This congressional report contains testimony pertaining to two Senate bills (S. 799 and S. 801) dealing with health professions education and nurse training and with the National Health Service Corps. (The National Health Service Corps Bill, S. 801, provides for redefining health manpower shortage areas, using the Corps only where there is demonstrable need, increasing the number of Corps assignees, phasing out the scholarship program and transfer into a voluntary program, and revising the Corps private practice option. Highlights of S. 799 include continuing the health professionals and nursing student loan programs, salvaging market rate loans and programs for disadvantaged students, providing support to stimulate primary health care physician services.) Among those persons providing testimony were representatives from various educational, medical, and nursing associations; educational institutions; and state national agencies. Also included in the report are articles and communications dealing with health manpower distribution and needs. (MN)
HEARING
BEFORE THE
COMMITTEE ON
LABOR AND HUMAN RESOURCES
UNITED STATES SENATE
NINETY-SEVENTH CONGRESS
FIRST SESSION
ON
S. 799
TO AMEND THE PUBLIC SERVICE ACT TO REVISE AND EXTEND TITLES VII AND VIII OF SUCH ACT WITH REGARD TO TRAINING IN THE HEALTH PROFESSIONS AND NURSING, AND FOR OTHER PURPOSES
S. 801
TO AMEND THE PUBLIC HEALTH SERVICE ACT TO REVISE PROVISIONS RELATING TO THE NATIONAL HEALTH SERVICE CORPS
APRIL 8, 1981
U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
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U.S. GOVERNMENT PRINTING OFFICE
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WASHINGTON 1981
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HEALTH PROFESSIONS EDUCATION/NURSE TRAINING AND NATIONAL HEALTH SERVICE CORPS, 1981

WEDNESDAY, APRIL 8, 1981

U.S. SENATE,
COMMITTEE ON LABOR AND HUMAN RESOURCES,
Washington, D.C.

The committee met, pursuant to notice, at 10:40 a.m., in room 4232 Dirksen Senate Office Building, Sen. Orrin G. Hatch (chairman) presiding.

OPENING STATEMENT OF SENATOR HATCH

Present: Senators Hatch, Kennedy, Hawkins, and Quayle.

The CHAIRMAN. We will now go into the hearing on the Health Professions Education/Nurse Training and National Service Corps, and with appropriate apologies to you folks for having to wait this long.

Today we will be considering a major restructuring of several existing health programs to reflect the changing realities of health care delivery in America in the 1980's. These bills are S. 799, dealing with health professions education and nurse training, and S. 801, dealing with the National Health Service Corps.

Last September, during oversight hearings chaired by then Senator Richard S. Schweiker, this committee began an examination of the changing trend in Americans' access to health care services. The nucleus of these changes is the inescapable fact that between 1978 and 1990 there will be a 50-percent increase in the number of practicing physicians. America has never experienced such an abundance of health care providers and it will mean many constructively competitive changes benefiting both patients and medical practitioners.

There will also be additional problems for us to solve. Last year, for example, Dr. David Rogers, president of the Robert Wood Johnson Foundation pointed out that even with the ongoing massive improvements in access to practitioners, many Americans would still be left without convenient access to a personal physician. And of course we are all concerned about the costs of this access.

However, at this same hearing we heard from Drs. Schwartz, Williams, and Newhouse, a group of researchers affiliated with Tufts University and the Rand Corp., who presented evidence of an influx of physicians into more rural areas. I am pleased to report that the committee has received an update from these individuals, discussing additional findings highly supportive of their earlier
encouraging conclusions—this report will be inserted in the hearing record following my statement.

These changes in our country's health care environment greatly affect the future of the National Health Service Corps. A program Congress initially developed to improve the delivery of health services for those Americans least able to receive them, the Corps' recruitment was to be voluntary. It was to last for a fixed and limited amount of time, until a private physician would become available.

During the last two Congresses, the size of the Corps was expanded. More scholarships were made available, and by 1990 this expansion in the National Health Service Corps would make the Corps 4 1/2 times its present size.

Yet, today can seldom be yesterday. And it would be as unfair as it would be financially imprudent, to keep the current Corps' formula as is—to do so at a time of a physician surplus and a reduced aggregate Federal financial base. This is a problem S. 801, is intended to solve.

My proposed National Health Service Corps bill, S. 801, provides for: (1) A redefinition of health manpower shortage areas and applicable procedures; (2) use of the Corps only where there is demonstrable demand; (3) growth from the current 2,060 assignees to the 2,500 level for at least 3 years; (4) phase-out of the scholarship program and transfer to a voluntary program by 1990; (5) revision of the private practice option to provide partial subsidy for individuals choosing this alternative; and (6) a request that the Secretary of the Department of Health and Human Services give full attention to the surplus of scholarship recipients who will be available for service over the next 5 years.

The second bill highlighted by today's hearing, S. 799, is also affected by the changing trends. In 1963, the Congress enacted the Health Professions Act to help alleviate physician, nursing, and technician shortages throughout our country. Over the years programs under this act have been broadened to provide financial assistance to both health professions institutions and students. Today, 18 years later, we are faced with increasing numbers of physicians, increasing diversity among health professions, and a continuing bedside nursing shortage for which there is very little the Federal Government can do. A thorough look at titles VII and VIII of the Public Health Service Act is not only appropriate, but crucial, in light of the ever-increasing and competing demands for Federal health dollars.

Highlights of S. 799 are. (1) The health professions student loan program and the nursing student loan program will be continued using the available revolving funds; (2) market-rate loans under the existing heal program will be salvaged; (3) a new program to provide support services and training opportunities for physicians in underserved areas will be launched; (4) support to stimulate and maintain primary health care physician services will be continued, and (5) disadvantaged student programs and support for financially distressed schools will be sustained.

My bill also addresses nursing problems, although there are no magic Federal solutions. There are severe problems in nursing including, a low wage scale, little or no career mobility, unattrac-
tive hours and Charles Dickens-like working conditions, problems which cannot be solved by traditional Federal approaches. Recognizing this, S. 799 continues nursing student loans, supports special projects; and assists in meeting the need for advanced nurses’ training.

I feel confident that these bills, S. 799 and S. 801, reflect and are worthy of the years of hard work and ongoing accomplishments in our Nation’s medical community. They exemplify the progress achieved in our health care delivery systems and how the people working in these systems are distributed nationally. They acknowledge and build upon the moral capital the earlier investment of time and effort by America’s health professionals have made possible. Today’s hearing is the keystone in this arch for all of us to build upon. This is why I thank you all for coming today, and along with the other members of this committee, pledge to work with you during this leanest of budgetary eras.

[The text of S. 799 and S. 801 follow:]
By Mr. HATCH.

S. 766. A bill to amend the Public Health Services Act to revise and extend titles VII and VIII of such act with respect to training in health professions and nursing, and for other purposes.

IN COMMITTEE ON LABOR AND HUMAN RESOURCES

INTRODUCTION OF EDUCATIONAL ASSISTANCE AND NURSE TRAINING ACT

Mr. HATCH. Mr. President, I am today introducing the Health Professions Educational Assistance and Nurse Training Act of 1981. This is a thorough reexamination of titles VII and VIII of the Public Health Service Act, which provides for Federal programs affecting the education of the health professionals, including nurses. This bill builds upon the work done over the last 2 Years by the Senate Committee on Labor and Human Resources, especially our distinguished former colleague, Senator Richard B. Schweicker. However, in recognition of the current budgetary constraints, this bill is lean. It refines a number of hard decisions that may not be popular but which are our considered judgment as to where the highest Federal priorities are within the scope of this legislation. As a result, some worthwhile programs have not been continued and in a number of potentially useful areas new initiatives have not been sought. However, I believe that this bill does justice to the most pressing needs without adding to any cluttered backlog.

My bill, in dealing with institutional support, special projects, construction, and other traditional areas of support, is guided by one overarching principal. There will be a substantial physiologic "surplus" by the mid-1980's and that this will result in substantial changes in the delivery of health care in the United States. Previous health manpower legislation has had that opposite purpose: To alleviate the physician shortage. The changes proposed in my bill are in part a tribute to the success of those past efforts.

I am convinced that the surplus will result in more competition among providers, a better geographic distribution of health care services, and a better specialty distribution among physicians, and other health care providers. I am concerned shortages will remain in the field of nursing. A need for more highly skilled and trained nurses specialists, salaries, and advancement which are not competitive with other careers, unsatisfactory hours and working conditions all contribute to nursing shortages. There is a Federal role, though limited, in alleviating these shortages. Through title VIII of the Nurse Training Act, we can help improve the attractiveness of the nursing career, helping health professions schools to attract and retain more disadvantaged students, and assisting health professions schools to survive limited periods of financial distress.

In revising the health manpower legislation, my bill attempts to focus the limited resources on the very few areas which still need Federal attention: Stimulating training in primary care and rehabilitation medicine; assuring adequate professional support for individuals who practice in underserved areas; improving the attractiveness of the nursing career; helping health professions schools to attract and retain more disadvantaged students, and assisting health professions schools to survive limited periods of financial distress.

Under this bill, the main elements of the health professions educational loan and the nursing student loan programs, which provide direct funds to health professions students, are allowed to continue using funds available from the revolving funds. Interest rates under the programs are increased. No new Federal appropriations are needed for this program.

Fourth, the National Health Service Corps scholarship is transferred to title VII of the Public Health Service Act where it is covered by another bill I have introduced today.

Fifth, the existing programs to stimulate primary care—family medicine, general internal, and psychiatric medicine—are revised and continued. This includes new support for residency training programs to train students and teachers, and support for family medicine departments.

Fifth, two new provisions highlight important areas of concern for the 1980's: Professional support for health care providers practicing in underserved areas and training needs in physical and rehabilitative medicine.

Sixth, an existing program to assist health professions schools to survive limited periods of financial distress is continued but in an extensively revised form.

Thus, the disenchanted assistance program, designed to help health professions schools to recruit and retain disadvantaged students, is continued.

Sixth, project grants for public health and health administration are continued and refined, special projects and advanced training—including nurse practitioners—for nurses are revised and continued.

I urge my colleagues to join me in supporting this bill. I recognize that to do so they must put aside special interest concerns, recognizing the paramount need to restrain Federal expenditures. This bill achieves, seen here as a whole, only part of the improvements that could be considered, and need to be made in a number or other provision of the Health Service Act.

APPENDIX

I urge Senator Humphrey to introduce this Act and the amendments and report it to the Senate at an early date.

TITLES I—AMENDMENTS TO TITLE VII

PART A—AMENDMENTS TO CURRENT PROVISIONS

SECTION 101. DEFINITION OF TERMS

SEC. 102. EXISTING PROVISIONS

SEC. 103. NEW PROVISIONS

SEC. 104. PROVISIONS NOT AFFECTED

SEC. 105. PROVISIONS REVISED

SEC. 106. ENACTED AS AN ACT
CONGRESSIONAL RECORD—SENATE
March 25, 1981

S 2662

HUMANE STANDARDS
Sec 141 Section VII is amended—
(1) by striking out "paragraph (1) and re-
designating paragraphs (2) and (3) as para-
graphs (1) and (2) respectively; and
(2) by striking out "and" at the end of paragraph (2). (as redesignated by para-
grah (1) of this section)

Sec 142 (d) is amended—(1) by striking out "paragraph (1) in paragraph (2) (as redesignated by para-
grah (1) of this section)

Sec 150 Section 7 is amended to read as follows—
"(a) In the absence of/send interest at the rate of 1/2 percent per year."

Sec 151 Section 2 is amended by inserting after paragraph (3) of such section—
"Provided that such funds shall not be used for the wages of individuals engaged in the production of health supplies unless such funds are used for the purpose of providing such supplies."

Sec 152 Section 23 through 77 are trans-
ferred to the Public Health Service Act and redesignated sections 33 through 77.

MACROCONOMIC APPRAISAL
Sec 14 (b) Section 5 of Part C Part D and Part E Title VII is redesignated as Part D-
Special Projects

Sec 17 (a) Part F of Title VII is redesignated as Part F-
PUBLIC HEALTH SERVICE ACT

Sec 37 (a) Part F of Title VII is redesignated as Part F-
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Sec 151 Section 7 is amended to read as follows—
"(a) In the absence of/send interest at the rate of 1/2 percent per year."

Sec 152 Section 2 is amended by inserting after paragraph (3) of such section—
"Provided that such funds shall not be used for the wages of individuals engaged in the production of health supplies unless such funds are used for the purpose of providing such supplies."

Sec 152 Section 23 through 77 are trans-
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Sec 14 (b) Section 5 of Part C Part D and Part E Title VII is redesignated as Part D-
Special Projects

Sec 17 (a) Part F of Title VII is redesignated as Part F-
PUBLIC HEALTH SERVICE ACT

Sec 37 (a) Part F of Title VII is redesignated as Part F-
"(1) by striking out "paragraph (1) and re-
designating paragraphs (2) and (3) as para-
graphs (1) and (2) respectively; and
(2) by striking out "and" at the end of paragraph (2). (as redesignated by para-
grah (1) of this section)

Sec 151 Section 7 is amended to read as follows—
"(a) In the absence of/send interest at the rate of 1/2 percent per year."

Sec 152 Section 2 is amended by inserting after paragraph (3) of such section—
"Provided that such funds shall not be used for the wages of individuals engaged in the production of health supplies unless such funds are used for the purpose of providing such supplies."

Sec 152 Section 23 through 77 are trans-
ferred to the Public Health Service Act and redesignated sections 33 through 77.
CONGRESSIONAL RECORD—SENATE

March 25, 1981

March 25, 1981

Second Session Ninety-sixth Congress

Mr. Sparkman (for Senator Williams) submitted the following

S.2664

CONGRESSIONAL RECORD—SENATE

March 25, 1981

September 25, 1934

Mr. Sparkman (for Senator Williams) submitted the following

S.2664

CONGRESSIONAL RECORD—SENATE

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Second Session Ninety-sixth Congress

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S.2664
March 25, 1981

CONGRESSIONAL RECORD—SENATE

B 2567

of 3,500 enrollees in 1982 and subsequent years;

Fourth, the phaseout over the next 3 years of the National Health Service Corps scholarship program, currently funded to provide over 4,000 enrollees in 1987, to reflect the fact that the NHSC will be capable of recruiting sufficient volunteers during the late 1980's to meet its needs;

Fifth, revision of the scholarship program's independence practices option to make it more attractive and to provide a partial subsidy for individuals choosing this option;

Sixth, provisions which allow the Secretary of HHS substantially greater flexibility in dealing with the surplus of scholarship recipients who will be available for service over the next 3 years.

The National Health Service Corps has often been looked upon as an educational tool rather than as a health services delivery program. As a consequence, the program has been planned and developed without regard for the most notable fact of the health care delivery system in the 1980's: that we will have by mid-decade a substantial surplus of physicians and that the resulting competitive forces are pushing doctors into areas where they have not previously been available. There are undoubtedly some areas for which no increased supply of competition in the health care delivery system will provide a readily accessible doctor. It is for this reason that the Corps, while undergoing substantial modification and reorientation under this bill, would nonetheless continue to grow slightly from its 1980 level and would probably stay at that increased level at least through the 1980's.

This reorientation of the National Health Service Corps is more than just an adjustment of numbers because of the coming surplus. Last September in an oversight hearing chaired by Senator Richard B. Schweiker, the Labor and Human Resources Committee heard ample testimony about the administrative and conceptual shortcomings of the Corps and about the blurred image of medicalunderserved in America created by its current "health manpower shortage area" designation process. To remedy these flaws, as well as to assure that Corps placements serve the most needy communities, basic changes have been made in the designation definition and procedures. This is also important because of an apparent contradiction that the placement of a federally salaried National Health Service Corps physician in a community is often an investment rather than as an asset in a community's long-term struggle to find a permanent doctor. Thus, the definition of health manpower shortage area is crucially important that the Secretary, in making such designations, takes account of reasonable access to nearly adequately served areas. Indicators of unmet demands for health services by individuals in the area, indicators of the hardship that unmet demand will be met within 3 years even if the area is not designated, the willingness of groups within the community to support and properly utilize Corps personnel, and the

By Mr. HATCH

S. 801 A bill to amend the Public Health Service Act to revise provisions relating to the National Health Service Corps to the Committee on Labor and Human Resources

Mr. HATCH. Mr. President, I am today introducing the National Health Service Corps amendments of 1981, an important step in providing adequate health manpower for our Nation's underserved in a fiscally responsible manner.

The major features of the bill are:

First, a revision of the definition of health manpower shortage areas and the procedural steps necessary for an area to achieve such designation.

Second, use of Corps personnel only in areas where there is a demonstrable demand for their services as well as a statistically established need.

Third, an authorization level consistent with the President's March 10 request, which allows the Corps to grow from 3,000 individuals in 1981 to a level...
comments of appropriate agencies, including medical and professional societies and State and local planning agencies. To a greater extent than under current procedures, this information would be required to be provided to the Secretary prior to designation of an area and placement of personnel.

With these changes made the Corps would be eligible for loans. In 1940 the growth of the Health Service Corps served.

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thou communities which are truly un-

will become

with increased administrative oversight of the effectiveness of existing placements. It is hoped that the National Health Service Corps will become a truly important service to these communities as each year is observed.

The bill also deals with the impact of unnecessarily ambitious plans for the growth of the National Health Service Corps in 1940. The bill has not been written to include any mandatory commitment to communities which are truly under served.

However, the Secretary of HHS will study the impact of unnecessarily ambitious plans. To the extent that the Secretary may find that the National Health Service Corps is having a significant effect on the geographical distribution of physicians this substantial future growth of the Corps is unnecessary.

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CONGRESSIONAL RECORD — SENATE

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mental capability of the entity to which Corps members would be assigned.
(b) by striking out "continued need in clause (b) of section 3801(b) and inserting in lieu thereof "need and demand";
(c) by striking out "has been" in clauses (ii) and (iii) of section 3801(b) and inserting in lieu thereof "will be";
(d) by striking out "previously in clauses (i) and (ii) of section 3801(b) and inserting in lieu thereof "subsequent to";
(e) by inserting "in" before "1981";
(f) by striking out "in" before "1982";
(g) by striking out "in" before "1983";
(h) by striking out "in" before "1983";
(i) by inserting "before" in clause (iii) of section 3801(b) and inserting in lieu thereof "to a reasonable practical extent", and
(j) by inserting the following new paragraph (b) thereof:

(1) The Secretary may not approve an assignment of a Corps member to a health manpower short-term area unless the Secretary has assured appropriate public or nonprofit private sector institutions (including medical and professional societies and State and local health planning agencies) that there is a demonstrated interest in the area or has designated an opportunity to review the application and submit to the Secretary the comments respecting the need for and proposed use of the Corps member requested in the application.

(2) Section 3801(b) is amended—
(a) by inserting "has" after "the assignment in paragraph (1)"
(b) by inserting the preceding paragraphs (1) through (4) and inserting in lieu thereof
(c) by striking out "has been designated in paragraph (1)"
(d) by striking out "are assigned in paragraph (1) and inserting in lieu thereof "as assigned in paragraph (1)"
(e) by striking out "by" in the definition of "population group", in paragraphs (3) and (4), and inserting in lieu thereof "has been designated by paragraph (1)"
(f) by striking out "by population groups, of the medical faculty or other public faculties in paragraph (1) (as redesignated by paragraphs (3) of this subsection)"
(g) by striking out the definition and inserting in lieu thereof "has been designated by paragraph (1)
(h) by inserting "has been designated by paragraph (1)
(i) by striking out "as described in subparagraph (A) of the preceding paragraph (1)"
(j) by striking out the definition and inserting in lieu thereof "has been designated by paragraph (1)

(3) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(4) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(5) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(6) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

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(14) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(15) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(16) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(17) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(18) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(19) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(20) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(21) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"

(22) Section 3801(b) is amended by striking out "the following amounts have been designated by paragraph (1)"
CONGRESSIONAL RECORD—SENATE
March 25, 1981

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(1) Section 320(c) (as redesignated by subsection (a) of this section) is amended by striking out "two" and inserting in lieu thereof "three-

(2) Section 320(d) (as redesignated by subsection (a) of this section) is further amended by striking out subsection (a) and inserting in lieu thereof the following new subsections:

"(a) Notwithstanding any other provision of this subpart-

"(1) The Secretary may not enter into any new or continuing scholarship contract after September 30, 1981, unless such contract provides that the Secretary may enter into a new agreement under which the individual is relieved of his service obligation and becomes liable for repayment, at 1 percent simple interest from the date of disbursement, of all sums provided to such individual by the Federal Government under such contract.

"(b) The Secretary may negotiate with individuals for the modification of any scholarship contract entered into under this subpart prior to October 1, 1981, to include the provisions described in paragraph (1) of this subsection.

"(2) In establishing any loan agreement under subsection (3), the Secretary shall not receive a loan for the period of the loan and the date upon which repayment begins.

"(3) In implementing subsection (3), the Secretary may negotiate interest rates and repayment terms that are no more favorable to the individual than the conditions upon which such individual establishes an independent practice in a health manpower shortage area (designated under section 320).

(3) Section 320(e) (as redesignated by subsection (a) of this section) is amended by striking out "section 320(e)" and inserting in lieu thereof "section 320(e)(1)(M).

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* * * *
The CHAIRMAN. Senator Kennedy?

Senator KENNEDY. I would ask consent to have my earlier statement with regards to the youth employment bill be put in the appropriate place in the record, and I would ask consent to put my statement in with regards to the introduction with respect to the whole issue of personnel for medical training.

The CHAIRMAN. So ordered.

OPENING STATEMENT OF SENATOR KENNEDY

Senator KENNEDY Health professionals are a national resource. They are the vital link in meeting national health care needs. For 20 years the Federal Government has responded to those national concerns by providing support for health training—to meet health professional shortages and to assure that the disadvantaged have access to health profession careers.

In the early 1960's when we were confronted with a shortage of physicians, we provided the incentive and medical schools responded. Within 10 years, medical school enrollments had nearly doubled.

In the early 1970's when we recognized that we had too many subspecialists and not enough primary care physicians, we provided the incentive and medical schools responded. Today more than half of all first year resident are in primary care training programs.

The Federal Government has made an important contribution to the excellence of our health professions training programs. It has provided support and encouragement for innovative teaching programs like area health education centers, other remote site training, nutrition training, and preventive medicine. It has allowed schools to reach out and train students from disadvantaged backgrounds. It has provided support to maintain and enhance the excellence of our educational institutions. It has afforded individuals from diverse backgrounds, individuals of all income levels, financial access to a health professions education.

For nearly 8 years, one administration after another has come before this committee and proposed drastic reductions in support for health professions education. The justification is always simplistic and always the same—we have enough health professionals and we no longer need to encourage schools to increase their enrollments.

Do we have enough nurses? Study after study has documented the shortage of professional nurses. This administration's response is to cut funding for nurse training by nearly $90 million.

Do we have enough public health personnel? Studies, including reports from the Department of Health and Human Services, document the shortage of trained public health professionals.

Do we have enough veterinarians? Enough podiatrists? Again, the answer is "No." Do we have enough physicians and dentists? Maybe. But Federal support for health professions training means more than numbers. It means financial access to and expensive education for the low- and middle-income student. It means advances in patient care and knowledge. It means the difference between excellent and marginal educational programs.

Are we prepared to limit access to medical school to those who can pay their own way? Or force students into lucrative nonpri-
mary care careers or practice locations so they can pay off huge debts?

Are we prepared to stifle innovative education programs and jeopardize quality as schools precipitously slash their budgets? Or threaten the very existence of minority training institutions?

Are we prepared to deny the poor of rural America and inner-city neighborhoods access to primary health care on the basis of scanty data indicating some physicians are moving past the suburbs?

I am not prepared to abandon the commitment to quality education. I am not prepared to deny the availability of that education to qualified students at a reasonable cost.

I am not prepared to turn back the clock to the late 1960's when 60 of the 102 medical schools were in financial distress, when prestigious schools like Johns Hopkins faced closure due to lack of funds.

Health professions education is the foundation of the future quality of our health care system. We have a responsibility to maintain and strengthen that foundation.

The CHAIRMAN. Senator Hawkins?

Senator HAWKINS. The committee today considers an issue vital to our health care system; providing an adequate supply of health care professionals. I believe the Federal Government does have a responsibility to insure that we have a sufficient supply of trained health professionals to meet the health care needs of our Nation.

Previous health manpower legislation enacted by Congress successfully dealt with the physician shortage to the extent that it now appears that there will be a surplus of physicians by the mid-1990's.

Despite this projected surplus, there are still areas of medical practice that need to be emphasized. One such area that I hope that the committee will focus on is family medicine, and the need to encourage physicians to pursue careers in this critical area.

The other critical area is nursing. Unfortunately, the nursing shortage remains severe. This shortage is a national problem, but Florida, because of our age distribution, is increasingly dependent upon nurses to meet the health care needs of our older residents. The nursing shortage in Florida has become so severe that it has forced local hospitals to close patient units, overwork their existing staff, or pay salaries that increase the cost of health care.

Because of the budget constraints under which we are operating, we will not be able to authorize funding for all worthy programs designed to encourage health careers. We will be forced to concentrate on the most critical areas and the programs that have proven to be most effective.

The testimony presented before the committee will assist in assuring that an adequate supply of qualified health care professionals is available to meet the health care needs of our Nation.

The CHAIRMAN. Senator Quayle?

Senator QUAYLE. In view of the time I ask unanimous consent that my statement be inserted into the record.

The CHAIRMAN. So ordered.
OPENING STATEMENT OF SENATOR QUAYLE

Senator QUAYLE. The subject of today's hearing, health professions education and the National Health Service Corps, are programs which were enacted in an effort, first to overcome a perceived shortage in health professionals in the United States and second, to put some of that increase in health professionals where they were most needed—in medically underserved areas.

The essential question which must be addressed is the role of the Federal Government in health professions education. Current legislation seeks to shift the focus away from institutional support which sought to increase the numbers of health professionals, to an emphasis on priorities in an effort to overcome some of the related problems of geographic and specialty distribution.

A perceived surplus in physicians would be welcomed in the State of Indiana where, according to 1978 statistics, there were only 130 non-Federal physicians per 100,000 population compared to a national average of 187 per 100,000. It is hoped that efforts to redistribute health professionals will be successful and that States like Indiana, which currently has 30 areas designated by DHHS as being medically underserved, representing a population of some 317,000 not receiving or lacking access to primary care services, will benefit.

I hope that some of these issues and priorities will be explored today and that we can perhaps come to some solution concerning the appropriate role of the Federal Government in this matter.

The CHAIRMAN. Before we begin with our first panel, we would like to welcome you to the witness table. We are very sorry that sometimes the committee has to conduct some very important business. Just be glad we are not investigating you right now.

Mr. MILLER. You are.

The CHAIRMAN. My goodness, I have to get them to inform me, including Senator Kennedy.

We do apologize for the delay, but that was very important, and I think it was resolved in a very satisfactory way. We are happy to have you here.

We welcome Mr Charles Miller, the Acting Assistant Secretary for Health of the Department of Health and Human Services. He is accompanied by Susanne Stoiber, Deputy Assistant Secretary for Health Planning and Evaluation; Robert Graham, M.D., Acting Administrator, Health Resources Administration, and Daniel Whiteside, Director, Bureaus of Health Personnel Development and Service, Health Services Administration.

I might mention for you in advance, it might be difficult for members of the committee to sit throughout the full hearing, because a number of us are on the Budget Committee. We are in major confrontations there, and a number of us have other pressing difficulties that have to be taken care of. So if you will understand that we may have staff take testimony which is crucial to the bills we are trying to get resolved before May 15, so we appreciate the efforts that you have put forth in being with us today.
STATEMENT OF CHARLES MILLER, ACTING ASSISTANT SECRETARY FOR HEALTH, DEPARTMENT OF HEALTH AND HUMAN SERVICES, ACCOMPANIED BY SUSANNE STOIBER, DEPUTY ASSISTANT SECRETARY FOR HEALTH PLANNING AND EVALUATION; ROBERT GRAHAM, M.D., ACTING ADMINISTRATOR, HEALTH RESOURCES ADMINISTRATION; DANIEL WHITESIDE, DIRECTOR, BUREAU OF HEALTH PERSONNEL DEVELOPMENT AND SERVICE, HEALTH SERVICES ADMINISTRATION, A PANEL.

Mr. MILLER. Mr. Chairman, in the interest of time, unless you wish otherwise——

The CHAIRMAN. It would be wonderful if you could summarize, because we will put all the statements into the record.

Mr. MILLER. I am even offering to skip the summary. I will move directly to questions. I do want my statement in the record. I think that the administration's position on matters before you have been well stated by the Secretary before you last week, and I will be glad to move to questions.

The CHAIRMAN. That is terrific. I think that is a good procedure to follow, and that allows us to ask questions up front.

My bill, S. 799, is the same as the administration's proposal with regard to total dollar allocation. Although I propose to use some of the funds to support different programs. Nonetheless, I would ask, what is the administration's rationale for such a severe cut in health manpower and nurse training programs?

Mr. MILLER. Mr. Chairman, I think that given the situation where there seems to be a consensus that there are going to have to be significant cuts in Government expenditures, we are going to have to choose those areas where the Government is put in place, have largely done their work, and I think this is true with respect to the health professions area, more than any other.

These programs, many of them, were started and enhanced in order to increase the supply and affect the distribution of health personnel. While there are still problems remaining before the country, and we think that the bills that the administration will send up will continue to attack those problems, we do believe that in a tight economy that this is an area that really has to take its share.

The CHAIRMAN. In light of the projected surplus of physicians, and the administration position, how do you plan to deal with the 6,500 scholarship recipients currently in the pipeline?

Mr. MILLER. Well, Mr. Chairman, we believe that the level of the National Health Service Corps that we are proposing for fiscal year 1983 will be sufficient to take care of those scholarship recipients in the pipeline.

Our plan is to take a look at the situation in the out years with some expectation that we will begin the scholarships again.

The CHAIRMAN. Will any scholarship recipients be relieved from their obligations without either serving or paying back the amounts that you have given them in their awards?

Mr. MILLER. We do not think that will be necessary.

The CHAIRMAN. So the administration intends to substantially revise the designation process for the Health Service manpower shortage areas?
Mr. MILLER. We cannot answer that at this time, Mr. Chairman. We recognize that it is an area that needs a careful look. We are taking a careful look at it. We do agree with the approach that I think you are taking, to try and combine whatever the designation is, into one system of designation. But we have not yet completed our work.

The CHAIRMAN. Thank you.

The administration proposes to target money to support nurse training, and to improve the registration and retention of registered nurses. Yet the funding level proposed is well below my recommendation of $30 million. In fact, it is almost half, $15 million.

Do you really believe this sum is realistic with the shortage of nurses we have?

Mr. MILLER. Well, Mr. Chairman, I know that you have heard this discussion many times. I think our problem at this juncture is that we really do not know what kind of programs will be most effective in getting at the problem of nursing. I think there is beginning to be a consensus that the problem is not one of entry into the nursing profession, but rather retention in the nursing profession.

We have a major study underway with the National Academy of Sciences, which is attempting to take a look at this, to determine what would be the most effective method of retaining nurses in the profession. Until then we believe that some of the previous programs may be targeted at the wrong problem. But we recognize this is a very difficult area that needs a lot of attention.

The CHAIRMAN. Thank you.

I have a large number of other questions that I would like to submit for the record.

I am very pleased to have Senator Hawkins and Senator Nickles with us here today.

Senator Hawkins has agreed, in light of the problems that I have right now, to chair these hearings further. I am very grateful to you, Senator Hawkins. Why do you not move over to this chair? I appreciate you being here. I will submit those questions to you, and if you can get those back as soon as possible.

Mr. MILLER. We will do that.

Senator HAWKINS [presiding] Am I correct in my belief that the administration supports training in nonphysician specialties, such as physician assistants and nurse practitioners?

Mr. MILLER. Yes, we do, at a reduced level. But we will be recommending continuous support for both of those specialties.

Senator HAWKINS. Do you know what level of support you are recommending? Let us take the physician assistants

Mr. MILLER. We would recommend a level of $5 million in fiscal year 1982.

Senator HAWKINS. $5 million in 1982?

Mr. MILLER. That is for physician assistants.

Senator HAWKINS. Nurse practitioner training?

Mr. MILLER. $6.5 million for nurse practitioners.
Senator HAWKINS. How much does each National Health Service Corps physician cost the Federal Government a year?

Mr. MILLER. May I ask Dr. Whiteside?

Dr. WHITESIDE. It costs on the average about $53,000, if you include their salary and their cost of travel and moving their families to the sites.

Senator HAWKINS. Salary plus expenses?

Dr. WHITESIDE. Yes.

Mr. MILLER. Of course, that is the initial cost, Senator. You said each year. I think that Dr. Whiteside has included the initial starting costs. On an annual basis that decreases.

Senator HAWKINS. For each one. How many years are the physicians in the program?

Dr. WHITESIDE. The cost for the people in the National Health Service Corps will drop over the number of years which they stay in the program. For example, you would subtract around $3,000 of travel costs in subsequent years.

Senator HAWKINS. Is geriatrics one of the national priority medical specialties that the administration wants to focus attention on?

Mr. MILLER. I think selectively. For example, we are proposing a small authorization for podiatrists. We will be, in the bill we submit—that very definitely is targeted toward special populations, particularly the elderly.

Senator HAWKINS. Since those individuals that are 75 and over are the fastest growing segment of our population, do you not think that more emphasis should be placed on a study of geriatrics, perhaps a course for all doctors, as well as a specialty?

Dr. GRAHAM. Madam Chairman, in addition to the response Mr. Miller has already made, in the preliminary care training programs which we support, that you were referring to earlier, the family practice and pediatrics, we try to provide emphasis in the grant awards to those programs which will emphasize the training in geriatrics, and care of the aging populations in their residency programs.

Senator HAWKINS. I have no other questions.

Senator Nickles, we will have his questions entered into the record, as well.

You can answer in writing, if you would.

Thank you for coming today.

[The prepared statement of Mr. Miller follows:]
STATEMENT

BY

CHARLES MILLER

ACTING ASSISTANT SECRETARY FOR HEALTH

DEPARTMENT OF HEALTH AND HUMAN SERVICES

BEFORE THE

COMMITTEE ON LABOR AND HUMAN RESOURCES

UNITED STATES SENATE

WEDNESDAY, APRIL 6, 1983
MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

It is a pleasure for me to appear before you today to present our views on the Federal role in health professions education and on the National Health Service Corps. The legislation you have introduced, S. 799 and S. 801, are in most respects similar to the proposals we will submit shortly, and we look forward to joining you in pursuit of our common goals.

Over the past decade and a half, the Federal Government has played a major role in the support of health professions education. For most of this period, we sought to expand the Nation's capacity for training the key professionals: physicians, dentists, nurses, public health personnel, and associated health professionals. At the time the programs were established, the outlook was for serious national shortages of health professionals to meet rising demands for care.

As Secretary Schweiker discussed with you last week, the Federal programs to increase the aggregate supply of physicians and other health providers have been extraordinarily successful. Since 1970, for example, the annual number of graduates from medical schools has increased from 9,000 to over 15,000. We now have in place sufficient training capacity to produce the required number of health professionals, in total, for just about every major discipline.
Yet there still are shortages of health professionals in certain geographic areas and in certain specialties. Individuals from minority and other disadvantaged backgrounds continue to be seriously underrepresented in the health professions. The Administration believes that there is a continuing role for the Federal Government in helping overcome these and other special health professions problems.

Like you, we propose to end support for most general institutional assistance. This includes support in the form of capitation grants, start-up grants, and construction programs. These are the programs that have contributed so substantially to the expansion of the Nation's health professions training resources. At a time of severe economic constraints, large general subsidies are not the best means for meeting those priority needs that still must be addressed on a Federal level.

As would your bill, we would also promote an increase in the supply of primary care physicians through continued support of training in family medicine, general internal medicine, and pediatrics. Since 1972, Federal grant funds have been used to stimulate the development of primary care training programs and residencies. A larger percentage of physicians now choose primary care specialties, and primary care has become an
established educational program in the curricula of many medical schools. Continued support will help to achieve a reasonable balance between primary care and other specialties.

In order to further improve the distribution of health professionals, and thereby ensure that people living in remote or underserved areas have better access to health services, we propose to continue support for Area Health Education Center (AHEC) programs. AHECs serve as regional educational systems where health professions students receive a portion of their clinical training in facilities located in shortage areas. These programs help address long-term needs by encouraging health professionals to enter practice in such areas. Your bill also would extend the authority for support of AHECs.

We share with you the view that it is appropriate for the Federal Government to help maintain the quality or prevent the closure of health professions schools in serious financial straits. We would continue to provide financial distress grants to schools now receiving such aid. However, a grant would be limited to 3 years and reduced 25% from the preceding year. Over the history of this program, 33 schools have received $74 million in grants. Of these, 27 were able to achieve financial solvency and are now operating without special support.
We also propose to continue supporting training for public health professionals to help identify public health problems and develop improved methods of health promotion and disease prevention. We believe that this assistance should take the form primarily of special project aid to high priority training programs. To a limited extent, aid also should be authorized for traineeships to public health students.

We propose the establishment of a new program to encourage the continued growth of important preventive health activities through the development of preventive medicine departments and preventive medicine residency training programs. Your bill would include preventive medicine training as one of the types of training that might be supported under the public health special project authority.

The problems faced in the area of nurse training and the availability of nurses are somewhat different from the problems of health professions training and availability generally. Although there has been significant growth in the number of active registered nurses, it is also clear that there are troublesome vacancies and shortages in some of the least favorable facilities, settings, or shifts.
Among the reasons for nursing shortages appear to be inadequate salaries and fringe benefits, lack of career ladders to provide mobility between levels of skill, and lack of flexibility in scheduling hours and night and shift work without adequate salary differentials. In certain types of facilities, we are seeing a number of nurses leaving settings such as intensive care units and other emotionally and physically taxing settings.

We propose to target nurse training support through special project awards designed to improve the distribution and retention of registered nurses. We would extend support for continuing education programs, particularly those emphasizing bedside nursing, primary care, and prevention. We propose to continue support for nurse practitioner training and to increase nursing education opportunities among individuals from disadvantaged backgrounds.

In a limited number of other health professions program areas, we plan to carry out initiatives of special national interest. Examples of such areas include education and training of allied health personnel for health promotion and disease prevention, develop curriculum and training for podiatrists and help meet
the foot care needs of special population groups such as the elderly, and curriculum improvements in schools of veterinary medicine.

Like you, we recognize the need for additional information on health professions supply and requirements as a basis for sound policy development. We propose to continue the authority for monitoring and analyzing health professions data. This would include the development and refinement of estimates of current and future health professions supply, requirements, and distribution. We would continue special activities begun under the Graduate Medical Education National Advisory Committee to identify, coordinate, and analyze medical specialty requirements.

I would emphasize that this Administration sees its role in relation to health professions education as being one of cooperation with State and local governments, educational institutions, the professions, and others to accomplish national priority goals.

**Student Assistance Programs**

Current law provides for a number of student assistance programs, including the Health Professions Student Loan (HPSL) Program, the Health Education Assistance Loan (HEAL) Program, the
Exceptional Financial Need (EFN) Scholarship Program, the Loan Repayment Program, the Nursing Student Loan (NSL) Program and Nursing Scholarships. In addition, health professions students are eligible for both Guaranteed Student Loans (GSL) and National Direct Student Loans (NDSL) offered through the Department of Education. All of these programs have served the country well, and at a time when there was a shortage of physicians and other health care providers there was a cogent rationale for supporting students desirous of a health professions education. Times have changed, however.

Many student assistance programs, while meritorious, cannot withstand the careful scrutiny which all programs must undergo at a time when there is a mandate from the American people to reduce federal spending. As part of the President's overall effort to be responsive to that mandate, it becomes very difficult to justify subsidizing the education of individuals who in the aggregate become some of the highest income earners in the country. Thus, the student assistance programs for health professions students outlined in the President's budget...
would eliminate subsidies for most students. It is on this basis that the Administration can fully support the provisions in your companion bill, S. 799, which will eliminate the Scholarships for Students of Exceptional Financial Need and Nursing Scholarships.

Although the Administration will no longer provide general subsidies for health professions students, we believe that some program reforms are needed so that a health professions career is not limited to the more affluent members of our society. In order to reduce the cost to the Federal Government and still continue to offer disadvantaged students an opportunity for a health professions education without undertaking a major financial obligation or a service obligation, the Administration is considering a proposal to make market rate HEAL loans more attractive to these students. Disadvantaged students who do not complete their schooling would have the loan repaid by the Federal Government, in effect converting it to a scholarship. Those students who complete school would be responsible for repaying the loan. This approach would provide disadvantaged students with the same opportunity as an EFN scholarship, but the Federal Government would only be subsidizing those low income students who do not succeed academically.
The Health Professions Student Loan and Nursing Student Loan Programs are need-based and were initially authorized in the Health Professions Educational Assistance Act of 1963 (P.L. 88-129) and the Nurse Training Act of 1964 (P.L. 88-581) and are administered by the schools through a revolving fund. Dollars that were initially appropriated by the Federal Government are continually recycled by the institution, thus maximizing the use of the Federal dollar. Because of the importance of these funds to the schools, the Administration endorses your recommendation that the funds already appropriated continue to be reloaned, but that no new funds be either authorized or appropriated. However, we believe that the revolving loan money should be used for disadvantaged students who may have difficulty securing a bank loan.

The Administration also supports the changes you propose for the HEAL Program. With no additional appropriation for the two student loan programs and the repeal of EFN, HEAL will become the principal student assistance program for health professions students. Created in 1976, this Federally Guaranteed Loan Program had some problems initially getting under way. A series of amendments, however, passed since its creation—the most recent being P.L. 96-538, signed into law on December 17, 1980, and which authorized lenders to charge
borrowers T-bill plus 3-1/2 percent with no ceiling--have made
the program attractive to major lenders including Chase
Manhattan, the principal lender to date, and now Citibank, the
second largest bank in the country.

Although the HEAL Program is becoming increasingly viable as
currently authorized, several provisions will enhance the
program considerably, including:

-- raising the borrowing limits to offset increasing
tuitions;

-- removing the current restriction limiting the percent
of students eligible for HEAL Loans in a given institution
to 50 percent.

The Administration supports all of these changes but will recommend
as well that HEAL Loans be made available to nursing students. It
is our view that the incorporation of these changes into the
present program will ensure the continued availability of loan
funds for health professions students.

National Health Service Corps: (Scholarship and Field Placement
Program)

The National Health Service Corps and its related scholarship
program were originally designed to provide a mechanism for
the Federal Government to guarantee the availability of health care providers in the underserved areas of this country. In exchange for a scholarship to finance a health professions education, upon completion of their education scholarship recipients would be required to provide at least two years of service in underserved areas.

Simultaneous with the inception of the NHSC and scholarship program, the Federal Government provided medical and other health professions schools with incentives to train more physicians and other health professionals in order to address the physician shortage problem. With the growing surplus of physicians there is strong evidence that they are beginning to migrate to some of the more rural areas of this country. What is now critical, however, is to adjust the projected field strength of the Corps in order to provide health care to those areas of the country where all available evidence would indicate physicians and other health providers will not choose to locate. It is on this basis that the Administration is planning for a projected and stable field strength of 2,500 and is pleased to see that you, Mr. Chairman, concur with that judgment. In order to reach that 2,500, the Administration will recommend that the awarding of new scholarships and recruitment of volunteers be suspended until at least 1983 when additional personnel will be needed to maintain the 2,500 field strength. Coupled with these
changes, the Administration would:

-- Permit the private practice option to continue with additional flexibility to permit the establishment of practice in shortage areas;

-- Continue the Secretary's discretion to offer one-time start-up grants of $25,000 to both Corps obligors who are newly available for service and obligors who have completed their service and are willing to establish a private practice in high priority underserved areas;

-- Continue placement of Corps obligors with State and local governments;

-- Continue to allow the Secretary to designate DoD and VA installations as shortage areas and as such placing assignees in these institutions;

-- Continue to allow students to buy out of their service obligation.

In summary, Mr. Chairman, the Administration generally supports the thrust of S. 801. As I think you will agree the National Health Service Corps has had and continues to have a very important
function to perform—that of providing health care to the truly underserved areas of this country—while at the same time encouraging the delivery of medical care to these areas through the private sector wherever possible. To accomplish that goal, efforts need to be directed at reducing the size of the scholarship program so that the number of scholarships is more in line with the needs of the Corps and to ensure that a field strength of 2500 can be maintained in the future.

Conclusion

In conclusion, Mr. Chairman, the Administration is in the process of drafting its own health professions legislation, and we are encouraged by the bills you have introduced. We look forward to working with you on this important legislation. We will be pleased to try to answer any questions you may have.
Opinion Forum: Marilyn L. Dyer, RN

Diploma Schools: Oppose the ANA 1985 Proposal

I would like to produce my remarks by stating that I have been the director of a diploma school of nursing for 10 years and before that, an instructor in the school for 9 years.

As I read current professional nursing journals, I see the following all the United States' registered nurses choosing sides to fight in the "battle of 1985." I find it difficult as a director of a diploma school of nursing, to prepare graduates to enter a profession in which confusion, frustration, and chaos hover because of the American Nurses' Association's (ANA's) 1985 Entry Into Practice proposal. I wonder what will happen to American health care needs when the ammunition used in the forthcoming battle is laid to rest. I prefer to believe that graduates of diploma schools of nursing will continue to be regarded as professionals rather than technical nurses.

The Resolutions

Health care leaders by now are undoubtedly familiar with the ANA Entry Into Practice proposal. Excerpts from the proposal's three resolutions are as follows:

1. Resolution 54: Identification and Taking of Establishments of Two Categories of Nursing Practice has two major points: "The ANA [should] assure that two categories of nursing practice be clearly identified and listed by 1986 end ... by 1985 minimum preparation for entry into professional nursing practice [should] be the baccalaureate degree in nursing.

2. Resolution 57: Establishing a Mechanism for Deriving Competency Statement for the Two Categories of Nursing Practice proposes that the "ANA establish a mechanism for deriving a comprehensive statement of competencies for two categories of nursing practice by 1980." If implemented, these resolutions will change the entire nursing profession. We in diploma nursing education, however, must work diligently to prevent such counterproductive changes. A Registered Nurse poll that I shall discuss later in the article states that the majority of nurses oppose the professional/technical split.

3. The ANA should actively support increased accessibility to high-quality career mobility programs which utilize flexible approaches for individual seeking academic degrees in nursing.

If implemented, these resolutions will change the entire nursing profession. We in diploma nursing education, however, must work diligently to prevent such counterproductive changes. A Registered Nurse poll that I shall discuss later in the article states that the majority of nurses oppose the professional/technical split. With this fact in mind, nurses must work together to oppose the 1985 Entry Into Practice proposal.

Area of Concern

1. Present nursing shortage. There already is a shortage of working nurses in all parts of the United States. And, a survey analyzed various data to reveal that graduates of baccalaureate nursing programs will represent 30 percent of the total registered nurse graduates in 1985. If the 1985 proposal were implemented, the pool of nurses eligible for professional mobility would decrease 70 percent.

The United States' nursing shortage is discussed in the March 1979 American Journal of Nursing. The journal conducted indepth interviews in every region and came to eight conclusions about the nursing shortage. Although all are important, I have space for only the first three (1) There is a widespread, severe nursing shortage in both urban and rural locations. (2) With rare exceptions all states have a serious misdistribution of registered nurses even though some do not have a numerical shortage. (3) The shortage is most acutely felt in hospitals.

If the nursing shortage is as pronounced in 1979, how severe will it be in 1985 if Resolution 58 is implemented?

2. Additional cost of education. It has always been difficult to compare the costs of associate degree, diploma, and baccalaureate nursing programs. The Institute of Medicine's most study for the 1972-73 academic year is often cited. The Institute computed the net educational expenditure, which is the cost per year minus revenues earned by research and clinical services the school provides and determined these costs $3,300 for an associate program, $4,800 for a diploma program, and $9,448 for a baccalaureate program. The figures represent the cost to taxpayers for education alone. Dolan determined that the ANA's proposal would cost nurses by $275,241,900, or 0 percent. He further states that if the proposed system were calculated using the
Diploma schools continue to provide nursing students with the greatest percentage of clinical experience in a hospital setting.

Editor's Note: In 1985 the ANA published a first position paper on education for nurses, entitled "Substantive Preparation for Nurse Practitioner and Advanced Practice in Nursing: A Position Paper." This position paper states that the baccalaureate degree is required for admission to a nurse practitioner training program and that the master's degree is required for minimum entry into advanced practice. In 1978 the ANA reaffirmed its 1965 position on the two concepts of nursing practice. The ANA House of Delegates approved Resolutions 28, 29, and 30, comprising Entry into Practice, at its 1978 convention. In May 1979 Mrs. Dyne began a year-long term as chairman, NLN Council of Diploma Programs. The council opposes Entry into Practice.
The nursing profession needs to spend more time and energy making education relevant and accessible and less time 'labeling' nurses. 

Continuing education [must be made] more available to nurses in all types of programs.

We need to maintain the present system. The American Medical Association, the American Hospital Association, and the American Association of Community and Junior Colleges support the current educational system.

In conclusion, Dolan's following statement emphasizes the issue discussed: "The proposal will make it a crime for new graduates of associate and diploma programs to perform RN functions." We must make certain that the proposal does not become a reality.

3. Dolan, p. 321
4. Dolan, p. 325
8. American Hospital Association Annual Report, p. 9
9. Dolan, p. 327
Senator Hawkins. The next witnesses are a panel consisting of Dr. Verla Collins, director of the nursing services administration, Intermountain Health Care, Salt Lake City, Utah; Sister JoAnne Upjohn, president, Holy Cross Hospital, Salt Lake City, Utah; Dr. Billye Brown, dean, school of nursing, University of Texas at Austin.

STATEMENTS OF SISTER JoANNE UPJOHN, PRESIDENT, HOLY CROSS HOSPITAL, SALT LAKE CITY, UTAH; DR. VERLA COLLINS, DIRECTOR, NURSING SERVICES ADMINISTRATION, INTERMOUNTAIN HEALTH CARE, SALT LAKE CITY, UTAH; AND DR. BILLYE BROWN, DEAN, SCHOOL OF NURSING, UNIVERSITY OF TEXAS AT AUSTIN, A PANEL

Sister JoAnne. First I want to say it is a privilege to be here. I know that time seems to be of the essence. Before everybody leaves, I want to get started.

As a hospital administrator and an employer of nurses at all levels of education and experience, it is my intent to be pragmatic in my testimony today. I will speak about what works in the day-to-day operation of the good general hospital—the one I want to go to when I get sick. We are in trenches living with how it really is.

Our mission is to provide compassionate, high-quality care on a day-to-day basis, around the clock, in a very complex medical arena.

We are experiencing a serious to acute shortage of nurses in Utah, as well as across the Nation. To dispute this fact is to deny reality. The hospital is the major employer of nurses. We are closing needed programs, denying care to inpatients and outpatients, and failing to serve the sick among us due to a manpower shortage in many places. We have closed nursing units because we are unable to recruit nurses to staff these units.

I agree with what was said previously, one of the major problems is retention. But that is just one of the major problems. That is not the whole story.

I am dividing my testimony into four categories:
One: What kind of nurses do hospitals need?
Two: How can we provide for stability in our nursing staff?
Three: Are qualified candidates available? Are young and middle aged motivated to become career nurses?
Four: Has the hospital directly contributed to the nurse shortage? Can this be reversed?

Issue 1: What kind of nurses do hospitals need?

Being fully aware of this as a nurse and administrator for more years than I would like to say publicly, the role of nurses, the acuity of patient illness today, the complexity of highly specialized services, for example, intensive care, the manpower needs of the long-term care facilities, the maldistribution of nurses and doctors, the liability and malpractice risk are things we must be aware of.

I firmly believe that in order to barely meet the demands made on hospitals, we must make haste to prepare nurses at all five levels of basic nursing education, the LPN [technical], the associate degree nurse [technical], the RN [diploma graduate], the baccalaureate degree nurse, the masters degree nurse, and the midwife.
This position has had the support of the National League of Nurses, the American Medical Association, the American Hospital Association, the Catholic Health Association, of which I am the chairman, and the Association of Community and Junior Colleges.

The key responsibility of hospital administration and management is to provide the right mix—competencies necessary to excellence in patient care—a climate that responds to what is best for the patient.

Issue 2: How can we provide for stability in our nursing staff?
   Hospital nursing is an end product—a career—it is not a stepping stone. Our expectations have been in conflict of late.
   Present and past experience demonstrates that in a great many hospitals, the professional registered nurse, the RN, is the backbone of the hospital nursing staff. I quote other hospital administrators across the country.

   They are at the bedside.
   They have a high degree of flexibility and a broad scope of understanding regarding the 24-hour, 7-day-a-week operation of the hospital.
   They have a strong work ethic, their expectations of their jobs are realistic, they share the common goals of the hospital.
   Nursing is their career. They demonstrate a high level of judgment, leadership, competence in the nursing process, in assessing, planning, implementing and evaluating patient care.

   That is the end of the quotes.

   Nursing is an applied science which includes academic preparation together with practical clinical experience. Professional registered nurses—diploma—who qualify for licensure by passing the same State board examinations, the diploma programs I am talking about, as do the nurses from collegiate programs, are capable of functioning as beginning practitioners because they have had extensive experience in the hospitals and they need little orientation to their role as a registered nurse. They are capable of meeting immediate staffing needs within the hospital. By contrast, the usual orientation needed to integrate the baccalaureate nurse often involves an inservice program lasting several months. This becomes a cost factor. Nurses who sat for the 1980-81 examination from our diploma school in Columbus, Ohio, passed in the top 30 percent of all students from seven schools in the State and above the national average for the United States.

   There is general cause for alarm that some would program the diploma nurse for extinction. At Holy Cross Hospital in Salt Lake City, we have had the misfortune of not being able to hire any new diploma graduate for over three years. We have 111 diploma nurses at present, one-third of our staff. Local hospitals have collaborated with Weber State College to support an associate degree program to increase manpower. Holy Cross reimburses for RN's working full time for their advanced education.

   We provide partial scholarships to beginning students at Weber State. We believe these measures do provide stability.

   Issue 3: Are qualified candidates available? Are the young and middle aged motivated to become career nurses?
   Yes, if we provide alternatives, ways and means, offer a variety of programs that make it possible to choose nursing as a career by those persons who can or cannot handle 4 years of college, those who must become self-supporting quickly, those who desire a
second career, or in numerous other situations demanding flexibility.

We continue to build blocks and expect people to fit in. We must provide innovative approaches. Major recruitment. Nontraditional students, for example, midlife careers. Provide night and weekend programs. Expand faculty. Change the image and the integrity of the diploma graduate. Subsidize multilevel programs in ratio related to need, to job opportunities.

Twenty-nine diploma schools in Ohio provide Ohio hospitals with 80 percent of the nursing staff in each hospital. We have two hospitals in Ohio. The for-profit hospitals and nursing homes utilize nurses and physicians, and make no contribution to their educational preparation.

Presently, older, more mature women are entering these programs and they bring special ability and gifts to the nursing profession that we have not had before.

There is a job market—there is unemployment—we have to get our act together.

Issue 4: Has the hospital directly contributed to the nurse shortage? Can this be reversed?

Yes. We closed diploma schools of nursing. Many were forced out by the heavy financial burden on patients which we could not justify.

Historically, the private not-for-profit hospitals have been the greatest supporters of both medical and nursing education. This commitment is based on the fact that quality care is greatly enhanced through these programs. We also believe in preparing for the future health care of the people of our country. The clinical ladder for nurses provides incentive to stay at the bedside. This system defines four levels, provides advancement for the RN, while allowing her to stay at the bedside. The nurse receives a salary increase with each advancement, as well as more responsibility and a status promotion. Heretofore the traditional promotion was to supervisor to teacher to administrator, and each step was further away from the bedside. I think we are living to regret that. They got nearer to the desk and the multimeeting syndrome.

These four levels of the clinical ladder are based on well documented programs of learning and evaluation of clinical excellence, knowledge, and practice.

The cost of education is overwhelming.

The professional status and integrity of the diploma nurse and the LPN has been under fire.

We are on the threshold of literally throwing the baby out with the bath water in the presence of rather sterile parents.

Can we turn ourselves around? I believe we can and will, and in some instances we have begun. We need support in doing so.

We must reinstate the hospital diploma program and be open to look at other alternatives of delivering quality care.

We must make nursing education more relevant, more accessible, oriented to patient needs, to the needs of the career nurse.

As the major employers of nurses, hospitals should become more accountable for influencing relevant curriculum development for the nursing profession at all levels.
We must deal radically with the dissatisfiers for nurses within our hospitals by providing opportunities such as:

- Clinical ladder for their advancement in education and skills—offer options. We found some new ways of doing that. I will not take your time to go into them today.
- Primary care nursing—Wholistic care for patients.
- Improve the nurse/physician relationship—resolve conflict.
- Assure equitable wage and benefit programs that are cost effective in reducing turnover.

To recap the challenge to hospitals, in rather simplistic, brief terms:

- Support all levels of nursing education as it relates to the hospital's mission of providing compassionate, quality care to the sick.
- Hospitals must seek a controlling influence in the planning for nursing manpower on a short- and long-range basis, especially since 80 percent of nursing manpower is in hospitals.
- Open up to nontraditional, innovative ways of providing quality care.

Be vocal and unified in dealing with our present plight. The health of our fellow man comes first.

I would like to say a couple more paragraphs about turnover, about my experience of turnover, and my whole thrust is geared to what my experience and the experience of others is in hospital administration.

The national norm for turnover ranges from 35 to 64 percent for nurses. Holy Cross Hospital has been 33 percent for 2 years and dropping. Radical change in the past month has occurred, and I attribute much of the change to primary care, which is a satisfier for nurses. There is a great reduction in medication errors and treatment errors. Since the units that we began as a pilot study have converted to primary care, there is no turnover on these units. The shift differential for holidays and weekends has been increased. These are some factors that change the lifestyle of nurses, and they go into other professions for these reasons.

For instance, on holidays, our nurses are paid 2½ times the usual wage. But they get no holiday in lieu of that holiday. This is cost containment considering the cost of turnover and closing beds. We have got to put more dollars and planning into the wage and salary programs for this reason.

On weekends, we have 12-hour shifts 2 days, and we pay for 40 hours. Since we have done that we have had no problem covering weekends.

Our current turnover, in the last 6 months, has dropped to 10 percent. That 10 percent we can attribute to nurses who are married to physicians who leave town, etcetera.

Our present position is that we only have openings for two full-time equivalents. That is it. However, we will need even more RN’s during 1981-82, as we convert the rest of the units in primary care.

I am going to end there. I think you have the gist of what I have to say. I believe very strongly in these issues, and I will discuss them with anyone who cares to discuss them.

Senator Hawkins. Since you have a tight timeframe, we will ask questions of you, and then go to the other witnesses. Please be
thinking of summarizing your statements while we ask questions of Sister JoAnne.

Nurses play a very important role in reducing health care costs. In Florida, 67 percent of our registered nurses work in hospitals. But the competition is so severe that one hospital in Hollywood, Fla., became innovative enough to offer a $35,000 a year salary, and took out ads to advertise the nursing positions available.

While I feel that nurses are deserving of more adequate salaries than they have been receiving, and there should be some attention placed on their surroundings, I am concerned about the effect this is going to have on the cost of health care.

Do you feel that expending Federal funds now on nurse training programs will have a long-term saving in health care costs?

Sister JoAnne. Yes, I do. I think that the fund allocation has to be carefully handled. I think there has to be a real commitment to programs, and close controls.

Senator Hawkins. Do you have any questions?

Do you have any questions of Sister JoAnne?

Senator Kennedy. Yes.

Sister, I welcome you here to the committee. We have seen over a period of recent years where at least the previous administration felt that we had sufficient nurses in the country; that was a great dispute between HEW and OMB and this committee.

The time that Secretary Califano appeared, I put on the table about a foot-high's worth of newspaper advertisements for nurses all across this country. There appears to continue to be a shortage of nurses, and I think that is seen in every major community across this country, in the rural areas as well as in urban areas.

So, I think it is important that in fashioning and shaping a health care system, we are going to be able to be assured of an adequate supply of nurses I think that is in our Nation's interest.

I am going to ask some questions of the panel and I would be interested in knowing what you believe will be the impact of the administration's budget cuts in terms of the future of nurse training. What will it mean? Will young, committed women and men look to it as a career opportunity? What do you think will be the result of these budget cuts?

Sister JoAnne. I think the budget cuts will be a real deterrent.

Senator Kennedy. Why will they be a deterrent?

Sister JoAnne. Well, it is not that they do not want to go into nursing, they cannot finance it. We give minimal scholarships to students from Weber State. I am talking about $200 or $300, and it helps them to make the decision that, yes, they do want to go into nursing. With the other changes that we are making in terms of the career ladder, the chance for advancement, and some choices within the profession women are attracted to the profession.

We already have people who want to come into nursing but who are unable to because they cannot finance it, and I think we are going to compound that problem.

Senator Kennedy. Will that not mean that the sons and daughters of wealthier people will go in their place, or do you think there will just be vacancies? What would be the result if just the wealthy could go into nursing?
Sister JoANNE. Disastrous. There will be vacancies. The other problem is that there are so many other careers that are available to women, and women are the primary people who go into nursing. The other careers are more attractive. You know, if there is instant independence and instant “having my own money,” why should I spend 3 or 4 years waiting for something that might not be all that great? I think those are deterring factors.

Senator KENNEDY. Let me just ask, finally, what do you think is the responsibility of the Federal Government in terms of increasing the numbers of nurses which are needed in the country?

Sister JoANNE. I think it has to be a joint working together, a joint venture. I think we both need to be responsible for it. I did mention that we have another serious problem, and I know this is an unpopular topic, but it is with the investor-owned hospital, which assume no responsibility for education and use the nurses. So, they do not have a commitment to education, plus they are creaming us at the top by taking patients. It is expedient for the for-profit hospital to take care of certain categories of patients because the reimbursement is excellent.

So, we have two problems here. We are going to have less money in nonprofit hospitals at the local level even before we get the cuts from the Federal Government.

Senator KENNEDY. Madam Chairman, could I just get reactions to those two questions.

Senator HAWKINS. Surely.

Senator KENNEDY. Those would be the only two questions that I would ask of the other two panelists.

Dr. COLLINS. I will address, Senator Kennedy, your first question, “What do you think the impact will be of the cutbacks?” I think the impact will be drastic. We have depended for some time on support money for education for nursing, especially as we move into higher education and academic settings, there is a need for support.

Students at this moment are anticipating dropping out of nursing programs, expecting cutbacks, which will further deplete the numbers that are pursuing nursing education. This indicates a waste of money already expended. The student will not be able to continue, or will continue on a part-time basis, which will again further deplete the numbers available for early employment.

Senator KENNEDY. You all agree with me that there is a shortage of nurses nationwide, certainly. Do you all agree?

Dr. COLLINS. Yes.

Dr. BROWN. Yes.

Sister JoANNE. Yes.

Senator KENNEDY. I gather from your testimony that these kinds of budget cuts will probably make that shortage more acute?

Sister JoANNE. Yes.

Dr. COLLINS. We believe so.

Senator KENNEDY. And then I would be interested if you would briefly describe what you think the Federal responsibility is. I think the sister indicated that it is a form of partnership.

Would you respond to that question?

Dr. BROWN. I would be glad to, Senator. I think that it is a partial responsibility of the Federal Government because the
health of the Nation is very important to the quality of life in the Nation. It is impossible, as the sister and Dr. Collins both have said, for a student to pay the entire cost of education.

Many of our students will be working more than they are working presently to supplement what private funds they have, which means that this will extend the length of time they are in nursing schools, which will further complicate the already existing shortage of nurses.

Senator Kennedy. You would agree with that?

Dr. Collins. Absolutely. I think, also, the stress on the employed students and with the heavy expectation of academic studies, the dropout rate would increase. We find in education that the more they have to work to supplement income, the less time they can attribute to the educational process. As a result, they become more tired, more depressed, more discouraged.

Senator Kennedy. Well, I appreciate the comments. We have seen in the medical schools, with the withdrawal of institutional support and individual support, an increasing burden on the student as well as on the institution. There are generally three well qualified students for medical education for every one that is accepted.

I do not know quite what it is with regard to the nursing schools, but what we are going to see is that medical education in this country is going to be reserved for only the sons and daughters of the wealthiest individuals in this country, rather than being clearly broad based, as I think the health care system should be in terms of being truly representative of our society.

I am wondering if this is going to be a problem among the nurses too, that it is only going to be the sons and daughters of more affluent people that are going to be able to choose that career and, by putting on this financial limitation, excluding talented, committed, compassionate young people whose parents do not have those resources.

Dr. Collins. Could I just respond to that briefly, Senator?

I recently heard an address by Eli Ginsberg, who reported, that with the declining birth rate in this country and the potential need for more students to enter the health professions, we are going to see fewer numbers available to pursue nursing education. We will see the stable population coming out of the minority groups, the poor, and the underprivileged. When we look at that grouping of people available to pursue health careers, there is going to have to be some financial support for the very reason that you have suggested. Only those with money will have access to nursing programs. There will be other options that have a faster turnaround than the nursing career would provide. I think this is a major concern and, again, a reason to support Government funding for education.

Dr. Brown. I agree with that. I do not have anything to add. 

Senator Kennedy. I hope you will extend my best wishes to Connie Halleran.

Dr. Collins. We will; thank you.

Senator Kennedy. She has appeared here before; she was a spokesperson for the Nurses' Association. She was here before the
committee on a number of different occasions and worked very closely with us on a wide range of different health policy issues.

Dr. BROWN. We appreciate that.

Senator KENNEDY. I know she is in Geneva.

Senator HAWKINS. Sister JoAnne, you may be excused since you have the travel problem.

Sister JOANNE. Thank you very much.

Senator HAWKINS. Dr. Collins, could you summarize your statement?

Dr. COLLINS. Yes, I will try to summarize my statement.

Senator HAWKINS. We will enter the full statement in the record.

Dr. COLLINS. Pardon?

Senator HAWKINS. We are going to enter your full statement in the record.

Dr. COLLINS. Thank you; I understand that to be true. I would just like to preface my remarks with the fact that I am here representing the National League for Nursing and the American Nurses' Association in a consolidated front, as they, in concert with the nursing population and the nursing community, have established this testimony in support of the request for funding for nursing education.

I would like to address several issues. One of them is the need for graduate and advanced training for nursing personnel. It is very crucial in this time of advanced technology, and requirement for quality care that nurses be prepared to meet the needs of—an aging population, the deprived and rural areas—that we have available, competent practitioners of nursing who can serve cost effectively in these specialty fields.

We see today the health needs of an increasing aging population and the resulting concerns, that nurses are leaving the nursing profession at a time of crisis. I would like to address this issue because I think it is crucial to an understanding of where our nursing practitioners and our nursing population is needed.

The ANA, in a 1977-78 inventory of registered nurses, indicated that of the 1.4 million RN's currently holding active license, 75 percent of those are still employed in nursing. Of the 25 percent not working in nursing and not working at all, about one-fourth are over 54 years of age. Another 43 percent are under the age of 40; that is, the age range commonly associated with child-bearing and child-rearing years. Thus, the activity rate of nurses is closely associated with age, and we need to recognize that.

According to data obtained by the National League for Nursing, just over 95 percent of the registered nurses newly employed in 1978 were working in nursing 6 to 8 months after graduation. I am therefore suggesting that the population of nursing does indicate an interest in retaining their activity in the nursing profession, yet we need to increase our numbers.

We know the technology required in intensive care areas, the serious nature of respiratory care, acute shock trauma units, and the whole category of intensive care units, which today require three times as many nurses to staff as they have in the past. We know that without advanced preparation, nurses are not prepared to deal with the highly technical needs of patients in these particular specialties.
Estimates of shortage of over 100,000 nurses in hospitals alone have been indicated, and we recognize that this number is expanded with nursing homes and community service needs. We believe that cuts of the size proposed in Federal support for nursing education would cripple many programs, especially at the graduate level.

I would like to add to my testimony a statement that summarizes why I believe that graduate and advanced education is necessary. In a 1977 survey—and this is a quote from the Journal of Public Health Policy, December 1980, submitted by Claire Fagan, suggesting changes occurring in nursing roles and functions to be as follows:

Several tasks were performed more often by nurses with higher levels of formal education than by nurses with less education. A significantly higher percentage of registered nurses with baccalaureates than with diplomas or associate degrees obtained health histories, performed portions of physical exams, selected a plan of treatment, developed therapeutic plans for patients, instructed patients in management of a defined illness, instructed and counseled patients and families in health promotion and maintenance, and had primary responsibility for following through on patient care routines.

The reason I am making this an emphasis is that one of the most expensive commodities in hospital nursing today is the nurse aide. When we look at the better prepared nurse, we are discovering that the nurse with advanced preparation can do all tasks and does not experience downtime while others are performing tasks that she is not licensed or prepared to do.

So, cost containment effort—the whole thrust of realizing more effective utilization of the resources of nursing—can be established by the better prepared nurse leader.

Nursing administrators with advanced preparation can determine where the most effective assignment of the nurse resources can be made in these agencies. This is important to support the claim that higher degrees in education for nursing is essential to the quality of patient care and the maximum use of personnel.

Since the inception of the Nurse Training Act in 1964, the demand for nurses with advanced degrees has continued to be greater than the ability of schools to prepare nurses at advanced levels. Any action that would decrease this ability in these times of financial constraint would prove disastrous to nursing efforts to prepare qualified professionals.

We understand that special projects and other moneys for nurse training have been included and retained in the bill that has been proposed. We salute this supportive move and certainly are in complete agreement with it.

However, there is one area that is under consideration to be repealed, and that is the repeal of section 215 “Delegation.” It is premature at this time. The nursing shortage is a nationwide shortage and not merely geographic in nature. Thus, it is important that nursing nationally be involved in the decision to distribute funds and be available to advise relative to how these funds could best be utilized.

It is unlikely that this shortage will be relieved to any great extent during the next 3 years. A major concern about the repeal of section 215 relates to the potential dilution of a national nursing perspective which includes the assessment and review of total national needs and the planning for adequate national resources.
Since nursing is a national resource, decentralization in the face of a continuing nationwide shortage would only aggravate the current critical situation.

We appreciate the need to hold the line on Federal spending in these inflationary times. However, given the scope and goal of this legislation, we do not believe that the authorization levels are adequate and we would request your thoughtful attention to this matter.

I think this summarizes the major aspects of my testimony in regard to moneys for advanced training for nursing in an academic setting.

[The prepared statement and responses to questions submitted to Dr. Collins follow:]
Testimony on S. 799

Health Professions Educational Assistance and Nurse Training Act

April 8, 1981

to Senate Labor & Human Resources Committee

By Dr. Verla Collins

Director, Intermountain Health Care Association

Salt Lake City, Utah
Mr. Chairman, I am Dr. Verla Collins, director of the Intermountain Health Care Association in Salt Lake City, Utah.

I am pleased to be here today on behalf of the American Nurses' Association and National League for Nursing to present testimony on S. 799 presently before this committee.

Nurses indeed support the government's effort to combat inflation through budgetary restraint; and we understand the strong popular mandate to obtain a better balance between productivity and the supply of public services. Yet, a failure to provide adequate health care to the people of this nation represents a serious threat to the quality of society as a whole. The health care of our country serves as a barometer for how we Americans deal with the human phenomena that touch us -- pain, suffering, disability, and dying. If the current critical shortage of nurses is allowed to continue, it will bring unacceptable consequences for many individuals. Especially at a time when commitment to a position of strong national defense is high, the government must have a vital interest in maintaining an adequate supply of nurses.
Predictions vs. Reality

The nature and scope of demands for nursing services have changed dramatically in recent years. Although between 1958 and 1980 the number of active nurses more than tripled, and the ratio of active nurses to 100,000 population nearly doubled, today we are faced with what is being termed an acute nursing shortage. 1

There is a widely held perception by present and past Administrations that the nursing shortage would be solved if inactive nurses returned to work. We do not agree with this assumption. The ANA 1977 Inventory of Registered Nurses, indicated that of the 1.4 million RNs currently holding active licenses, 75 percent are employed in nursing. Of the 25 percent not working at all, about one-fourth are over 54 years of age. Another 43 percent of this group are under the age of forty, those years most commonly associated with childbearing and child rearing. Thus, the activity rate of nurses is very strongly associated with age. According to data obtained by the National League for Nursing, just over 95 percent of registered nurses newly employed in 1978 were working in nursing six to eight months after graduation. 3

Declines in Graduations

We cannot emphasize too strongly that a drastic decrease in federal funds for nursing education would pose a grave and unnecessary risk to people of this nation. There is every reason to believe that the situation will grow increasingly worse. The latest NLN data demonstrates that the downtrend in admissions, graduation, and enrollments to schools of nursing that began in 1976 is worsening. The
will be a 3 percent drop in graduations from RN programs in 1981; admissions and enrollments will be down 2 percent.

This future decrease in supply must be considered in light of the Bureau of Labor statistics projections that the explosive growth in the health care system has created a need for 85,000 new registered nurses annually through 1990. Further, the demand for skilled nursing care will undoubtedly continue to rise, fueled by advances in medical technology, the proliferation of labor-intensive critical-care units, and the aging population.

Demand for Nursing Services

In settings which required ten RNs to staff an intensive care unit in 1970, there are now three intensive care units -- one for cardiac problems, one for kidney disorders, and one for brain scanning -- and three times as many nurses are required. A 40 percent increase in various kinds of intensive care units in the nation, coupled with a steep rise in medical technology, has dramatically increased -- not only the need for nurses -- but for more nurses with special training. Moreover, as pressures to lower hospital costs have tended to limit care to the very sick, more nurses are needed to care for a rapid turnover of intensely ill patients.

The number of long-term care facilities has multiplied as the demand for health care services by the elderly population has increased. The demand is expected to continue in the future as life expectancy increases. The number of nursing home residents during 1973-74 was 1,075,800. By 1977, this figure had risen by 21 percent to 1,303,100.
This increase can be attributed, in part, to the growing proportion of persons 85 years of age and over. In addition, long-term care has expanded to include both institutional and non-institutional health care services.

**Institutional Demand**

The most significant increase in demand for nurses has occurred within the hospital setting. With the emphasis on removal of financial barriers to health care during the 1960's, hospital utilization increased. As a result of the enactment of the Hill-Burton Act, many hospitals were enlarged and more medical facilities were built. The addition of more hospital beds signaled the need for more nurses.

Estimates of a shortage of over 103,000 nurses in hospitals alone, and information in news media all over the country testify to the severity and widespread nature of the problem.

In the state of Utah there are currently budgeted vacancies of 1,400 registered nurses. Some southwestern hospitals are offering bonuses of glamorous apartments at low rents, free use of an automobile, or cash awards up to $4,000 to lure nurses onto their staffs.

In Massachusetts the latest estimate cites 2,500 unfiled nursing positions.
In the New York City area alone there are over 1,100 staff nurse vacancies; in some floors in Bellevue Hospital there is only one practical nurse and an aide covering an entire floor.

Need for Nurses with Advanced Degrees

While the nursing shortage seems to have reached intolerable proportions in many institutional settings, the most grave situation by far is the shortage of nurses with advanced educational preparation. In view of the increasing technological sophistication and complexity of health care, many nursing skills require special educational preparation. More nurses with master's and doctoral degrees are needed, especially in nursing service, educational administration, research, and as clinical specialists.

Clinicians:

Clinical specialists for intensive care units such as renal, coronary care, and trauma care are necessary. Directors of nursing services report a serious scarcity of highly skilled registered nurses, especially those prepared to care for critically ill persons. Further, many nurses are presently practicing in underserved areas, providing care to populations that would not otherwise have access to health services. In situations of this nature, where a high degree
of professional judgement must be exercised, it is absolutely essential that the nurse have the necessary educational background.

Educators:

Other professions have long ago established the importance of advanced education, and nursing is not an exception to this standard. To maintain the quality and quantity of direct patient care required from nurses, nursing students must be taught by nurses with advanced degrees.

According to data collected by the National League for Nursing in January, 1978, a total of 20,217 full-time and 4,457 part-time nurse faculty members were employed in 1,358 R.N. education programs. There were 800 unfilled budgeted positions, 24 more than reported in January 1976. Of all the full-time nurse faculty reported as employed in R.N. programs, only 5.3 percent held the doctorate, and 62.5 percent the master's degree.

Administrators:

Nearly half (48.1 percent) of nursing service administrators do not hold even a baccalaureate. Yet nursing service administrators must assume responsibility for 40-60 percent of a hospital's budget and 33-50 percent of its personnel. Only advanced education can prepare nurses to provide leadership in responsible fiscal management, in development of standards and quality assurance programs, in application of patient classification systems, in use of computers to project plans and predict consequences, in development of research in practice and operations, and in promotion of exemplary learning opportunities for staff and students.
Researchers:

More nurses with advanced preparation also are needed to address the complex problems concerning quality and delivery of care. In times of cost containment, innovations are needed. But innovations must be tested scientifically, which requires more nurses educated at the doctoral level to design instruments and methodologies suited to nursing phenomena. Equally important, more nurses must be prepared to interpret and apply these and other research findings in practice settings.

Need for Doctoral Preparation

According to preliminary findings from the 1979 National Survey of Nurses with Doctorates conducted by ANA and funded through the Division of Nursing, Health Resources Administration, there are only approximately 2,500 nurses with doctorates in the United States. This is far too few to meet the needs of educational and service settings.

American Nurses' Association and National League for Nursing Priority

Because of the critical need and increased demand for nurses prepared to deliver high quality care in the most cost-effective manner in today's highly complex health care system both the American Nurses' Association and the National League for Nursing have identified the continuation of federal monies for the preparation of nurses with advanced degrees as their highest priority. In order to achieve this priority however, assistance is necessary at the undergraduate level to increase the pool of qualified candidates eligible for advanced study.
We are pleased that S. 799 would extend the Nurse Training Act for three years. Lack of consistent policy direction during the past few years has severely affected program planning in schools of nursing. Continuity will, in addition, enhance and provide a broader base for evaluation of program effectiveness.

Sec. 203: Advanced Nurse Training

Numerous reports reveal a severe shortage of nursing personnel prepared to fill leadership and functional roles such as clinical nurse specialists, nurse educators, nurse researchers and administrators for service agencies and for education, government and organizational work.

The definition of advanced nurse training used in past legislation and current regulations is:

"Advanced training programs means a program of study in a collegiate school of nursing leading to a graduate degree in nursing...."

Section 203 of S. 799 would alter this definition considerably. This section proposes that:

"The secretary may make grants to and enter into contracts with public and nonprofit private schools of nursing and other public and nonprofit private entities to meet the costs of projects to...."

It is our understanding that with the inclusion of nurse practitioner programs under....s section the above revisions were necessary to incorporate a variety of certificate programs currently preparing nurse practitioners. We recognize the unique role that these programs have demonstrated in the past, but they are no longer sufficient to meet the current demand for nurse practitioners prepared to function independently in a variety of settings.
The American Nurses' Association and National League for Nursing both have taken the position that nurse practitioners must be prepared in graduate programs in nursing.

Since the inception of the Nurse Training Act in 1964 the demand for nurses with advanced degrees has continued to be greater than the ability of schools to prepare nurses at advanced levels. Any action that would decrease this ability in these times of financial constraint could prove disastrous to nursing's efforts to prepare qualified professionals.

We urge that Sec. 203 be amended and would suggest the following:

"The Secretary may make grants to and enter into contracts with collegiate schools of nursing to meet the costs of projects to..."

We strongly support the concept that programs in geographic areas lacking such programs and programs on a part-time basis should receive special consideration.

It should be noted that there is no documented evidence to support the popular assumption that better educationally prepared nurses will increase health care costs. In fact, managerial effectiveness is increased with fewer categories of better prepared personnel who can be held accountable for a broader range of patient care tasks.

Sec. 202, 822, 823: Support for Practicing Nurses; Educational Assistance to Individuals from Disadvantaged Backgrounds; Strengthening Nursing Education.

Special projects, authorized in Section 820 of present law have been most beneficial in fostering the development of new nursing methods emphasizing primary care, health education, prevention and greater cost effectiveness.
It is our understanding that the intent of sections 202, 822, 823 of S. 799 is to provide for a variety of activities which would enhance the attractiveness of nursing, improve clinical practice, and provide for such programs as continuing education for nurses in areas where no schools of nursing exist. Past and current special project grants authorizations have spoken to this need in language broad enough to include schools of nursing and public and nonprofit private entities which also includes hospitals. We do not believe it necessary therefore, to specify "public and non-profit hospitals" and urge that this be amended to delete the reference to hospitals. We do note that special consideration will be given to schools of nursing and understand that such consideration will be expanded upon in report language and regulations.

We do not believe that funding authorized for Sections 202, 822 and 823 is sufficient to cover the variety and complexity of programs specified. We therefore recommend authorization levels be doubled and the sections be targeted to programs which have proven to be effective in enhancing innovative clinical and academic learning including continuing education, assistance to individuals with disadvantaged backgrounds, providing flexible opportunities for career mobility for practicing nurses and programs preparing nurse practitioners.

Sec. 206: Traineeships

Although enrollments in master's programs rose by nearly 8 percent in 1979 over the previous year, the population of full-time enrollees dipped below 50 percent. It is predicted that with the increase in part-time enrollments, slowdowns in growth rates of graduations will occur.
Further, in light of recent inflation and economic concerns and increased numbers of persons entering nursing as a second career, we believe that traineeships must be maintained. Due to the high demand for better prepared nurses, we support consideration of offering some assistance to part-time students. An accelerated payback system might be tied to this part-time assistance.

Section 208-210: Loan Agreements

Nursing remains one of the lowest paid professions in the country. Many nursing students come from homes with incomes that are not high enough to support any post-high school education. A survey by the National Student Nurses' Association showed over 50 percent of nursing student respondents coming from homes with incomes below $15,000 per year. The request for loans, as well as scholarships, has remained greater than funds available. The NSNA survey reported that 85 percent of students receiving federal funds said they would be unable to continue their education without that assistance. A total of 61.33 percent of the students responding to the NSNA survey said that they held jobs to help meet education and maintenance costs.

We are pleased that loan provisions remain in proposed legislation and that Sec. 208 repeals the prohibition against participation in the NDSL program. In a time of shrinking financial resources and funding, it is most helpful for nursing students to be able to participate in NDSL.

We continue to support loan forgiveness as both a mechanism to relieve maldistribution and improve access to care as well as a vehicle to increase the potential applicant pool for graduate study.
Section 211-212: Scholarships

Scholarship assistance has in the past, been designed to and has served as a resource specifically for those students who would not be otherwise able to obtain a nursing education. This group particularly includes financially distressed students as well as ethnic minorities. If nursing is to continue to fulfill its social obligations in the delivery of quality health care and increase the numbers of minorities and disadvantaged in nursing education programs scholarship monies must be retained at this time. We therefore believe that scholarships should not be repealed but rather continued and funded at an adequate level.

Section 215: Delegation

The nursing shortage is a nationwide shortage and not merely geographic in nature. It is unlikely that this shortage will be relieved to any great extent during the next three years.

A major concern about the repeal of Section 215 relates to the potential dilution of a national nursing perspective which includes the assessment and review of total national needs and the planning for adequate national resources. Since nursing is a national resource, decentralization, in face of a continuing nationwide shortage would only aggravate the current critical situation.

Decentralization of merit review of grants and contracts would be problematic in terms of increased program costs, diffusion of program responsibility and accountability and coordination. Therefore, we believe that repeal of Section 215 at this time is premature.
Authorization Levels:

We appreciate the need to hold the line on federal spending in these inflationary times and have indicated our willingness to take our share of necessary budget cuts. However, given the scope and goals of this legislation we do not believe the authorization levels are adequate. We particularly recommend higher authorizations for special projects grants.

Summary:

The nation cannot afford to utilize nurses, its largest group of health professionals, at anything less than their highest capacity. At the same time, a people who rightfully demand the best health care possible must be willing to support the efforts needed to provide such care. Such support comes through the funds provided for sound nursing education.

FOOTNOTES

2. Ibid.
In your testimony you state that admissions to, graduation from and enrollment in, nursing schools is down, although enrollment is still far higher than 15 years ago. What then can the nursing profession itself do to increase the attractiveness of nursing as a career?

1. Nursing as a career can be more attractive when

A. Salary and benefits increase.

B. Greater flexibility in scheduling the nurse's time.

C. Nurses no longer expected to perform non-nursing tasks that can be delegated to ancillary support services. This would free the nurse to maximize her/his productivity for direct patient care.

D. Nurses are recognized and respected as colleagues of the other health care providers; i.e., physicians, etc. This will be better accomplished when standard educational requirements are agreed upon by the profession.

II. Complex patient care requires a minimum of baccalaureate preparation to meet the needs. Nurses must dialogue with other disciplines; i.e., medicine, social services, diet, physical therapy, pharmacy, etc., all of whom are prepared minimally at the baccalaureate level.

The Wisconsin Study, Volume 1, 1979 (Statewide Study of Nursing and Nursing Education SSNE, funded by the Wisconsin System Health Science Advisory Council and funded by W. K. Kellogg Foundation), calls for a move from the four present types of basic nursing education programs (practical nursing, associate degree, diploma, and bachelor of science) to two new programs, associate degree and bachelor of science in nursing.

States must take action in this direction to standardize educational requirements.

The development of shared educational activities among professionals would provide a common knowledge base for the delivery of care.

The development of management and leadership skills in institutions of higher learning must be supported.

The need for collaboration between nursing service and education for meaningful clinical experience and realistic expectations of the practitioner must be articulated.
Question 1. With the enlargement of patient facilities and advancement in technology causing increased demands on available nursing personnel, how can nursing schools and hospitals eliminate some of the demand on and for professional nurses?

I. When nurses assume the responsibilities of other departments on evenings, nights, and weekends, transport patients, deliver laboratory specimens, picking up medications from the pharmacy, delivering food, etc., and other housekeeping tasks, the benefit to direct patient care is lost.

The assumption of responsibilities of other departments and menial tasks further depletes the nurse manpower available for producing continuity and quality of patient care.

II. Nurses need to feel they are valued and organizations should provide opportunity for nurses to participate in decision making appropriate to their professional responsibilities, thus, avoiding the traditional rigid hierarchy of close supervision of professionals leading to a lack of trust and collaboration, stifling professional judgment and creativity.

Question 2. I stated in my opening remarks that many of the problems causing nurses to leave the profession cannot be solved by the federal government. What do you see those problems as being and how will the professional address them?

I feel the answers to this question are addressed in all of the above; perhaps, summarized to include the following:

The issues that need to be addressed by the profession include:

- change the disillusionment and dissatisfaction experienced in the practice of nursing in health care agencies.
- improve the relationships with medical staffs and agencies administrative staffs.
- offer flexibility of work conditions to develop an appropriate balance between agency needs and personal values and needs.
- develop a consensus around expectations for the beginning practice of nursing and the educational preparation required to meet the complex needs of patient care.
- develop well prepared nurse administrators at all levels of the organization to meet the growing demands of the health care system, the profession of nursing and society in general.
Senator Hawkins. Thank you, Dr. Collins.

Dr. Brown?

Senator Kennedy. Madam Chairman, I am going to have to excuse myself. I want to thank the group that has come here this morning, and particularly the next panel which is on the National Health Service Corps. One of the witnesses will be Mr. Gregory Bulger, who is the director of the Community Health Center in Mattapan, Mass. I want to thank him very much for coming down here.

We have many fine centers in our State and a very active State organization. This is an excellent program, and I want to thank Mr. Bulger for being willing to come down here and talk with us about these matters. I had a good opportunity to visit a number of these centers and see what those National Health Service doctors were doing. I know that his testimony will be very important and helpful.

I want to give assurances to our other panels that I will look forward to following their testimony with great interest. Their subject matters are matters which I have long been interested in and concerned about and, needless to say, strongly committed to. We will have to do the best we can.

I want to thank our panel here, and also thank Gregory for joining with us, and thank you very much.

Senator Hawkins. Thank you, Senator.

Dr. Brown. I am Billye Brown. I am president-elect of the American Association of Colleges of Nursing, and I am dean of the School of Nursing at the University of Texas at Austin.

Our association represents over 270 programs in which there are baccalaureate and graduate programs. Senator, it is very difficult for me to abstract in a few moments an issue about which I have so much feeling and feel that I have a great deal of information on. I realize, however, the constraint of time.

I would be prepared to speak to support advanced nurse training, for special projects, and for financial assistance to nursing students. In the interest of time, however, you have my testimony, which you say will be entered into the record. I think rather than attempting to abstract, as I said, an issue which I feel is terribly important, perhaps issues that are not included in the written testimony could be brought out by questions. And I believe I would defer to any questions that might be brought up at this time.

Senator Hawkins. I have questions for both of you.

Dr. Collins, I understand from studying that President Carter's rationale for vetoing the nurse training legislation in the 95th Congress was that the outlook was good for adequate, sustained growth in the supply of nurses. I took those words from his text.

I hope that projection proves true; however we have not seen it in Florida, even though our population has grown so tremendously in the last few years. In Miami alone, there are presently 1,000 budgeted positions open for nurses in acute-care hospitals.

I need to know from both of you what your projections are for a nursing shortage, both of you.

Dr. Collins. Perhaps I could address that from my perspective in regard to my position as director of nursing and education for a
multihospital system that serves hospitals in the three States of Utah, Idaho, and Wyoming. We presently have affiliate contracts also with 57 additional hospitals in the broader western region.

In Utah alone at the present time, there are over 1,000 budgeted positions vacant and more predicted to occur—between now and 1990. Those positions have been established as a result of a study done in the State of Utah to determine needs for nurses in the present and immediate future.

In the metropolitan area of Salt Lake City alone, we have 500 vacant budgeted positions as of today. I cannot provide figures for all States, but as I react and respond to the constant need for recruitment, and requests for staff, it is apparent to me that we are not nearly meeting the need or filling the positions.

I do know for a fact that in some hospitals, acute beds are closing; beds needed to meet the needs of the sick in some areas are having to be deactivated because of the lack of personnel in the nursing area.

Senator HAWKINS. Dr. Brown, would you support that?

Dr. BROWN. The same is true in Texas. I failed to mention that Austin is in Texas, but I thought perhaps you knew that.

Senator HAWKINS. I thought it was. We have been here a long time.

Dr. BROWN. The same is true in Texas; we do have a great shortage of nurses there, and many beds are closed in the acute care hospitals, particularly. There is a great need for nurses in nursing homes—an area that we have not placed a great deal of emphasis on, but where there is a tremendous shortage of nursing care being given because of the lack of prepared nurses at the professional level.

Many of our schools at the baccalaureate and higher degree levels are church-supported programs; they are private schools. At these schools, the tuition is very high. Again, the kind of support that would be provided with Federal legislation—money for special projects, advanced nurse training, and financial assistance—would be very helpful to allow these schools to remain open. Some of them will probably have to close if such funds are not available. This will further complicate the shortage of nurses.

Dr. COLLINS. Could I add an additional statement?

Senator HAWKINS. Yes.

Dr. COLLINS. In the Kearny study conducted in Utah, it was determined that at the present rate of enrollment, the shortage predicted would occur. If funds are cut and declining enrollment is a fact, those shortages could be magnified tremendously as a result of lack of funds.

Senator HAWKINS. You mentioned a perception held by many that the nursing shortage would be solved if inactive nurses returned to work. In Florida, there are over 55,000 resident nurses, about 8,000 of which are not currently working. But out of this 8,000, only 800 were seeking work. A large percentage of the unemployed registered nurses in Florida are retired and they have no intention of returning to work. Is that similar to what you are finding on a national level, or are our percentages out of skew?

Dr. COLLINS. I think that is very representative of the national level. As we look at statistics, very often they are deceptive because
they say there are great numbers that hold licenses. But the percentages of those that are interested in seeking employment or are capable of employment are very low. So, as we review those numbers, it is very true.

I reviewed a statement out of the analysis and planning project report from the Wiche study that said that the proportion of unemployed nurses is considerably lower than that for the entire U.S. labor force. So, you see that people that are willing and available to work in nursing are working. There is not an unemployment problem.

Senator Hawkins. What percent of the nurses are women? Do you have those statistics?

Dr. Collins. About 96 percent.

Dr. Brown. At least that.

Dr. Collins. We have attempted to attract more males into the profession. I think there is a slight increase in the number of males that are entering the nursing profession, but it has not dramatically increased in the last few years.

Dr. Brown. We have 10 to 12 percent in our nursing program. However, because of the lack of male nurses who are already graduates, this would bring our overall percentage down so that in the neighborhood of 96 percent of all registered nurses are female.

[The prepared statement and responses to questions submitted to Dr. Brown follow:]
AMERICAN ASSOCIATION OF COLLEGES OF NURSING
Testimony on S. 799
to
Labor and Human Resources Committee
of the
Senate
on Health Manpower Legislation
April 8, 1981

AMERICAN ASSOCIATION OF COLLEGES OF NURSING
11 Dupont Circle, Suite 430, Washington, D.C. 20036
I am Dr. Billye Brown, President-Elect of the AACN, and Dean, University of Texas, Austin. The AACN is an organization that represents over 270 schools with baccalaureate and graduate programs in nursing. We are happy to speak in support of federal investment in nursing education.

I will focus my remarks on three areas: Advanced nurse training, special projects and financial assistance to students.

Even though the federal government has provided some support for advanced nurse training through previous legislation, the need is still acute. Only approximately five percent of nurses in active practice in the United States have had educational preparation to prepare for teaching, administration or clinical specialty positions. Repeated studies of nursing, all the way back to the Surgeon General's Consultant group on nursing in 1963, have pointed out that lack of prepared leadership was nursing's most crucial problem. The recommendation of that study was to triple the number, a 1976 report of a panel of expert consultants composed of nurses and non-nurses recommended that by 1982, 17-18 percent of practicing nurses should have achieved leadership preparation.

It should be pointed out that funds for advanced nurse training in previous legislation have been used wisely, recipients of training assistance are employed. But nursing is still "running to catch up" because changes in the complexities
of both hospital care and management require more highly skilled professionals. The lack of nurses with such skills is continuing to have a direct impact on the nursing shortage. Nurses prepared under advanced nurse training are employed in a wide range of settings as teachers who are indispensable for the education of the nurse at all levels of preparation, as directors of nursing who manage the largest group of personnel, the nursing service staff in hospitals, as clinicans who provide expert care and teach and direct the nursing practice in specialty care units in hospitals, as practitioners who render primary care in rural areas and in underserved urban areas. Curtailment of educational support for nursing's leadership group can only worsen the nursing shortage. All nursing organizations join with us in urging the Senate not to curtail support for advanced nurse training and traineeships.

Special Projects

Special project grants, on a competitive basis, can be compared to small investments which enable faculty to develop materials or methods which will result in improvements in teaching or in nursing care. An example is planning, pilot testing and evaluating outreach programs which bring undergraduate or graduate courses to sites distant from the campus or medical center. Some schools have used project grant funds to develop self-instructional learning packages which have reduced the cost of education. Other schools have developed
a consortium for continuing education, programs to recruit and retain disadvantaged students or educational career ladders for the practicing nurse.

In today's budgets in colleges and universities it is literally impossible to justify any released time for faculty to devote to ideas which improve and extend the values of education. Continuation of federal support for competitive special project grants is badly needed. One provision for receiving these grants is the stipulation that the university or school will continue the program when the grant has been completed. I see special project dollars and the support for advanced nurse training to be financial stimuli to the private sector to risk new ventures in education and to improve the education of nurses.

My last remarks are directed to the importance and necessity of loans and scholarships for nursing students.

Let me explain why we believe nursing students need specially designated loans and scholarships.

.98% of nurses are women. They are subjected to the values within families which, when money is limited, leads the family to choose to educate its sons. Nursing students come from middle or lower class families. Without help these students cannot afford to enter baccalaureate (4-year) programs in nursing --
and yet this is the most direct and most economical approach to lessening the nursing shortage. Nursing education, which must include clinical practice, is expensive. This is reflected in tuition. Moreover, the clinical schedule, including time and cost of travel to clinical sites, makes it difficult for nursing students to work as many hours as their coed friends in arts and sciences. The starting salary for beginning nurses is low - between $9,500 and $13,000. The repayment rate on loans to nursing students has been good.

We appreciate the zeal of your committee in its efforts to reduce federal spending. However, we believe that the reductions in the Nurse Training Act are, to use an apt term, radical surgery. The nursing community has no other federal support for its educational programs. The 30 million in the bill represents the total federal contribution to nursing education. We believe it is important for this Committee to know that 40 percent of AACN's member schools are in the private sector, 63 percent of the private schools have religious sponsorship and 37 percent are private-secular. We are very concerned that without some assistance to students and programmatic support more private schools of nursing will be forced to close and state schools will be less able to respond to the total need.
Senator HAWKINS. We thank you ladies for coming and we hope you will forgive the lack of attendance because of other meetings that go on simultaneously during the same time. It seems to be a rule of the Senate that all committees meet at the same hour and same moment in time.

Senator Hatch has questions he would like submitted to both of you, and you can respond in writing for the record, and other members of the committee who wish to do so may do so.

Dr. COLLINS. Could I make one more statement with regard to costs?

Senator HAWKINS. Yes.

Dr. COLLINS. It will be very brief. In identifying costs for education for nursing, there has been a great deal focused on the diploma level of education. The statistics out of the HEW study, reporting the direct costs per student of operating basic programs, the diploma program still ranks the highest costwise. The associate degree at $1,600 and the baccalaureate at $2,500 gives us an indication of how that relates to $3,300 for diploma nursing. I think we need to address that fact as we look at where the moneys can best be used for advanced preparation in nursing education.

Senator HAWKINS. Thank you so much.

We will now revert to panel II which will discuss S. 801, the National Health Service Corps amendments. First on the panel will be Dr. Ross Woolley, who is an associate professor and chairman of the division of community medicine at the University of Utah College of Medicine. He has initiated and contributed to a great deal of research related to health care delivery, and specifically rural health problems.

Second will be Dr. Jack Hadley, senior research associate at the Urban Institute in Washington, D.C. His major research over the last several years has dealt with physician income and distribution patterns, and he is a nationally recognized expert in this area.

Our last panel member is Gregory Bulger, the executive director of the Mattapan Community Health Center in Boston, Mass., of which Senator Kennedy spoke so fondly. Mr. Bulger is also president of the Massachusetts League of Community Health Centers.

We would like to ask each of you in turn, starting with Dr. Woolley, if you could condense your statements to a few words. We will enter your full statements in the record and ask any questions in writing or verbally myself.

Dr. Woolley?

STATEMENTS OF F. ROSS WOOLLEY, PH. D., ASSOCIATE PROFESSOR AND CHAIRMAN, DIVISION OF COMMUNITY MEDICINE, DEPARTMENT OF FAMILY AND COMMUNITY MEDICINE, UNIVERSITY OF UTAH, SALT LAKE CITY, UTAH; JACK HADLEY, SENIOR RESEARCH ASSOCIATE, THE URBAN INSTITUTE, WASHINGTON, D.C.; AND GREGORY BULGER, EXECUTIVE DIRECTOR, MATTAPAN COMMUNITY HEALTH CENTER, BOSTON, MASS., AND PRESIDENT, MASSACHUSETTS LEAGUE OF COMMUNITY HEALTH CENTERS, A PANEL

Dr. Woolley. Thank you. Let me just summarize some points. I would like to point out that our experience with the National Health Service Corps began virtually at its inception, or at least
when the first deployments were made, and has included a lot of different kinds of activities that relate to both the deployment of the Corps and helping communities to achieve manpower under the National Health Service Corps program and conducting studies, as well as providing services. We have run five different clinics in the Intermountain West using National Health Service Corps manpower.

So, I come to this committee with a dual perspective of both researcher and provider.

I would like to say at the outset that there have been some very positive impacts from the National Health Service Corps in the Intermountain West. I would point out that the Intermountain West is a rather peculiar place in terms of the kinds of problems that we face as perhaps opposed to the other parts of the country.

We do not refer to our problems as being problems of rural health, but rather remote health. We do not have very many even distributed, low-density populations. We have some very isolated pockets of population of low density which are frequently separated by hundreds of miles with virtually no population in between. This really presents some significant problems when it comes to establishing adequate medical care in these areas.

The National Health Service Corps has indeed helped us to fill some significant needs.

Second, there is no question that the financial assistance that has been provided to medical students and nursing students and others has been a significant contribution. The ability of students to go to school without having to worry about working outside or seeking outside loans, and so forth, has really been important.

All of those good things having been said, there have been a few problems and I would like to touch on a couple of those problem areas.

We have had a good deal of confusion, as I suspect many other areas of the country have, in terms of just what the focus and purpose of the National Health Service Corps is. We have had confusion about who qualifies and who should qualify for National Health Service Corps placement.

We frequently have found that health systems agencies and others who are supposed to be helping in this activity have used the wrong data; they have been confusing and they have failed to give any consideration to advanced planning in terms of what is likely to happen in terms of manpower needs.

There has also been confusion as to how to evaluate and how to judge whether a Corps site has been a good site or a bad site. What are the terms of productivity? Is it simply the number of patients that one pushes through the door in a given day, or does it relate to an overall increase in the level of care that exists in a community?

There have been some real problems in terms of disincentives, particularly under the scholarship program. We found a lot of students or residents that came out with 1 year's residency and interrupted their training program to fulfill their obligation. Many times, we had people who were totally untrained in primary care going out into rural, remote, isolated places and trying to deliver a
full range of services. They had no incentive for staying on and building a large practice.

In fact, there was a real disincentive because they were given a bonus simply for maintaining the time and place for the duration of their obligation, plus the fact of why build a large practice that attracts a lot of people who become interested in you as a provider when you are going to be leaving anyway? There is a great emotional component that goes along with that.

Finally, as a disincentive—and this has real impacts as it relates to the proposal for instituting the private practice option—is the whole issue of fee structures. We have been instructed, and there are very clear guidelines, that in establishing fees in clinics, we must follow what is the current and usual fee structure prevailing in the communities so as to not create unfair competition.

Older, established physicians who have been in communities for many, many years and who have their buildings paid for and have inadequate medical record systems that do not cost very much to maintain—they can charge $4 or $5 for an office visit. Then we ask somebody to come along and establish a solvent, productive practice, and it cannot be done. It is a real disincentive for people to establish private practice.

So, there are some real questions as to how the private practice option is really going to attract people into the areas where we need them and where these kinds of disincentives may exist. There are questions as to areas without hospitals.

An ambulatory, primary care physician who bases his entire practice on ambulatory, out-patient, nonhospital medicine is at a significant economic disadvantage. I have not heard anything addressed as to how that is going to be adjudicated.

There are questions about administrative overhead. Our experience has been that National Health Service Corps sites are administratively topheavy because of the rules and regulations of having to fill out forms and comply with various regulations. Typically, this requires at least one additional administrative person.

We need to have better orientation in communities; we need to have physicians who understand the kinds of communities they are going into. I suspect that the private practice option may be beneficial in that regard.

Let me just make a plea, if I may. The States, and particularly the States in the Intermountain West, need more flexibility and need a greater voice in planning their own manpower needs. The recent census that came out showed that Utah grew 38 percent between 1970 and 1980, where the rest of the Nation was obviously at a much lower rate of growth. That is the tip of the iceberg; that is what is going to happen.

Exxon just published a report that appeared in the newspaper the night before last that said that between now and the year 2010, the Intermountain West could expect 800,000 workers to be imported for the development of synthetic fuels, if they have their say. That kind of growth is explosive, and we need greater flexibility in being able to determine just when we need to put manpower and greater flexibility in terms of being able to do proactive planning and not in response to crisis.
We need streamlining; we need flexibility in terms of staffing. We need better use of mid-level practitioners.

In summary, I think I would just like to say that I see no way that we can meet our manpower needs without some type of National Health Service Corps program in the future.

Senator HAWKINS. Thank you. Florida grew 41.1 percent in the last 10 years and can relate to your problem of growth.

Dr. WOOLLEY. Yes.

[The prepared statement of Dr. Woolley and responses to questions follow:]
As a member of the Department of Family and Community Medicine at the University of Utah, I have been involved with the National Health Service Corps (NHSC) nearly from its inception. We have participated with communities and governmental agencies in designating health manpower shortage areas, preparing NHSC manpower requests, recruiting nurse practitioners, physicians assistants and physicians for NHSC placement, and participating in studies of various aspects of NHSC activity throughout Utah, Colorado, Wyoming and Montana. Our research has included studies assessing the impact of NHSC practices on utilization of medical care services, community acceptance, and practice activities of NHSC assignees. We also completed a study on the adjustment of spouses of NHSC assignees and assessed NHSC productivity and utilization in a study of the effectiveness of rural health programs.

In addition to research and community development activities with the NHSC, we have developed five primary care clinics located in the rural Intermountain West which have utilized corps personnel. The Department of Family and Community Medicine, as the grantee, took responsibility for overall management and provision of services using NHSC manpower. Thus, I bring today the dual perspective of an academic researcher who has participated in evaluation of the NHSC as well as that of a provider and manager who has dealt intimately with the day-to-day problems of operating an NHSC-staffed clinic.
Positive Impact of the NHSC in the Intermountain Area

There is no question that the availability of health manpower through the NHSC has had a very positive impact on helping to meet the health care needs of people in the rural areas of the Intermountain West. Were it not for guaranteed incomes and direct manpower placement by the NHSC, many small communities would have continued to exist without adequate medical services. Isolated towns, often separated by distances of over a 100 miles from the nearest medical services, simply cannot develop sufficient resources on their own. Nor can they combine efforts with neighboring communities due to excessive distances between these communities. Thus, frequently, the only viable alternative has been the NHSC.

Another area of significant impact has been that of the financial assistance provided to both medical and nursing students. Although the total percentage of medical or nursing students receiving NHSC assistance at the University of Utah has never been great, for those using this resource, it has been a means for going to school without many of the encumbrances often placed on students who must support themselves. Clearly, this financial support makes it possible for these students to concentrate on gaining an education without diluting their activities through outside employment. It also limits the need for obtaining other loans which are becoming more difficult to secure and may put them in serious financial jeopardy for many years.

Despite these positive attributes, the processes of obtaining site designation and recruitment and retention of NHSC personnel have created some significant problems. Although many of these issues are inherent to the bureaucratic process, I believe that there are positive steps which may be taken to reduce the difficulties.
Site Designations and NHSC Manpower Applications

The first step in bringing NHSC personnel to an area is obtaining designation of the proposed site as a Health Manpower Shortage Area (HMSA) or Medically Underserved Area (MUA). Although the criteria for MUAs and HMSAs are theoretically distinct, there is considerable confusion between the two on the part of local communities and even the state agencies responsible for carrying out the designation process. The result has been that many communities have dissembled when faced with the problem of producing different and contradictory sets of population data, delineating contorted geographic boundaries, revising service area estimates, and reducing aggregated health statistics in order to qualify under one or the other sets of designations. This has effectively eliminated many communities from consideration simply because they did not understand the forms and needs of the government.

A major problem encountered in site designation has been the unclear role of the Health Systems Agencies (HSAs) in the review process. In several instances we have found that the HSA uses standards or data which are outdated or applied the wrong set of criteria in making the evaluation. The paucity of accurate health manpower and population data has been a significant problem in working effectively for the designation of HMSAs or MUAs when developing NHSC sites.

Furthermore, there is little, if any, attempt for state or federal agencies to designate areas in anticipation of future needs. Indeed, there has been a strong reluctance on the part of the HSAs to approve any proposals for which the need is not already acute. The reason is, of course, that this is mandated by the guidelines from the federal government. HSAs seem to have little incentive in developing guidelines geared specifically to state or regional needs. Unfortunately, the lack of proactive planning has
become a major problem. With the intermountain area growing at a rate unexceeded by any other area in the United States (Utah grew by 38% from 1970-1980), the need for anticipatory planning and, hence, site designation is critical. With the construction of power plants or the development of energy resources such as coal, oil, natural gas, oil shale, or tar sands for example, we have seen, and expect to see again, 100% or greater increases in community populations in the span of a few months. This rapid growth is frequently characterized by young, highly transient populations with heavy demands for acute care services which cannot be met by existing health manpower.

The introduction of new NHSC providers or any other type of health manpower into a community requires a certain period of adjustment. It has been our experience that the longer the community is without health care services the longer it will take for new providers to become well utilized. This may be due to the fact that once people have established alternative sources of health care, they are reluctant to make a change, even though new services may be relatively more accessible. This does not mean that the new resources are not needed. It does mean, however, that the development of even small systems of health care delivery requires time. This will, in the long run, result in improvements in both the quality and quantity of health care.

It is apparent that goals and objectives of the NHSC have shifted dramatically. It is still unclear as to whether or not the federal government is intent on developing services only where there is economic sufficiency or whether reasonable geographic accessibility is paramount. Should the government insure access to care regardless of its economic viability? This is apparently the philosophy which prevails for Native Americans, given the magnitude of services provided by the Indian Health Service. Or, should the
government simply do nothing to limit access to medical care while maintaining no direct responsibility for providing services where none are available. Presently, the federal position on this issue is unclear and this lack of clarity has produced some considerable chaos in determining just who gets NHSC personnel.

Historically, the placement of NHSC assignees (especially those under the scholarship program) has been determined by a grading system for sites. There are four levels of sites currently under designation. At this time, however, only level 1 and level 2 sites qualify for placement under the loan forgiveness or scholarship obligation programs. Level determinations are made by evaluating various aspects of the shortage area criteria, e.g., the provider-to-population ratios. Although the process for determining which communities will be at which levels is largely a function of the number of sites who have made application in relationship to the manpower pool available, the unpredictability of this process makes it difficult to plan and advise communities who are seeking assistance. Furthermore, our small, remote sites rarely meet the population density requirements.

**Economic Factors**

As indicated above, the issue of the federal position in relationship to providing access to services is unclear. This becomes a major factor in determining whether or not a particular NHSC site has an appropriate level of utilization and is, consequently, judged as being productive. The issue of productivity has been a significant one in evaluating sites. Unfortunately, the very nature of the system has tended to make the site nonproductive as compared to their counterparts in the private sector. There are, in fact, some significant disincentives under the existing scholarship program which may or may not be ameliorated under the private practice option (PPO). These
disincentives include the following:

1. **National Health Service Corps assignees traditionally have had little or no training in practice management.** Unfortunately, the practices they enter are traditionally on very shaky economic ground. Thus, careful attention to the details of practice economics and personnel management is required. Although the governing board is supposed to take an active role in establishing management policies, the nature of the medical care system generally puts the provider in the lead position as it relates to management decisions. Therefore, conflicts between providers and governing boards become commonplace.

2. **There is a limited commitment on the part of scholarship and some other assignees to establishing or building a significant practice.** Many NHSC assignees have no intention of remaining in primary care practice or at the site where they were placed. Many scholarship recipients left residencies to fulfill their 2 or 3 year obligation and had no intention of practicing a primary care specialty. At the end of their tour of duty, they left the corps and returned to a residency training program.

3. **There are no economic incentives for productivity given to scholarship recipients and bonuses have been paid not for productivity, but merely for remaining in place to complete their tour of duty.** There has never been an attempt under the scholarship program to provide
incentives for increasing utilization of services or other forms of productivity. Salaried systems could, and should, be augmented by some form of incentive based on practice productivity. Incentives should not necessarily be tied only to the number of ambulatory patients seen in the office. A significant portion of many assignees' time, especially in the smaller communities, should be consumed with preventive services, health education and organization of more effective service delivery systems.

4. Fee structure imposed on NHSC sites are often unrealistic. By agreement, to avoid unfair competition, NHSC sites are obliged to charge fees which are representative of the prevailing rate structure in the community. Unfortunately, in areas where the majority of existing providers have been in practice for many years, prevailing rates may well be below those necessary to develop and maintain a new and economically viable practice. In many instances, established practices have the advantage of buildings which are completely debt free, minimal (and often inadequate) recordkeeping systems which do not require significant expense, medical records systems which would not meet BCHS requirements, yet are inexpensive to operate, and a minimal number of staff whose salary demands are modest. Thus, the new NHSC provider may be attempting to deliver up-to-date care using a fee structure that was adequate two decades ago.
Many of the current problems experienced in NHSC sites may be overcome by the PPO, however, there are some serious questions raised by the discontinuance of the scholarship program. For example, under the most recent operating guidelines, NHSC sites have often not been expected to achieve economic viability. With the discontinuance of the scholarship program and a shift to the PPO, the question arises as to the incentives that will be given to NHSC providers to practice in areas with marginal economies or geographic isolation which makes them undesirable. Obviously, under the PPO, the provider is at significantly greater economic risk than the scholarship recipient operating strictly on a salary. At issue is not only the amount of subsidy to be provided, but also the duration of such help under the private practice option.

An attendant issue is the economic impact of practicing in an area without hospital services. Under current reimbursement schemes, any primary care practitioner providing services where there is no hospital is at a significant economic disadvantage. The amount of income which can be generated by a practice exclusively devoted to ambulatory care is more limited than one in which hospital services can be provided. Such a situation threatens the provider not only economically, but also medically. Certainly, most physician training programs do not adequately prepare their graduates to practice without the substantial benefit and backup provided by a hospital.

Regulations imposed by the Bureau of Community Health Services (BCHS), the NHSC itself, and other federal agencies make the development of a viable NHSC practice unnecessarily difficult. It has been our experience that at least one extra staff member is required in an NHSC site as compared to a private practice to provide the management services required by federal regulations. Frequently, this one additional person results in increases
of 33% in the staffing level in small clinics. Reporting requirements, auditing procedures, requirements for linkages with other programs, licensure review procedures, etc., all of which are ostensibly designed to improve the quality of services provided, have, in many instances, imposed such encumbrances upon the practice that the opposite effect was achieved. I am aware of many instances where regulations were functionally ignored and reports were generated based more on fantasy than fact simply to cut down on the amount of bookkeeping and paperwork.

In a similar vein, we have observed that there are competing or conflicting requirements from different federal agencies. Although in the following example the practice was not an NHSC site at the time, it was a community health center funded under the auspices of BCHS and, therefore, subject to the same operating rules and regulations as an NHSC site. We established a clinic at Page, Arizona, which primarily served the needs of the Navajo Indians living in and within a 50 mile radius of that isolated community. The Indian Health Service had provided one-day-a-week services for a number of years using a traveling clinic. Unfortunately, there were too many occasions when acute illnesses required immediate attention, necessitating trips of over 80 miles to the Tuba City Hospital. In operating this clinic, we received grant support from BCHS, but because the services were being provided by federally funded personnel to Native Americans, the operating rules and regulations of the Indian Health Service were more consistent with the needs of the patients being served. A major issue, which caused a great deal of concern, was the charging of fees. On the one hand, BCHS regulations demanded that we establish a sliding scale fee schedule and attempt to collect fees from the Indian patients. On the other hand, the Indian Health Service (IHS), of course, has never made an attempt to collect fees for their services. Since the IHS hospital and specialists were a major
source of referral and we used an IHS clinic as a satellite site, we were inexorably connected to the IHS and the whole issue of fees and charging for services became extraordinarily complex. As a result, many hours of expensive administrative time were spent in attempting to resolve this dilemma. It is precisely this type of confusion which requires extra administrative overhead and dilutes the effectiveness of federally funded clinics in delivery of services.

Retention

The issue of retention of NHSC assignees beyond their basic commitment is a multifaceted problem. Many factors undoubtedly contribute to decisions to leave a site or to buy out of the program. It is apparent from our experience that the increased penalty for buying out (three for one payback) has had a significant effect on the number of obligees who elect to follow this course. The most significant factor related to retention appears to be orientation to the community. Adequate orientation takes on several dimensions which include being socially oriented, and medically oriented to the practice environment.

We recently conducted a study of spouses of NHSC assignees. Previous studies have shown that the single most important factor in physician location is spouse preference. Our research found that the most critical factor in helping spouses to adjust to the community was, in fact, help from inside the community rather than assistance provided by NHSC orientation sessions. Interestingly, this study, which was completed late in 1979, found that 72% of the 61 NHSC providers were currently buying homes in the communities to which they had been assigned. This suggests that there is a reasonable high expectation for permanence among those assigned to Region VIII. However, experience suggests that lack of attention to spouse concerns will
dilute this commitment.

One of the most helpful features of the PPO which we have observed to date has been the significantly greater orientation which takes place prior to the assignees arriving on-site. Because of the greater involvement in the details of establishing a practice, the PPO provider frequently makes several visits to the community before actually beginning practice.

The appropriateness of the training received by NHSC assignees is also of great importance. As indicated earlier, we have observed that many NHSC assignees have not had training appropriate for their site. For example, a family practitioner trained in a residency program emphasizing only internal medicine and pediatrics is poorly suited for entering practice in a Western rural community where there is a hospital and only one or two other physicians. It is virtually incumbent upon these assignees that they practice obstetrics and surgery. Because of low occupancy rates and high overhead, most small rural hospitals are dependent upon surgery and obstetrics to maintain solvency. Conversely, there may be physicians who must learn to practice where there are no hospital facilities at all as well as those who are forced to practice specialties for which they have received limited training.

The scholarship program of the NHSC was thought to be having some impact in modifying resident training programs so that assignees would achieve skills more consistent with their anticipated practice. The effects of the elimination of the scholarship program, of course, are unknown as they relate to possible influence upon curricula.

An area which has caused problems for NHSC providers has been the antagonism which they have aroused in both patients and other providers. In one community we observed that the NHSC physicians refused to continue practices instituted by a physician who had served the community for many years. The procedures in question were undoubtedly antiquated and of
questionable value. Unfortunately, the new physicians were given no
guidance nor had they had any relevant training in how to deal with what
was a significant community health education problem. Their tactics included
lecturing at patients and writing hostile editorials in the local newspaper
in an attempt to persuade the community that their style of medicine was
better than that of the former physician. It took a number of years before
the mutual antagonism was dissipated. It is probable that the skepticism
which many people have for federal programs contributes to the hostility.
Even after former NHSC physicians have converted over to straight private
practice, they are often referred to as the "government doctors".

Similarly, many private physicians resent the fact that the government
is helping to establish new physicians in their community. Part of this is
fear of competition, however, jealousy also plays a role. There older
physicians recall that there was no one available to help them start their
practice when they first came to the community.

All of these factors point to the need for a greater education and
cooperation among the existing medical community and the NHSC. In all
likelihood, in the Intermountain Area the PPO will be much more palatable
and understandable by the current physicians in practice than were the
salaried assignments. It is important, however, that we continue to solicit
the help and support of the existing medical community and not simply obtain
their acquiescence to NHSC placement.

Suggestions for the Future

Perhaps the most pressing need in the re-structuring of the NHSC is to
provide the states with greater flexibility in determining their own health
manpower needs. In the past, excessively difficult regulations, cumbersome
selection criteria, and bureaucratic bottlenecks imposed by HSAs and other
agencies have tended to discourage communities where significant needs existed.

In the Intermountain Area we are in the midst of a major population boom related to energy development. This boom is expected to continue over the next 30 years and the development of a viable health care system is critical to preserving the quality of life that now exists. It would be highly desirable to let states develop flexible criteria for designating energy impacted areas as HEMAs. The following is an example of a possible set of criteria for designating an energy-impacted health service area.

1. The proposed service area is rational for the delivery of primary care services.

2. Each of the following conditions prevails with the area:
   a. The area has, or is projected to have within one year, a primary care practitioner-to-population ratio of 1 to 800.
   b. The area is at a distance of more than 30 minutes travel time from the nearest contiguous health services.

3. The projected increase of population of the area is a minimum of 100% during the (36 months or more) initial construction phase period.

4. The primary medical care providers in the nearest contiguous area will be unable to meet the increased demands for the projected population growth in the impacted area.¹

¹These criteria were developed cooperatively by the Montana HSA and the Utah Network of Rural Health Systems, Division of Community Medicine, University of Utah.
Although the development of long-term sites for placement of NHSC assignees is desirable, there are some situations in which the needs for medical services are of limited duration. The Intermountain Area is anticipating large growth followed by diminished populations in many areas in which synthetic fuels or electrical generating plants will be built. In these situations, additional manpower to meet the peak demands will be required for only two to five years. Therefore, some provision for limited term assignments should be incorporated.

Professionals associated with the NHSC program should increase their activity and collaboration with medical schools and residency training programs. Increased opportunities for training physicians in practice management, health economics, and the behavioral sciences are critical to the success of the NHSC. Additional training in community medicine and health care organization would also be highly desirable inasmuch as many NHSC assignees provide the leadership for all medical services in the area in which they practice. An important linkage which is often neglected is that with the state and local public health personnel. It may be desirable to develop joint functions where NHSC assignees serve both as public health officers and provide routine medical care.

An essential ingredient in the further training of future NHSC assignees should be an opportunity, while still in training, to serve a preceptorship either in the area in which they plan on establishing practice or in one similar to it. Our observation has been that this experience is invaluable in helping assignees to build relationships with the established providers as well as anticipate and resolve many of the problems which are inevitable in establishing a new practice.

The reduced amount of paperwork required of NHSC assignees under the PPO system is gratifying. Streamlining reporting and administrative
requirements in order to reduce practice overhead is vital. Although sound business management dictates that accurate records be maintained, the unnecessary paperwork and compliance with inappropriate or low-yield federally mandated programs can reduce an otherwise viable practice to insolvency.

The NHSC should be leading the way in the development of innovative practice activities and arrangements. Staffing patterns in NHSC sites should be such that they maximize the potential utilization of the community in which they are located. The practice of having two providers on site to prevent burnout and maintain full-time coverage is desirable. Economics may, however, dictate that more reliance be placed on the use of mid-level practitioners working either as teams or in combination with physicians. It is important, however, that when physicians are asked to participate in the delivery of services with mid-level practitioners, they have previous experience and understanding of the role and capabilities of these providers. An understanding of the distinction between nurse practitioners and physicians assistants is important. Although students and residents may encounter mid-level practitioners in their hospital training many are unfamiliar with how these personnel function in the rural ambulatory setting.

Summary

On the whole, our experience with the National Health Service Corps in the Intermountain West has been a positive one. Although projections for a physician surplus by 1990 have convinced many that economic pressures will force physicians into areas that are currently underserved, the rapid growth in the West will probably demand that assistance from National Health Service Corps providers will be required in the foreseeable future.

Greater flexibility at the state level in determining the need for health manpower is an important factor for the future success of the NHSC. It is vital, however, that consistent policy regarding the government's commitment to providing access to medical care be developed.
1. In any federally funded program there must, of course, be baseline standards, as well as flexibility that make sense based on the needs in different parts of the country. A sensible designation of medically underserved areas in Utah could be more efficiently and accurately addressed at the state level. Representatives from academia, the state, and regional and local officials must sit down together to equitably define a working formula from which the needs of medically underserved areas could be met.

2. The scholarship program was instituted at the same time as almost every other avenue of federal and public support was withdrawn. Therefore, a variety of students with different agendas turned for assistance to the NHSC scholarship program. Thus, although there are undoubtedly students seeking financial assistance through this program and who, for a variety of reasons, are not suited for either primary care or service to the underserved, the Corps scholarship program continued to be a critical source of support for appropriate students. An April 1981 DHHS study found that over 34% of the medical scholarship recipients for the 1979-80 school year were identified as non-white. These students will, by definition, serve the underserved at a higher rate than their white counterparts. We cannot ignore the honest financial needs of these and low-income white students who often come from and will return to rural areas. We must diversify means of financial support so that we can adequately respond to those who will serve in the public interest.
3. The Intermountain West will bear the burden of developing energy resources necessary to the whole country. The federal government has a responsibility to assist this area in the provision of the myriad of public services which will be necessary to support these energy development projects. The upfront cost of water, sewer, roads, schools, and other basic services cannot be borne by current populations. Further, it will be necessary to plan for services to mitigate social impacts of communities undergoing rapid change. We know from the experiences in places like Gillette and Green River, Wyoming, that rates of alcohol and drug abuse, as well as of family violence, will increase dramatically. Such social problems can be linked to the efficiency of the business operations in the area. There are clear economic costs to disregarding these basic human services. The federal government must join with private companies in paying for the cost of developing viable health and mental health services in these areas. To leave such responsibility solely in the hands of the private sector would be to disregard a basic public responsibility.

4. The experience of the past ten years makes it clear that merely increasing the number of primary care residency graduates will not correct problems of geographic maldistribution. Even with a greater percentage of students choosing to practice in rural areas, shortages will continue to exist in small, isolated communities. Corps physicians and/or mid-level practitioners will be needed in substantial numbers during the 1980's in our area, particularly with the transient pattern of energy projects in isolated areas of the rural Intermountain West. The market mechanism alone will not meet these needs.
5. Promoting appropriate matches of health professional to rural areas must involve two basic changes.

a. Selection procedures to medical school must take into account those factors which have been shown to be predictive of practice in rural communities. Both Florida State and Michigan State have successfully implemented admissions formulas oriented toward this goal. I recommend that we study these two examples carefully.

b. The training of health professionals must include early and repeated opportunities for exposure to rural practice. The health professional in training should be allowed to develop an ongoing relationship in a specific community to which he or she might consider returning.

We must not make the mistake of thinking that everyone could be convinced of the attractiveness of rural practice. Rather, we must target our efforts towards those most likely to find work satisfaction in the rural setting.

Two other factors must be remembered.

1. It is counter-productive to alter a selection procedure without altering the corresponding training program.

2. Since spouse satisfaction has been shown to be the single most important factor in the size of a town in which a physician settles, the family unit must be treated as a whole in the campaign to make rural practice more attractive.

PW/kn
Senator HAWKINS. Dr. Hadley?

Dr. HADLEY. Thank you, Madam Chairman.

My comments focus on two issues. One is trends in the market for physicians, the possible effects of market forces on physician distribution, and implications for the National Health Service Corps. The other is the process of designating health manpower shortage areas.

Like most economists, I tend to look forward by looking backward. In 1963, there were just over 225,000 non-Federal patient care physicians in the United States. By 1970, the total number had increased by 12.1 percent. However, disparities among geographic areas in the number of people per physician either grew wider or did not change. In sum, the experience of the 1960’s was that growth in the total number of physicians did not improve their geographic distribution.

Since 1970, the growth in the total number of physicians has accelerated rapidly, reaching almost 323,000 by 1978—a more than 25-percent increase. By 1990, it is projected that there will be almost 600,000 active physicians and osteopaths, or roughly one physician for every 409 people. Consequently, the experiences of the 1970’s may provide some clues as to what might happen to physicians’ earnings and distribution patterns during the 1980’s.

My reason for focusing first on changes in physicians’ earnings is that this is presumably the mechanism through which market forces operate. Two trends stand out. First, after adjusting for inflation, physicians’ real incomes fell by about 10 percent between 1970 and 1978. However, the rate of change differed among various specialties and community-size groups.

Second, after adjusting for differences in the cost of living, in 1971 physicians in nonmetropolitan counties had incomes which were about 18 percent larger than the incomes of physicians in the largest metropolitan counties. In 1978, this relationship was essentially unchanged, in spite of about a 25-percent increase in the total number of physicians. A further examination of these data suggests that a good share of the reduction in earnings has been due to physicians working fewer hours; that is, about 7 percent less, which means that about a quarter of the growth in the total number of physicians was offset by fewer hours of work.

What have been the trends in the distribution of physicians over this period? First, communities in every county size grouping have gained physicians relative to population. Second, the largest relative gains have been made by the smaller metropolitan communities. Third, the smallest increases occurred in the smallest counties, particularly those with fewer than 25,000 people, and in the very largest, most populous counties.

Thus, there has been a diffusion of physicians from the largest to smaller sized counties, although this diffusion does not appear to have been as rapid in the smallest counties. Furthermore, there were no dramatic changes in the relative incomes of physicians in different sized communities. Thus, the market does not appear to have tilted financial incentives sufficiently to offer a very strong stimulus for geographic redistribution.

I’d like to turn now to the question of designating health manpower shortage areas. As I am sure you know, the cornerstone of
the process is the population per primary care physician ratio. As of 1979, there were about 1,400 sites designated as having a physician shortage, and it was estimated that as many as 40 million people came under the health manpower shortage area umbrella.

How good is the population per primary care physician ratio as an indicator of where to locate additional medical care resources? The answer I offer is "not very." Probably the biggest reason for this is that the ratio conveys no direct information about either the use of medical care or the need for medical care.

Second, the focus on primary care physicians ignores the contribution of other medical care providers, medical specialists, osteopaths, nurse practitioners, physicians' assistants, nurses, pharmacists, and hospitals for improving the health of the Nation.

Let me skip ahead a little bit and conclude simply by saying that the problem of developing better criteria for designating shortage areas and identifying needy populations is, I believe, soluble. There is work underway to try and reach those goals.

The problem of placing and maintaining Corps physicians requires a more careful and fundamental reappraisal of the Corps' goals and objectives. To the extent that the Corps continues to place physicians in sites which are relatively the best off among all designated sites, then Corps placements simply supplant a process which would occur under natural market forces. Continuing growth in physician supply will drive more and more physicians into successively less well served communities. However, these very market forces also insure that the order in which these communities are queued will reflect the financial ability of a community to support a physician and not necessarily its residents' needs for additional medical services.

Future interactions between the size of the Corps, designation of shortage areas, and trends in market-motivated physician distribution depend on which of two alternative strategies is used to place Corps physicians. The "bottom up" approach focuses on communities and populations least able to attract physicians and obtain medical care on their own. The "top down" approach concentrates on communities which appear to have a reasonably good chance of supporting a physician financially, but for one reason or another have been unable to link up with a private practitioner.

These two approaches to placing Corps physicians reflect, I believe, two fundamentally different objectives which the Corps might pursue. The objective of providing a temporary helping hand to physicians seeking to establish private practices in currently less well served communities implies, and in fact should require, a focus on the best of the worst—precisely those communities with the best potential for supporting a private practice physician.

The goal of providing medical care to those least able to obtain it on their own, for whatever reason, calls for exactly the opposite approach to Corps placements. This goal also suggests that the Corps is likely to be a continuing and ongoing factor in such communities. At the same time, however, concentrating only on the worst-off communities narrows the breadth of the shortage area umbrella. Studies supported by the Robert Wood Johnson Foundation suggest that 12 to 15 million people are structurally underserved. This number is considerably smaller than the ap-
proximately 40 million people claimed to reside in currently designated shortage areas.

Finally, one clear consequence of the growing supply of physicians is that it is going to become less costly to hire physicians for all activities, including service in the National Health Service Corps. Given that medical schools' tuitions, and consequently Corps scholarship costs, are rising, it may be more efficient to sever the Corps from the process of financing medical education. If this were done, however, an adequate, though unsubsidized loan program for medical students should be established to fill the vacuum left by ending Corps scholarships.

Severing the Corps from medical education financing has several advantages. Planning flexibility for Corps size and placement should be greatly enhanced by not being locked into a 6- to 8-year-long pipeline. At the same time, the recruitment pool would be greatly enlarged, permitting greater selection among skills and experience. Finally, the Corps would be more likely to recruit physicians with a serious commitment to serving the medically needy rather than young medical students trying to finance an expensive medical education.

In sum, I believe that there is now and will continue to be a need for a program like the National Health Service Corps. However, I also believe that as currently structured, the Corps is not operating as well as it might. Changes need to be made in the designation, recruitment, and assignment processes.

Thank you, Madam Chairman.

[The prepared statement of Dr. Hadley follows:]
Thank you, Mr. Chairman, for the opportunity to appear before you this morning.

My name is Jack Hadley. I am an economist with the Health Policy Program of The Urban Institute, a nonprofit research organization located here in Washington.

A major portion of my research over the last several years has dealt with the problems of the geographic distribution of physicians. I have investigated both the factors which influence physicians' location choices and the normative issue of how physicians should be distributed. I would like to use my time this morning to describe the implications of my research, and other research on these questions, for two issues pertinent to the National Health Service Corps. The first issue concerns trends in the market for physicians, the possible effects of market forces on physician distribution, and consequences for the size of the National Health Service Corps. The second is the process of designating health manpower shortage areas. I would like to conclude with some general comments about the role of the Corps in meeting the health needs of the nation.
Market Forces and the Distribution of Physicians

Like most social scientists, I tend to look forward by looking backward. Accordingly, I'd like to begin by reporting some data from the 1960s. In 1963, there were just over 225,000 nonfederal, patient care physicians in the United States. 79.1 percent were located in metropolitan counties and 20.9 percent in nonmetropolitan counties. This translated into 693 people per physician in metropolitan counties and almost twice that, 1,355 people per physician in nonmetropolitan counties.

By 1970, the total number of physicians had increased by 12.1 percent, to almost 253,000. However, the share of physicians in nonmetropolitan counties dropped to 18.2 percent of the total, and the number of people per physician in these locations increased to almost 1,400.

Also in 1970, the counties with fewer than 25,000 residents had from three to four times as many people per physician as did metropolitan counties. The state with the greatest number of physicians, New York, had only 429 people per physician while Mississippi, at the other end of the spectrum, had almost exactly three times as many people per physician, 1,266. Finally, a series of studies of trends in physician distribution within several large cities, New York, Chicago, Los Angeles, and Baltimore documented that there were very few office-based physicians available to many residents of poor neighborhoods.

In sum, the experience of the 1960s was that growth in the total number of physicians did not improve their geographic distribution. The National Health Service Corps was established in 1970 partially in response to perceptions of the 1960s experience. It was felt that some type of direct intervention was needed to assist and encourage physicians to locate in communities which had difficulty in attracting a physician on their own.
Since 1970, the growth in the total number of physicians has accelerated rapidly, reaching almost 323,000 by 1978—a more than 25 percent increase. The number of people per physician dropped 20 percent, from 728 to 578. By 1990, it is projected that there will be almost 600,000 active physicians and osteopaths, or 1 physician for every 409 people. Although these projections may be somewhat astonishing, they reflect a rate of growth which is slightly less than what occurred between 1970 and 1978. Consequently, the experiences of the seventies may provide some clues as to what might happen to physicians’ earnings and distribution patterns during the 1980s.

My reason for focusing on changes in physicians’ earnings first is that this is presumably one of the mechanisms through which market forces operate. Eight econometric studies of physicians’ location choices, which I have reviewed in a paper accompanying my statement, corroborate this presumption. All eight studies found that holding other factors constant, physicians tend to locate where physicians’ incomes are higher. (Estimates varied from a 0.5 to a 4 percent increase in the number of physicians for a 10 percent increase in physicians’ incomes.)

Data on changes in physicians’ average net incomes by specialty and community size are reported in Table 1. Some interesting and perhaps surprising relationships appear. First, the data suggest that physicians’ incomes are not immune or insulated from market forces. The combination of high inflation rates and an expanding supply of physicians relative to population has reduced physicians’ real incomes (adjusted for inflation) by about 10 percent between 1970 and 1978. This trend has been similar across all three community sizes. General practitioners, obstetrician-gynecologists, and pediatricians seem to...
have fared worse than average, while internists, surgeons, and anesthesiologists have done slightly better than average. Second, after adjusting for differences in the cost of living, in 1971 physicians in nonmetropolitan counties had incomes which were 17.7 percent larger than the incomes of physicians in the largest metropolitan counties. In 1978, this relationship was essentially unchanged—nonmetropolitan physicians' earnings were 18.0 percent higher than physician's earnings in the largest metropolitan counties.

A further examination of these data suggests that most of the reduction in earnings has been due to physicians' working fewer hours. The change in average net real income per hour for all physicians decreased by less than 2 percent in nonmetropolitan and large metropolitan counties. The hourly wage decreased by about 7 percent in small metropolitan counties. (These estimates reflect a reduction in annual hours worked of between 7 and 10 percent.)

What have been the trends in the distribution of physicians over this period? First, communities in every county size grouping have gained physicians relative to population. (See Table 3.) Second, the largest relative gains have been made by smaller metropolitan counties. (This in part explains why physicians in these locations had the largest decreases in real net income per hour.) Third, the smallest increases occurred in the smallest counties, particularly those with fewer than 25,000 people, and in the very largest, most populous counties.
Table 1
Physicians' Average Net Incomes
by Specialty and Community Size
1971 and 1978 - Constant 1971 Dollars,
Adjusted for Cost of Living Differences
(Percent Change in Parentheses)

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Non-Metropolitan</th>
<th>Small Metropolitan</th>
<th>Large Metropolitan</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Physicians</td>
<td>$50,620</td>
<td>$45,430</td>
<td>$46,092</td>
</tr>
<tr>
<td>General Practice</td>
<td>47,916</td>
<td>40,703</td>
<td>39,823</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>52,167</td>
<td>49,310</td>
<td>41,222</td>
</tr>
<tr>
<td>Surgery</td>
<td>59,097</td>
<td>52,554</td>
<td>56,943</td>
</tr>
<tr>
<td>Obstetrics-Gynecology</td>
<td>57,458</td>
<td>54,389</td>
<td>48,216</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>46,027</td>
<td>32,309</td>
<td>39,704</td>
</tr>
<tr>
<td>Anesthesiology</td>
<td>43,533</td>
<td>40,280</td>
<td>48,240</td>
</tr>
</tbody>
</table>

Sources: Physicians' income data are from the Profile of Medical Practice, 1973 and 1980 editions.

Notes: 1. All counties in SMSAs with 50,000-99,999 inhabitants and all potential SMSA counties.
2. All counties in SMSAs with at least 1,000,000 inhabitants.
Table 2

Physicians' Average Net Incomes Per Hour of Work by Specialty and Community Size
1971 and 1978 - Constant 1971 Dollars, Adjusted for Cost of Living Differences (Percent Change in Parentheses)

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>$18.95 ($-2%$)</td>
<td>$18.57 ($-7%$)</td>
<td>$17.02 ($-1%$)</td>
<td>$17.02 ($-1%$)</td>
<td>$16.82 ($-1%$)</td>
<td>$16.82 ($-1%$)</td>
</tr>
<tr>
<td>General Practice</td>
<td>17.27 ($-3%$)</td>
<td>16.76 ($-5%$)</td>
<td>14.40 ($-1%$)</td>
<td>14.29 ($-1%$)</td>
<td>15.89 ($+1%$)</td>
<td>16.39 ($+1%$)</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>20.35 ($-5%$)</td>
<td>19.24 ($-5%$)</td>
<td>15.89 ($+1%$)</td>
<td>15.89 ($+1%$)</td>
<td>16.39 ($+1%$)</td>
<td>16.39 ($+1%$)</td>
</tr>
<tr>
<td>Surgery</td>
<td>22.25 ($-8%$)</td>
<td>20.37 ($-3%$)</td>
<td>19.68 ($+4%$)</td>
<td>19.68 ($+4%$)</td>
<td>19.68 ($+4%$)</td>
<td>19.68 ($+4%$)</td>
</tr>
<tr>
<td>Obstetric</td>
<td>19.46 ($+3%$)</td>
<td>20.13 ($+1%$)</td>
<td>17.99 ($-8%$)</td>
<td>17.99 ($-8%$)</td>
<td>16.62 ($-8%$)</td>
<td>16.62 ($-8%$)</td>
</tr>
<tr>
<td>Gynecology</td>
<td>17.81 ($-2%$)</td>
<td>13.48 ($-2%$)</td>
<td>13.35 ($+6%$)</td>
<td>13.35 ($+6%$)</td>
<td>16.54 ($+6%$)</td>
<td>16.54 ($+6%$)</td>
</tr>
<tr>
<td>Pediatrics</td>
<td>20.42 ($+1%$)</td>
<td>20.55 ($+14%$)</td>
<td>18.05 ($-8%$)</td>
<td>18.05 ($-8%$)</td>
<td>19.58 ($-8%$)</td>
<td>19.58 ($-8%$)</td>
</tr>
</tbody>
</table>

Sources. Physicians' hours of work and income data are from the Profile of Medical Practice, 1973 and 1980 editions.

Notes. 1. All counties in SMSAs with 50,000-99,999 inhabitants and all potential SMSA counties.

2. All counties in SMSAs with at least 1,000,000 inhabitants.
Table 3
Population-to-Physician Ratios, 1970 and 1978, by County Size Classification

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All Counties</td>
<td>728</td>
<td>578</td>
<td>-20.60%</td>
</tr>
<tr>
<td>All Metropolitan Counties</td>
<td>622</td>
<td>489</td>
<td>-21.38%</td>
</tr>
<tr>
<td>Greater than 5,000,000</td>
<td>458</td>
<td>380</td>
<td>-17.03%</td>
</tr>
<tr>
<td>1,000,000 to 5,000,000</td>
<td>585</td>
<td>454</td>
<td>-22.39%</td>
</tr>
<tr>
<td>500,000 to 1,000,000</td>
<td>708</td>
<td>531</td>
<td>-25.00%</td>
</tr>
<tr>
<td>50,000 to 500,000</td>
<td>835</td>
<td>636</td>
<td>-23.83%</td>
</tr>
<tr>
<td>All Nonmetropolitan Counties</td>
<td>1,416</td>
<td>1,165</td>
<td>-15.45%</td>
</tr>
<tr>
<td>Greater than 50,000</td>
<td>830</td>
<td>656</td>
<td>-19.50%</td>
</tr>
<tr>
<td>25,000 to 50,000</td>
<td>1,470</td>
<td>1,210</td>
<td>-15.91%</td>
</tr>
<tr>
<td>10,000 to 25,000</td>
<td>1,962</td>
<td>1,763</td>
<td>-10.37%</td>
</tr>
<tr>
<td>Less than 10,000</td>
<td>2,352</td>
<td>2,266</td>
<td>-3.33%</td>
</tr>
</tbody>
</table>

Designating Health Manpower Shortage Areas

As I am sure you know, the cornerstone of the process of designating an area or site as eligible for the receipt of a Corps physician is the population-per-primary-care-physician ratio. Under the current law, an area which has more than 3,500 people per primary-care-physician and is not adjacent to or accessible to an area which has an excess capacity of primary care physicians is eligible for designation. In addition, population groups and facilities within an otherwise adequately served area may also be eligible for designation. The Secretary is also empowered to take factors such as high infant mortality, poverty, and the age distribution of the population into account in designating shortage areas. As of 1979, there were just over 1,400 designated sites, roughly 1,100 in rural areas and 300 in urban areas; about 65 percent of all sites were at least partially staffed. It is estimated that as many as 40 million people may come under the health manpower shortage area umbrella.

Given these data as background, how good is the population-per-primary-care-physician ratio as an indicator of where to locate additional medical care resources? The answer I offer is "Not very."

On conceptual grounds, the population-per-primary-care-physician ratio is subject to the following criticisms. First, and perhaps most significantly, this ratio conveys no direct information about either the use of medical care or the need for medical care. Second, the focus on primary care physicians ignores the contributions of other medical care providers—medical specialists, osteopaths, nurse practitioners, physicians' assistants, nurses, pharmacists, and hospitals—to maintaining and improving the health of the nation. Third, this ratio provides little basis for comparing areas and conveys little
information about the type of program response which is appropriate. For example, it does not follow that an area which has twice as many people per primary care physician as another is either twice as needy or should receive twice as many additional physicians or other resources. Lastly, the choice of a cut-off point for designating shortage areas is arbitrary and is not related to the objectives of the program. In effect, the population-per-physician ratio is currently a criterion without a goal.

The current criterion is also subject to criticism on a number of mechanical grounds. Many of the key concepts that are described in the regulations and are used to construct the criterion are vaguely defined and difficult to measure. Even the most imaginative and resourceful of us would be hard pressed to define and measure concepts such as rational service area, overused personnel, contiguous area, excessive distance, inaccessibility, and unusually high need. Consequently, and not surprisingly, the process tends to focus on things that we can count and can observe—numbers of physicians and political boundaries. The result is, I believe, a poor accounting of differences in physicians' work patterns—the amount of time spent with patients and the mix of services provided—and patients' travel patterns. I also believe that the current criteria contain an inherent bias which makes it more likely that rural areas rather than urban areas will be designated, simply because it is much more difficult to identify meaningful boundaries and to count physicians in urban areas.

By definition, health manpower shortage areas have fewer physicians per capita than nonshortage areas. How do residents of these areas compare to residents of nonshortage areas? The statistical evidence is slight, but it appears that, on average, residents of shortage areas may use slightly fewer services but do not have significantly different mortality rates.
discriminating among areas or that the designation is too broad. There is also evidence that among designated sites, those with the fewest people per primary care physician have the best chances of both successfully staffing a site and retaining a Corps member. Overall, then, it appears that a combination of inadequate criteria for designating shortage areas and placement incentives within the Corps have 'hampered the Corps' ability to provide additional medical services to those persons most unable to obtain medical care on their own.

The problem of developing better criteria for designating shortage areas and needy populations is, I believe, soluble. My own current research is exploring the feasibility of employing a different type of ratio—the ratio of Medicare expenditures per enrollee in an area to the mortality rate. Medicare expenditures per enrollee is a direct indicator of variations in the use of services. The mortality rate is one of the simplest and most direct indicators of health status and the potential need for medical care. Both Medicare expenditure and mortality data are readily available on an annual basis for small areas. They are both defined by area of residence, so travel patterns to obtain care and boundaries of medical service areas are not a problem. Finally, both variables could be available for relatively fine breakdowns of the population into age, sex, and race groups. Thus, I believe that some improvements over current criteria for designating shortage areas could be made fairly readily.

The second problem, i.e., placing and maintaining Corps physicians, requires a more careful and fundamental reappraisal of the Corps' goals and objectives. I will say more about this in my concluding remarks.
Concluding Comments

So far, I have tried to focus my comments on two separate issues related to National Health Service Corps legislation: market-generated trends in the distribution of physicians and the designation of health manpower shortage areas. I would like to conclude by trying to tie these strands together in order to draw inferences for the size and structure of the NHSC.

To the extent that the Corps continues to place physicians in sites which are relatively the best off among all designated sites, then Corps placements simply supplant a process which would occur under natural market forces. Continuing growth in physician supply will drive more and more physicians into successively less-well served communities. These very market forces also insure, however, that the order in which these communities are queued will reflect the financial ability of a community to support a physician, and not necessarily its residents' need for additional medical services.

Recent testimony before this Committee by the Department of Health and Human Services stated that Corps placements in 1980 emphasized the least well served among all designated sites. To the extent that this trend continues, then Corps placements will be less likely to compete with physicians seeking to establish private practices.

In effect, interactions between the size of the Corps, designation of shortage areas, and trends in market-motivated physician distribution depend on which of two alternative strategies is used to place Corps physicians. The "bottom up" approach focuses on communities and populations least able to attract physicians and obtain medical care on their own. The "top down" approach concentrates on communities which appear to have a reasonably good chance of supporting a physician financially, but for one reason or another have been unable to link up with a private practitioner.
These two different approaches to placing Corps physicians reflect, I believe, two fundamentally different objectives which the Corps might pursue. The objective of providing a temporary helping hand to physicians seeking to establish private practices in currently less well served communities implies, and in fact should require, a focus on the best of the worst—precisely those communities with the best potential for supporting a private-practice physician.

The goal of providing medical care to those least able to obtain it on their own, for whatever reason, calls for exactly the opposite approach to Corps placements. This goal also suggests that the Corps is likely to be a continuing and ongoing factor in such communities. At the same time, however, concentrating only on the worst off communities narrows the breadth of the shortage area umbrella. Studies supported by the Robert Wood Johnson Foundation suggest that 12 to 15 million people are "structurally underserved." This number is considerably smaller than the approximately 40 million people claimed to reside in currently designated shortage areas.

It also seems that the Corps could efficiently meet the goal of serving the structurally underserved with fewer physicians than the 9,000 suggested not too long ago. Although based on very crude calculations, my estimate is that about 3,000 Corps physicians would be a reasonable interim size for the program. To be more precise than this requires better information and methods to identify populations which need more medical care and to assess the impact of the Corps on the use of medical services. Both of these should be given high priority for continuing research and evaluation efforts.

Finally, one clear consequence of the growing supply of physicians is that it is going to become less costly to hire physicians for all activities, including service in the National Health Service Corps. Given that medical schools' tuitions, and consequently Corps scholarship costs, are rising, it
may be more efficient to sever the Corps from the process of financing medical education. (An adequate, though unsubsidized loan program would have to be established to fill the vacuum left by ending Corps scholarships.) This approach has several additional advantages. Planning flexibility for Corps size and placement should also be greatly enhanced by not being locked into a six-to-eight year long pipeline. At the same time, the recruitment pool would be greatly enlarged, permitting greater selection among skills and experience. Finally, the Corps would be more likely to recruit physicians with a serious commitment to serving the medically needy rather than young medical students trying to finance an expensive education.

In sum, I believe that there is now and will continue to be a need for a program like the National Health Service Corps. However, I also believe that as currently structured the Corps is not operating as well as it might. Changes need to be made in the designation, recruitment, and assignment processes. I hope that the information I provided the Committee will assist you in your deliberations.

I have brought with me, Mr. Chairman, copies of several papers which I would like to submit for the record and for distribution to the Committee members and staff.

Thank you again for the opportunity to appear before you.
Notes


7. Statement by David E. Rogers before the Subcommittee on Health and Scientific Research, Committee on Labor and Human Resources, U.S. Senate, September 24, 1980, p. 64.
Senator HAWKINS. Thank you, Doctor.
I have to leave and go to another meeting at this point, but we are going to continue the hearings. Steve Grossman of Senator Hatch’s staff will preside.

Mr. GROSSMAN. Mr. Bulger, would you please continue?

Mr. BULGER. Thank you, Mr. Grossman.
I am here today to urge the committee not to adopt proposals that would significantly alter the growth and development of the National Health Service Corps by capping Corps personnel at 2,500 for the foreseeable future, restricting eligibility requirements for placement even further, and encouraging an independent practice model. It is vital that the Corps continue to be able to respond to the growing need for primary health care services in shortage areas in both urban and rural communities.

Much has been said about the excess supply of physicians that will be evident over the next 5 years. However, in Boston and other urban areas, it has never been a question of physician supply, but of maldistribution.

Boston, with its three major medical schools and numerous teaching hospitals, is one of the world’s leading medical centers, and if you took the city as a whole, it probably would have the lowest physician to population ratio of any major American city. Yet, over half of Boston’s neighborhoods have been declared health manpower shortage areas and medically underserved areas, and a large segment of the city surrounded by these hospitals has been labeled a “death zone” by the New England Journal of Medicine because of morbidity and mortality rates many times above the national average.

The private sector has left the inner city neighborhoods in scores over the past 10 to 15 years, and continues to do so. The few that remain will invariably soon retire. In the Mattapan neighborhood where my center is located, 15 years ago it was predominately a white, middle-class community with ample physicians. It is now almost entirely a young, black low- to middle-class community with only two part-time general practitioners, both over 65, besides the health center, providing services to a population which has increased to almost 30,000. The story is the same for many other Boston neighborhoods as well as other urban areas across the country.

In response to this void created by the absence of the private sector in providing primary health care services, programs such as the National Health Service Corps have become an invaluable source of physicians to serve needy urban populations. Boston now has 28 community health centers which serve over half the city’s population. Most of the centers are not supported by Federal funds, but a majority do receive National Health Service Corps placements which provide them a vital source of support. And a majority of these sites are experiencing significant increases in utilization rather than a decline.

My own center experienced a 40-percent increase in utilization in 1980. In terms of the excess supply of physicians opening offices in many of the city’s neighborhoods once thought undesirable, this has just not been the case. The health centers with National
Health Service Corps support have become in many instances the only source of primary health care services.

Given the economic makeup of the inner-city populations that are underserved, it is almost impossible for a private physician to create a viable practice with a client mix of medicaid and working poor who can afford little or nothing toward their bills.

Thus, while Boston for many years has had a citywide physician excess, these physicians have not chosen to serve the primary health care needs of much of Boston’s population. They have instead clustered in teaching hospitals and, as documented by the ABT study, have served the needs of residents of the surrounding metropolitan area more than those of the inner city.

It is our perception that the number of truly needy residents of the city who have no access to primary health care continues to grow, and without the Corps being able to respond to the situation, many people will be left with no medical care.

It is important as well, in the designation process for placement, to consider not just geographical barriers, but cultural, language, and racial barriers. For example, the South Cove Community Health Center in Boston sits across the street from a major medical center. Yet, it is the chief source of primary health care for Boston’s Chinese population, since it responds to their unique needs in terms of interpreters, etc. Such a center might well lose their MUA designation if rigid guidelines were imposed. Yet, no other provider would be able to serve this population. It is vital that the uniqueness of various population groups be included in the methodology utilized for Corps placement.

In Boston, the great majority of Corps placements have been at community-based, integrated sites, and have allowed the centers to expand their services to continue to meet the need for basic primary health care services, which continues to grow with the decline in the number of physicians practicing in communities served by the health centers. This type of setting, we feel, has encouraged physicians to remain in the community at the centers. However, without continued NHSC support after the initial commitment, most centers cannot hire the Corps physician, given the lack of other grant support to augment their salary. With a set number of Corps personnel, many of these physicians would not be funded by the Corps after the initial placement period.

In Boston, volunteer Corps placements have been quite common and have proved very successful for those involved. But with the cap, volunteers who may be more committed and motivated to work at a particular site would be almost eliminated. While there are some areas of the country that would not induce volunteers to practice in that locale and would warrant a scholarship placement, a mix of both volunteers and scholarship Corps members should be maintained.

The Corps is a relatively young program and, up to this point, has demonstrated a real capacity to begin to address not just the physician shortage problem, but the real question of distribution. The private practitioner has shown an unwillingness to serve a large segment of the inner city and rural populations. As proven in Boston’s case, an increased supply of doctors has not effectuated any real change in the situation.
With the proposed limitation on Corps expansion, many truly needy individuals will be denied access to basic primary health care services. I would urge the committee not to support the proposed leveling off of the Corps and its reorganization, but to support the continued planned growth of the Corps in its present form with emphasis on placement in integrated, community-based sites where the physician can best be utilized.

I appreciate this time you have allowed me to express my views. Thank you.

[The prepared statement and questions with addendum to Mr. Bulger follow]
Mr. Chairman and Senators, my name is Gregory Bulger. I am the Executive Director of the Mattapan Community Health Center in Boston, Massachusetts, as well as the President of the Mass. League of Community Health Centers. I would like to thank Senator Hatch for the opportunity to address the Committee. I am here today to urge the Committee not to adopt proposals that would significantly alter the growth and development of the National Health Service Corps by capping Corps personnel at 2,500 for the foreseeable future, restricting eligibility criteria for placement even further, and encouraging an independent practice model. It is vital that the Corps continue to be able to respond to the growing need for Primary Health Care Services in shortage areas in both urban and rural communities.

Much has been said about the excess supply of physicians that will be evident over the next five years, however in Boston and other urban areas it has never been a question of physician supply but of maldistribution. Boston with its three major medical schools and numerous teach-
ing hospitals is one of the world's leading medical centers and if you took the City as a whole, probably would have the lowest physician to population ratio of any major American City. Yet over half of Boston's neighborhoods have been declared Health Manpower Shortage Areas and Medically Underserved Areas and a large segment of the City surrounded by these hospitals has been labeled a "Death Zone" by the New England Journal of Medicine because of morbidity and mortality rates many times above the national average. The private sector has left the inner-city neighborhoods in scores over the past 10-15 years and continues to do so. The few that remain invariably will soon retire. In the Mattapan neighborhood where my Center is located, 15 years ago it was predominately a white middle-class community with ample physicians. It is now almost entirely a young, Black, lower middle-class community with only two part-time general practitioners both over 65 besides the Health Center, providing services to a population which has increased to almost 30,000. The story is the same for many other Boston neighborhoods as well as other urban areas across the country.

In response to this void created by the absence of the private sector in providing Primary Health Care Services, programs such as the National Health Service Corps have become an invaluable source of physicians to serve needy urban populations. Boston now has 28 community health centers which serve over half the City's population. Most of the centers are not supported by federal funds but a majority do receive National Health
Service Corps placements which provide them a vital source of support and the majority of these sites are experiencing significant increases in utilization rather than a decline. My own Center experienced a 40% increase in utilization in 1980. In terms of the excess supply of physicians opening offices in many of the city's neighborhoods once thought undesirable, this has just not been the case. The health centers with National Health Service Corps support have become in many instances the only source of Primary Health Care Services.

Given the economic makeup of the inner-city populations that are underserved it is almost impossible for a private physician to create a viable practice with a client mix of medicaid and working poor who can afford little or nothing towards their bill. Thus while Boston for many years has had a city-wide physician excess these physicians have not chosen to serve the Primary Health Care needs of much of Boston's population. They have instead clustered in teaching hospitals and as documented by the ABT Study have served the needs of residents of the surrounding metropolitan area more than those in the inner-city. It is our perception that the number of truly needy residents of the city who have no access to Primary Health Care continue to grow, and without the Corps being able to respond to this situation many people will be left with no medical care.

It is important as well in the designation process for placement to consider not just geographical barriers but cultural, language, and racial barriers. For example, the South Cove Community Health Center in Boston
sits across the street from a major medical center, yet it is the chief source of Primary Health Care for Boston's Chinese population since it responds to their unique needs in terms of interpreters, etc. Such a center might well loose their M.U.A. designation if rigid guidelines were imposed, yet no other provider would be able to serve this population. It is vital that the uniqueness of various population groups be included in the methodology utilized for Corps placement.

In Boston, the great majority of Corps placements have been at community-based integrated sites and have allowed the centers to expand their services to continue to meet the need for basic Primary Health Care Services which continues to grow with the decline in the number of physicians practicing in communities served by the health centers. This type of setting we feel has encouraged physicians to remain in the community at the centers, however without continued NHSC support after the initial commitment most centers cannot hire the Corps physician given the lack of other grant support to augment their salary. With a set number of Corps personnel many of these physicians would not be funded by the Corps after the initial placement period.

In Boston volunteer Corps placements have been quite common and have proved very successful for those involved, but with the Cap, volunteers who may be more committed and motivated to work at a particular site would be almost eliminated. While there are some areas of the country that would not induce volunteers to practice in that locale and would warrant a scholarship placement, a mix of both volunteers and scholarship Corps members should be maintained.
The Corps is a relatively young program and up to this point has demonstrated a real capacity to begin to address not just a physician shortage problem but the real question of distribution. The private practitioner has shown an unwillingness to serve a large segment of the inner-city and rural population and as proven in Boston's case an increased supply of doctors has not effectuated any real change in the situation. With the proposed limitation on Corps expansion many truly needy individuals will be denied access to basic Primary Health Care Services. I would urge the Committee not to support the proposed leveling off of the Corps and its reorganization, but support the continued planned growth of the Corps in its present form with emphasis on placement in integrated community based sites where the physician can best be utilized.

I appreciate the time you have allowed me to express my views, if the Committee has any questions I would be glad to answer them.

Respectfully submitted,

Gregory Bulger
Executive Director

GB/sm
QUESTIONS FOR MR. BULGER

1. Where is the nearest hospital facility to your center? Where is the nearest outpatient facility in relation to your clinic? Is there transportation available to these facilities? If so, what kind? Do these facilities accept Medicare and Medicaid?

2. Dr. Hooley just testified that in many cases "the Corps placement simply supplants a process which would occur under natural market forces." And we have also heard considerable testimony this morning that a substantial improvement in geographic distribution of physicians has occurred. Since there is a projected surplus of physicians and the Boston area is already well-supplied, what recommendations can you make in enhancing the attractiveness of your area to private physicians?

3. In designating your area as a medically underserved area, when was the last time that your petition was reviewed by the local planning agency and by the Department of Health and Human Services?

4. How many of the Corps Members in your area have stayed to develop their own private practices as was the original intent of placing a Corp member in your clinic? If they didn't stay, why not? Is your clinic competing with the placement of a private practice physician and/or clinic?
ADDENDUM

MANPOWER HEARING

Answers to additional questions not asked at Hearing

1. The nearest hospital is Carney Hospital in Dorchester, which does have an outpatient department. The hospital is four miles east of the Health Center. However, the hospital's outpatient department is presently fully utilized and it was in an effort to relieve demand for services that the hospital encouraged the development of its affiliated health centers such as Mattapan. Given that the Mattapan neighborhood which the Health Center serves is south of the downtown Boston area, the major public transportation routes run north/south. Thus the trip to Carney Hospital involves at least two and in some cases three different bus connections on routes that run quite irregularly. Depending on these schedules the trip takes one to two hours. Carney Hospital does accept Medicare and Medicaid patients.

2. Urban areas such as Mattapan I feel will continue to remain unattractive to most private physicians primarily because of the economic mix of the population in need of services and without the Health Center and the National Health Service Corps' Programs, Primary Health Care Services would not be available. Even though the supply of doctors has increased, the great majority in the Boston area have opted to practice in a particular specialty and are not providing Primary Health Care. To further dissuade the few physicians interested in Primary Care the economic makeup of neighborhoods such as Mattapan does not allow them to set up a viable practice. Mattapan's population which is predominately lower and lower-middle class just cannot provide enough revenue for a private office. Over 55% of the population is considered to be the working poor who are not eligible for medicaid and who have no insurance coverage. Most of the uninsured population can afford to pay only a small percentage of the cost of Primary Health Care Services. Given the situation, any private practitioner would have a difficult time generating a decent income to support himself.

3. The Health Planning Council of Greater Boston, Health Systems Agency IV in Massachusetts just reviewed our Medically Underserved Area status in March, 1981 and requested that the Health Center's Health Manpower Shortage Area status be upgraded from a 3 to number one classification by the Department of Health and Human Services. Upon reviewing that request the Department in April formally changed our designation from Health Manpower Shortage Area Three to Health Manpower Shortage Area One.
Mr. GROSSMAN. Thank you.

What I am going to do is ask each one of you one of Senator Hatch's, questions and then I assume we will submit further questions to each of you for your answers in the record, and I also assume that other Senators will also have questions for you to answer for the record.

I will start off with Dr. Woolley. What recommendations would you make to enhance the attractiveness of the rural practice to health professionals?

Dr. WOOLLEY. That is a very large question, obviously.

Mr. GROSSMAN. I understand.

Dr. WOOLLEY. The major problem that I see is one of adequate training and preparation. We have a major problem that rural is not necessarily the same in all parts of even our State or any other area of the country. Therefore, we need to train physicians differently to practice in different areas.

For example, if you have a person training in a fairly typical eastern family practice program—and I am not discouraging eastern family practice programs, but they do not typically emphasize obstetrics or surgery. If such a physician goes to practice in a small western town where they are one of two physicians and you have a small hospital that operates at 35 or 36 percent occupancy, the only way to keep the doors open in that hospital is to do obstetrics and surgery. That physician is forced to practice a private medicine for which he has no training. So, training becomes a critical issue.

Second is financial; the Federal Government has a long history of making nonurban practice financially unattractive. They reimburse on medicare and medicaid payments at a lower rate, with the perverse notion that it is cheaper to practice in rural areas than it is in urban areas. I know of no valid data to support that conclusion.

Physicians in rural areas have specific and unusual problems as relates to continuing education, training, and so forth. The burnout issue is very real. I do not think that the same standards of physician-to-population ratios that are used in urban areas are at all appropriate to rural areas. You simply have to have enough people there to make life worth living.

Mr. GROSSMAN. Thank you.

[Responses to additional questions to Dr. Hadley follow:]
RESPONSES TO WRITTEN QUESTIONS

Q1. I am impressed with your testimony and feel your research is supportive of the goals of my bill, S.801. Are there any significant changes that you would propose in relation to S.801?

A. I support the goal of separating the NHSC from medical education financing. If this is done, however, I believe that it is essential that an adequately funded, unsubsidized loan program be established to help finance medical training.

The process of designating shortage areas should focus primarily on identifying populations with both poor health and low use of medical care. The ratio of available physicians to population within a geographic area should be deemphasized as an indicator.

Greater emphasis should be given to developing the data systems needed both to designate populations as eligible for the receipt of Corps personnel and to monitor the impact of the Corps on the use of services.

Q2. In revising the designation and NHSC placement process for underserved areas, how can we take account of an area's demand for services instead of only its statistically defined needs?

A. Taking account of the demand for services only makes sense if the goal of the NHSC is to place physicians in areas which are financially able to support additional physicians but have not been able to attract them. I believe that social needs will be better served by concentrating on communities and populations unable to afford additional medical care. My research suggests that populations with the lowest use of medical care relative to need (as measured by mortality rates) also tend to have lower incomes than other population groups. Under these circumstances, I don't think that measuring the economic demand for services should be given high priority.
Q3 THE GENERAL ACCOUNTING OFFICE IS CURRENTLY CIRCULATING A DRAFT REPORT ENTITLED: "HEALTH SERVICE PROGRAM NEED ASSESSMENT SHOULD BE APPROVED." THIS REPORT IS HIGHLY CRITICAL OF THE FEDERAL DESIGNATION PROCESS FOR UNDERSERVED AND SHORTAGE AREAS AND YOUR TESTIMONY SEEMS TO INDICATE YOU AGREE. WHERE DID THE FEDERAL GOVERNMENT GO WRONG?

A. As I indicated in my written statement, the major problem has been an undue emphasis on the number of physicians relative to population in an area. The designation process should focus on the use of services relative to need (poor health). Medicare expenditures per enrollee and mortality data are, I believe, better building blocks than physician availability.

Q4 DO YOU FEEL THE NATIONAL HEALTH SERVICE CORPS HAS BEEN OF SOME VALUE IN SOLVING PROBLEMS OF PHYSICIAN DISTRIBUTION?

A. I believe that it has, but I also believe that its contribution could be increased by shifting its focus to the least well-off populations.

Q5 IT WOULD BE LOGICAL TO ME THAT WHEN A SURPLUS OF PHYSICIANS EXIST, THEY DISPERSE OUT INTO THE TOWNS AND AREAS WITH LESS POPULATION AND ALSO LESS COMPETITION I ALSO HAVE ANECDOTAL AND SOME STATISTICAL EVIDENCE THAT THIS IS TRUE. HOWEVER, GIVEN THAT WE HAVE JUST ENTERED THE PERIOD WHEN DOCTORS WILL BE ENTERING THE MARKETPLACE IN HUGENUMBERS, IS IT TOO SOON TO BE ABLE TO ASSESS THE FULL EXTENT OF THIS PHENOMENA?

A. Physician supply has been growing rapidly since 1970. Thus, I believe that the process is well under way. Our ability to measure and assess its magnitude is hampered primarily by the lack of up-to-date data on physicians' earnings and their geographic distribution by small areas.
Mr. Grossman. Dr. Hadley, in revising the designation and National Health Service Corps placement process for underserved areas how can we take account of an area's demand for services instead of only its statistically-defined needs?

Dr. Hadley. The demand for services in the absence of adequate financing is a difficult concept to identify. I think that is the rub that is causing a lot of the confusion about the role of the Health Service Corps. I think it relates to my comment about there being two competing and different objectives which one could impose on the Corps.

If the objective is to help physicians establish private practices in communities that could potentially support a private practitioner, then I presume that there are a number of mechanisms relating to willingness or ability to pay that could be identified.

If the objective is to place physicians in communities that do not have the financial resources for whatever reason, then I think the demand is probably closer and more akin to the need. It then becomes imperative to establish some sort of outside standard as to what a reasonable level of the need is.

Mr. Grossman. Thank you.

Mr. Bulger, one of the original purposes of the National Health Service Corps was to have Corps members stay in the area after they finished their obligated service and develop their own private practice.

Have any of the Corps members in your area of Boston done that? If they have not stayed, why not? Are you aware of any reasons why they have not?

Mr. Bulger. Well, I think the great majority have stayed in the sites where they were practicing. As I said earlier, it is difficult sometimes for the health center to pick up the full salary that the National Health Service Corps is picking up in its initial commitment, given the fact that the income that can be generated by the physician really is not adequate without other grant support to provide a cushion for a salary. I think that if there were adequate grant support in the second phase of commitment or placement—let us say a half placement that would be funded—I think that would be very helpful to centers in keeping on the National Service Corps placements for a second term.

Mr. Grossman. Thank you.

I would like to move on and call our last panel. The members of this panel are Dr. Edward Stemmler, dean of the college of medicine at the University of Pennsylvania, and a representative of the Association of American Medical Colleges; Dr. Walter C. Bowie, dean of Tuskegee Institute's School of Veterinary Medicine, who is representing the Association of Minority Health Professions Schools; and Dr. E. Harvey Estes, professor and chairman of the community and family medicine department at the Duke University School of Medicine. He will be speaking about primary care needs.

Dr. Stemmler, would you begin, please?

Dr. STEMMLER. Mr. Grossman, do you want to take the time for an oral statement, or would you like to move right to questions, because we would be pleased to submit this testimony for the record, if you would accept it?

Mr. GROSSMAN. Well, all of the statements will be accepted for the record. You might wish to briefly summarize and take 3 or 4 minutes, if you would want to.

Dr. STEMMLER. Well, let me then read the prepared oral statement, although I would request, too, that a larger statement which is more broad and all-encompassing be accepted for the record as well.

Mr. GROSSMAN. Each of your full statements will be inserted in the record.

Dr. STEMMLER. Thank you, Mr. Grossman.

I am Dr. Edward J. Stemmler, dean of the University of Pennsylvania School of Medicine. I am here to represent the point of view of the Association of American Medical Colleges.

Given the time limits, I will restrict my comments to a synopsis of the association's key concerns, but request that the more lengthy explication, as I said, of our position be entered into the hearing record.

Clearly, the country is deeply engaged in an examination of the economic constraints within which this Nation must operate. Central to this exercise is the question of the appropriate role of the Federal Government in the host of activities perceived as necessary to sustain or improve our Nation's social condition.

Let me summarize why the AAMC believes that the Federal participation in the complex enterprise of medical education represents an appropriate as well as an important utilization of Federal resources. The paramount fact is that the quality of medical care received by the people of this Nation is ultimately dependent upon the excellence of the education received by medical students. Furthermore, the international preeminence of the United States in biomedical and behavioral research is directly related to the excellence of the educational institutions in which many American scientists conduct their research. I must say it is nice to be first in something. The continuation and enhancement of this superb record of innovation and creativity is vital to our Nation's future.

Finally, Government investment in these educational institutions in the recent past has unequivocally confirmed their value as instruments of change in the immediate- and long-range implementation of national health policy.

Federal participation in the support of medical education has served the people of this Nation productively and should not be
abandoned. The reauthorization of the basic health manpower programs currently in force is now more necessary than ever. Medical schools and affiliated teaching hospitals will in the next few years be faced with unprecedented financial stresses that could compromise the very existence of some. Our institutions are dependent upon many revenue streams intermixed from a large and diverse number of sources, many of which are highly insecure. The loss of any one or group of these cannot necessarily be made up by others.

Now, first let me discuss student assistance. Two basic assumptions underlie the AAMC's position on the future of student aid programs. The first is that, in view of their high-income potential, all but the most severely disadvantaged students should ultimately be responsible for financing a significant portion of their medical education. The second is that the cost of obtaining a medical education is becoming almost prohibitive for the average individual. Absent a reasonably comprehensive portfolio of financial aid programs, the opportunity to secure an M.D. degree will be limited to only the affluent; that is, those who are accustomed to and comfortable with the notion of borrowing to achieve some future gain.

Therefore, the association hopes that you will join us and share our priorities that accord student assistance the highest importance in the development of a new statute. We advocate that the new statute provide: An appropriately balanced set of student assistance programs for all qualified students seeking access to medical education, regardless of their economic status; manageable debt repayment options, in recognition of the economic reality that initiation of repayment of loans is virtually impossible during school, residency, and a serious hardship in the very early years of practice; and an expanded opportunity for students to repay their indebtedness through loan forgiveness programs.

The association is disappointed to observe the disparity between these specifications and the proposals currently embodied in S. 799.

The scholarship program for students in exceptional financial need—a program that has helped many economically disadvantaged young men and women to become physicians—is terminated.

Neither S. 799 nor S. 801 offer any substitute for the substantial funds now available in scholarship support that will disappear gradually over the next 3 years under the proposed change in the National Health Service Corps scholarship program. The adverse impact of this loss without any offsetting replacement cannot be overstated.

The failure to continue the capitalization of the health professions student loan program, a campus-administered student loan program with a modest Federal subsidy that has been extraordinarily cost effective in assisting needy students to complete their education, is also very distressing in the face of the rapidly rising costs of attending medical school.

The cumulative impact of these deletions would make the HEAL program, at its very high interest rates, the major vehicle for student assistance. On Monday, the rate of Treasury bills again exceeded 16 percent. Moreover, even HEAL borrowing is limited by the low authorization ceilings—a puzzling proposal since the cost of this program to the Government is negligible.
The association is deeply concerned that enactment of the limited student assistance provisions of this bill would constitute disincentives to students to undertake careers in primary care or to practice in underserved areas and fears that, in the long term, upward pressures on health care costs would be created.

The limited access and high cost of HEAL loan money for students could be additionally and severely exacerbated by some of the extant proposals for reforming the guaranteed student loan program administered by the Department of Education.

Let me discuss institutional support briefly. The AAMC's views on this program are well known. While currently the amount allocated to each medical school is computed on the basis of student population, we emphasize that it is not primarily a form of student subsidy. Institutional support is utilized for the stabilization of the medical center's entire mission, including service and community outreach programs through discretionary interventions.

The termination of institutional support proposed by this bill is, of course, of grave concern to our constituents. Institutional support, small as it is, is the only accessible, uncommitted money available to many schools. The true value of these funds exceeds by far their actual magnitude. They constitute the only source of funds to develop new and innovative programs and to meet unexpected contingencies and emergencies caused by the vagaries in all forms of support.

Now, the association would like to reiterate one important point, and that is that the medical schools of this Nation have been and can continue to be powerful instruments of change. Remember, there are only 126 of them. Not a single problem identified by Government, be it the need for expanded enrollment, to improve geographic distribution of physicians, to emphasize primary care, or to reorient medical practice to family medicine, had its solution initiated within the Government. Almost all, with the possible exception of the HMO's, were innovations conceived in, and implemented on an experimental basis by, this country's schools of medicine or in the private sector.

Many of these creative developments by the schools would not have been possible without Federal institutional support funds that served to focus the attention of our faculties on the importance of the social, in addition to the scientific and technical dimensions of medical education. In the AAMC's opinion, this country has reaped enormous benefit from a small investment of public funds in this program, and we regret that this bill fails to continue this support.

I will not read the remaining testimony which relates to the other provisions, other than to point out our support for the special projects which must be identified as national priorities and supported appropriately. The AAMC would also note that in the absence of institutional funds to help cover the costs of those special projects, its constituents have grave concerns about their ability to carry them out as you intend.

So, in summary, S. 799, on balance, leaves much to be desired. The AAMC would be pleased to work with the committee in the modification of its initial proposal along lines that we believe have earned public support, even in the stringent economic climate of these present difficult times.
Thank you, Mr. Grossman.
[The prepared statement of the Association of American Medical Colleges follows:]

Statement of the Association of American Medical Colleges on The Health Professions Educational Assistance & Nurse Training Act of 1981 (S. 799)

The Association of American Medical Colleges (AAMC) is pleased to have this opportunity to share with the Committee its views on S. 799, "The Health Professions Educational Assistance & Nurse Training Amendments of 1981." The interest of the Association in this legislation is self-evident. Since its founding in 1876, the AAMC has steadily expanded its horizons so that today it represents the whole complex of individual organizations and institutions charged with the undergraduate and graduate education of physicians. It serves as the national voice for the 126 U.S. accredited medical schools and their students; more than 400 of the major teaching hospitals; and over 70 academic and professional societies whose members are engaged on an everyday basis in the activities—teaching, research and patient care—that in the aggregate constitute medical education.

Submitted to the Senate Committee on Labor and Human Resources, April 7, 1981.
JUSTIFICATION OF FEDERAL SUPPORT OF MEDICAL EDUCATION

Prior to discussing its specific program recommendations, the AAMC believes it is necessary to outline its views on the support of medical education.

In reviewing recent developments, the AAMC has been impressed with the need for and justifiability of marshaling support from all parties who benefit from medical education. Students benefit from preparation to enter a well remunerated profession. Those who would place the entire burden of the cost of the education on the student do not appreciate that, in addition to their own living expenses and foregone earnings—opportunity costs—, each would have to bear institutional educational costs that currently average more than $20,000 per year. A burden of this magnitude would surely restrict the profession of medicine to individuals from high income families.

The extraordinary commitments of the states to medical education indicate the recognition of the importance of medical schools to them. In academic year 1978-79, state support of public medical schools totaled $1,001 billion and these jurisdictions provided an additional $79 million to private schools; these amounts account for about 38% of the total operating revenues of the nation's medical schools. The states have borne and are bearing an unusually large share of the responsibility for financing medical education.
Now, as in the past, the schools stake their claim on Federal resources on the fact that they are a national resource, engaged to a significant degree in public service activities that impact on the whole nation and thus merit Federal subsidy. At this time, the country is currently extremely sensitive to, and deeply engaged in, an examination of the economic constraints within which this nation must operate, both domestically and abroad. Central to this exercise is an intense scrutiny of the entire spectrum of programs which realistically deserve Federal support. Thus, the following points need to be made in support of the schools' claim that Federal resources are warranted:

- The health needs of citizens throughout the country are served by a system of medical education that uniformly produces highly competent physicians, based on national standards and thus warranting national support.
- The high degree of geographic mobility of physicians imbues them with the character of a national, rather than local, resource and justifies Federal subsidization of the schools which provide their education.
- Medical education requires subsidy because it is far more expensive than most other graduate or professional education programs, and is, in practical terms, beyond the economic reach of many able, altruistic and well motivated students.
- The Federal Government entered into a partnership with medical schools to achieve commonly agreed upon public purposes, the accomplishment and maintenance of which require continuing mutual commitment.
The preeminent international stature the United States enjoys in biomedical and behavioral research is directly related to the excellence of the educational institutions in which many of our country's scientists conduct their research. The continuation and enhancement of this superb record of innovation and creativity is vital to our nation's future.

Past government investment of only a small fraction of the nation's health budget in these educational institutions has demonstrated their value as instruments of change in the immediate and long-range implementation of national health policy.

**SPECIFIC PROGRAM RECOMMENDATIONS**

**Student Assistance**

**Rationale for AAMC Position**

Prior to addressing the specifics of the student aid proposals advanced by S.799, it is necessary to outline the basic rationale upon which the Association's views on the future of student aid is predicated:

- In view of their future high income potential, all but the most economically disadvantaged students and their families should ultimately bear responsibility for financing a significant portion of their medical education through direct payment, loan repayment, or service payback.
The cost of obtaining a medical education is becoming almost prohibitive for the average individual. Tuitions have increased dramatically over the past decade. In private schools, the average first-year tuition has increased from $1,050 in academic year 1960-1961 to $7,910. Over this same epoch, the median first year tuitions in public schools have grown from $498 for residents to $2,070 and from $830 to $4,118 for non-residents. Without a reasonably comprehensive set of aid programs, the opportunity to secure an M.D. degree will be limited to only those fortunate enough to occupy the upper economic levels of our society---those who are more accustomed to the notion of investing large sums for a future return.

The period of training for an adequately educated physician is long and arduous, usually encompassing a span of no less than seven and often several more years.

The medical school curriculum is so rigorous and demanding as to make outside employment to defray expenses virtually impossible during most phases.

Medical students who finance their education through borrowing are faced with the prospects of high and rapidly rising debts. The average debt of students with indebtedness who graduated
in 1980 was $17,200, up sharply and continuing to rise as tuition and living costs increase.

- The future of other forms of aid upon which medical students have traditionally relied is now increasingly in doubt, particularly in light of the Administration's proposals to cut the very valuable Guaranteed Student Loan (GSL) Program. In academic year 1979-1980, 35,183 medical students (55.1% of all medical students) received aid under this program, which provided 70.5% of all loans to these individuals.

Criteria for Student

A careful analysis of the above factors, in light of the prevailing economic climate, has led the Association to conclude that student assistance is its highest priority and most urgent recommendation in the development of new authorizing legislation. It is imperative that the Congress enact into law an appropriately balanced portfolio of programs designed to meet the needs of all qualified students seeking access to a medical education regardless of economic status. Such a structure should encompass: scholarships for the most disadvantaged students; subsidized loans for students with substantial needs; and market rate loans for the financially able.
The characteristics to be built into these programs obviously merit careful attention. Perhaps the most important is the assurance of availability of assistance. The enormous difficulties and uncertainties that have ensued due to oscillations in the availability of student aid in the last year are very undesirable and worked severe hardships on the students and the schools. The recent ups and downs of the HEAL Program, with which the members of this Committee are all too familiar, are illustrative of this point. Once students have gained acceptance into medical school, they should be able to pursue their education with reasonable certainty that assistance will be available until graduation. Several other criteria are intrinsic to a well designed and cost effective assistance structure. The Association maintains that future student aid programs should reflect the lessons of past experience and thus should:

- Establish manageable debt repayment options in recognition of the economic reality that initiation of repayment of loans is virtually impossible during undergraduate and graduate medical education and may be a serious hardship during the very early years of practice when gross income is offset by the high expenses associated with starting up a practice. This situation will worsen as incomes are reduced by regulation and/or greater competition with the increasing numbers of physicians entering practice.
Award assistance on the basis of need, preferably at the discretion of the financial aid officer at each medical school. It is crucial, particularly during the current economic climate, that the limited financial resources available be distributed in the most cost-effective manner. Given the diversity of individual needs and circumstances and the complexities of the various aid programs, the school financial aid officers are the most qualified individuals to make these determinations.

Expand opportunities for students to repay their indebtedness through loan forgiveness. The present provision for loan forgiveness has been oversubscribed. The Association believes that service as a means of repayment will become an attractive alternative to many students as their level of indebtedness increases as well as more cost effective for the government than the National Health Service Corps. Loan forgiveness has the added advantage of not forcing students to make premature career choices of specialty.

The Association must weigh student aid proposals in light of their potential to meet these important criteria.

**Student Aid Provisions of S.799**

Because of these factors, the AAMC finds the student aid structure envisioned by S.799 to be of questionable wisdom from the perspective of all concerned—the students, the schools, and the Nation. In essence, the bill would circumscribe the current portfolio of assistance programs available to medical students under the health manpower statute. The cumulative impact of this would
be to make increasing numbers to rely solely on the Health Educational Assistance Loan (HEAL) Program as the major vehicle for aid. The Association would view this eventuality as short-sighted in terms of the country's social, medical and economic policies and responsibilities and suggests that the Committee seriously consider the long-term consequences of adopting such a policy. While the Association views on the specifics of the proposed student aid programs are discussed below, it wants to highlight one primary recommendation: that members of this Committee thoroughly examine the failure of the bill to continue funding for those programs---or to establish new mechanisms---designed to aid the most needy students, the Exceptional Financial Need (EFN) Scholarship Program and the Health Professions Student Loan (HPSL) Program.

The bill proposes to retain---at approximately its current level---the successful special project grant program which is designed to encourage the application of minority and low income students to medical schools. Yet the proposal does not provide substantive loan or scholarship assistance for these students to actually pursue a medical education. Without sufficient access to funds on reasonable terms, minority and low income students will be unable to realistically consider the prospect of becoming physicians. Adoption of the proposal advanced by S.799 would guarantee this outcome and give credence to the unfortunate but popular belief that a medical education can only be achieved by the affluent: that is, those who are accustomed to and comfortable with the notion of investing large sums for a future return.
Moreover, the Association is deeply concerned that enactment of the bill's limited student assistance provisions would constitute disincentives to students to undertake careers in primary care or to practice in underserved areas and fears that in the long-term, upward pressured on health care costs would be created.

Outlined below are the AAMC's views on the specific programs addressed by S.799.

**Exceptional Financial Need (EFN) Scholarship Programs**

The AAMC believes that the high costs involved in training physicians mandate, as a matter of public policy, that specific provisions be made to insure that even the most economically disadvantaged students not be denied access to a health professions career for financial reasons. Therefore, the Association deeply regrets and strongly opposes the termination of the EFN Scholarship Program envisioned by S.799. This Program has enabled the medical schools to admit a socioeconomically heterogeneous cohort of students and has helped to limit the degree to which access to a career in medicine has become a privilege of only the more affluent.

In academic year 1979-1980, this Program permitted 340 needy students to attend medical schools. The eligibility criteria for this program are extremely stringent; until last summer, it was restricted to those students with absolutely no resources. This definition of need was redefined last year as possession of the lesser of $5,000 or half the annual student cost of attending school. The Association is hard pressed to understand the rationale for eliminating aid to such disadvantaged students...
and strongly believes that it must be retained or a substitute mechanism provided.

Health Professions Student Loan (HPSL) Program

The Association is puzzled by the decision not to continue capitalization for the HPSL Program in light of its success from the viewpoint of both the students and the schools. The 1978 Report of the AAMC Task Force on Student Financing found that the HPSL Program was an important factor in minimizing the debt burden on economically disadvantaged students and concluded that:

"The HPSL program will help insure that the consequences of the apparent Federal policy of having medical students pay for a larger share of their educational costs does not fall disproportionately upon the economically disadvantaged student, therefore effectively further limiting access to medical school for these students."

As noted in its discussion of the EFN Scholarship Program, the AAMC deeply regrets and strongly opposes the proposed elimination of assistance programs to this cohort of needy students. The Association is also particularly disturbed by the decision not to continue appropriations for a loan program, particularly one whose unique features have combined to establish it as a cost effective aid mechanism from the perspective of all parties concerned—the students, the schools and the Federal Government. This program:

- Permits aid to a substantial number of students who are in exceptional need but are unable to secure awards under the Exceptional Financial Need (EFN) Scholarship
Program---for one reason or another, i.e., are not in their first year of school---but are hesitant to assume burdensome HEAL loans. For academic years 1978-1979 and 1979-1980 respectively, awards to 9,808 and 7,646 medical students were made under this program.

- Recognizes the unique needs of and the range of economic circumstances presented by each student by providing financial aid officers with the flexibility necessary to assemble student aid packages to fit individual requirements.

- Authorizes funds received in repayment of loans by past borrowers to be utilized for new loans to needy students. While this program is still young and repayments are just beginning to approach steady state conditions, its reauthorization will eventuate in at least a partially self-sustaining, cost-effective means of financing aid to needy students that is sound from both an economic and public policy perspective.

- Provides a partial loan forgiveness option that serves as an effective device to attract physicians to underserved areas.

Finally, the AAMC would like to express its support for the decision to permit the revolving funds to remain in the schools until FY 1986 as a highly cost-effective means of student financing.
Health Education Assistance Loan (HEAL) Program

S.799 proposes to retain the HEAL Program established under P.L. 94-484 at a level considerably below its present authorization ceiling. The Association has long regarded the HEAL Program as one of last resort because of the enormous indebtedness burden incurred. However, in view of the growing costs of medical education and the vagaries in other forms of student aid, the AAMC believes that this ceiling should be expanded, particularly in view of the fact that the risks and costs to the government are minimal.

As noted above, the enthusiasm of the Association for this Program has been tempered because of the huge debt burden that current interest rates presage. Assuming that the loan was negotiated on a fixed rate basis, a student borrowing $10,000 a year, or $400,000 aggregate under current rates of approximately 18% (the bond equivalent of a 91 day Treasury bill plus 3.5%) would be liable to repay a total of $188,860 over the minimum ten year repayment period or $1,574 per month for 120 months, sometimes starting even before completion of residency training.

The AAMC would like to express its support for the provisions of S.799 designed to ease the Program's repayment burden and increase the flexibility and accessibility of these loan funds by:

- Increasing the potential annual and aggregate borrowing limits to $20,000 and $80,000, respectively;
- Removing the remaining eligibility restrictions on HEAL borrowers---the stipulation that no more than 50% of each school's students can receive HEAL loans;
Providing for a graduated repayment option;
Allowing deferral of repayment on both the principal and interest during specified periods of education, training and national service.

While the Association endorses these modifications, it urges that the Committee make further efforts to lessen the costly repayment requirements that fall upon HEAL borrowers, by:

- Extending the deferral of repayment until completion of periods of national service and graduate medical education. The Association believes that this would:
  - facilitate better debt management by permitting borrowers to defer repayment until they are in a more realistic economic position to do so.
  - Several residency programs now demand periods of training of five or more years.
  - act to reduce disincentives for young physicians to serve in shortage areas.
  - not lead to a significant increase in the Government's expenditures for this program. Since HEAL is not a Federally subsidized program, the costs to the Government of such an improvement would be minimal.

Finally, the AAMC would like to stress that the high debt burden that a student could incur under this Program has highly
undesirable economic and social consequences particularly in view of the possibility that adoption of S.799 would leave the majority of medical students no choice but to obtain these loans. Members of the Committee should beware that high levels of indebtedness:

- May be a strong disincentive for physicians to enter practice in primary care in rural and inner-city areas where they are most needed because these practice modes and areas are less likely to produce the necessary income to repay these debts.

- Could have a chilling effect upon the choice of medicine as a career by minority and financially disadvantaged students.

- Could result in additional "pass through" costs to the consumer and exacerbate the spiraling inflation of health care costs.

The AAMC believes that these potential problems merit serious attention by the Congress.
Institutional Support

A variety of cogent arguments may be advanced to justify general Federal support to the institutions engaged in medical education. One major theme is that the Federal Government, as an important beneficiary of the process, both in its own right and as an agent for the general public, should assume its fair share of the unusually costly process. The Congress appears to have shared this conviction in 1971 and at that time requested the Institute of Medicine (IOM) to assess the true costs of medical education and to recommend what would constitute a fair share for the Federal Government to underwrite. The report of the carefully crafted IOM study concluded that an appropriate Federal share would be about a third of the education program costs. The Association found the IOM study well documented and persuasively argued at the time of its publication, and can identify nothing that has subsequently happened to invalidate the arguments or reduce the force of the conclusions. A GAO Report in 1978 found institutional support was used effectively and for some institutions was critical to their fiscal stability.

The clear trends in Congressional action on this issue since the publication of the IOM Report have been to specify in even greater detail what a school must do to receive a progressively dwindling award. While education costs have nearly doubled, the per capita grant fell from $2,065 in FY 1972—barring rescissions—, to about $315 in 1972 dollars this year. This is the Federal contribution to the support of institutions that have served as powerful instruments of social change. Not a single mechanism
advocated by the Government---be it to expand medical school enrollment, to improve geographic distribution of physicians to emphasize primary care, to reorient medical practice to family medicine---originated within the Government. Almost all, with the possible exception of HMO's, were innovations conceived in and implemented on an experimental basis by this country's schools of medicine.

This very minimal Government investment in these institutions has unequivocally yielded a high return in immediate and long-range public benefits and has confirmed the value of these institutions as a perennial resource of imaginative ideas for the resolution of societal problems. Faculties of these schools are usually far ahead of other segments of society in recognizing problems and in taking "fliers" at their solutions. The Federal Government's small, but vital contribution to the maintenance of institutions that serve as major agents of innovation in this country should not be abandoned.

Potential Loss of Institutional Support

While currently computed on the basis of student population---considered at one time to be the most equitable formula for allocating these funds among eligible institutions---institutional support is not primarily a form of student subsidy. Rather, these funds are utilized for the stabilization of an institution's entire education program, through discretionary interventions at appropriate times and places. Institutional support, small as it is, is the only accessible uncommitted money available to many
schools. The real worth of these funds exceeds by far their raw monetary value. Most medical school deans view them as the most useful at their disposal, the only source of funds to develop the new and innovative programs the nation so desperately needs to advance the health of our people; and to meet unexpected contingencies and emergencies increasingly encountered in this period of fiscal stringency.

The schools have made commitments to educational programs that hew to joint Federal/institutional objectives, perhaps of higher priority to the former than the latter. Cooperation with the Government on these public-interest ventures is costly to the schools.

For example, the sponsor does not pay the full costs of the programs and contributes nothing to the cost of faculty time and effort involved in the planning of the programs, the development of new curricula, the preparation and processing of applications, etc. Discretionary funds are critically needed: to meet unmet institutional costs to the schools of joining hands with government in a wide variety of activities of great benefit to the whole nation; and especially, to deal with the turbulence induced by vacillations and oscillations in federal commitments.

There is a prevalent misperception that student financial assistance funds are essentially fungible with flexible institutional support and that schools can recoup the loss of these institutional funds by raising tuition, an option made viable by the fact that students have access to loans or scholarships. This argument has very
limited validity. While private schools have the theoretical freedom to increase tuition at whatever frequency and to whatever extent they desire, tuitions in many of these institutions are already staggering. The result is that the social/economic/cultural/ethnic mix of the student body becomes a less representative and more elitist cross section of America. For most public schools tuition increases are not a viable option. Raising tuition is complicated, time consuming and cumbersome, often requires action by a Governor, a Legislature (which may meet only biannually), a Board of Regents or a State Commission on Higher Education. The result of an increase is variable: in some states, tuition is returned to the State Treasury, deposited either a general or a dedicated account (e.g., for retirement of construction indebtedness); in others, the increased revenue from tuition can and often will be offset by an equivalent decline in appropriated funds. Thus, the use of student aid to compensate for the loss of the funds proposed by S.799 is not, in the Association's opinion, a viable option. As noted elsewhere, the States are already contributing heavily to the costs of medical education; imposing a further burden upon them would probably not be feasible or fair. Accordingly, the Association is persuaded that the Federal Government should continue to discharge its responsibility for providing the schools with a form of flexible institutional support.

The integrity of a large number of medical schools is seriously threatened today by plethora of destabilizing fiscal forces, whose cumulative impacts could be lethal, an outcome surely not in the public interest. Medical schools and affiliated teaching hospitals...
will, in the next few years, be faced with unprecedented reductions in revenues on several fronts—from service programs and, in terms of constant dollars, from severe reductions in research and research training funds. The failure of the biomedical research budget to keep pace with inflation, and the proposal to eliminate institutional support and overhead from training grants pose extremely difficult problems for the schools, as large numbers of faculty are partially supported by Federal research dollars, dividing their time between, and deriving their compensation from, both educational and research activities. If the Federal Government no longer wishes to utilize their research talents, are they expected to live on half a salary? The economic reality is that some form of institutional support is now more necessary than ever to maintain the innovation, creativity, integrity and very viability of these institutions that have done so much to propel the United States to its position of preeminence in medicine and biomedical and behavioral research.

The potential impact of the termination of institutional support envisioned by this proposal must be viewed in the context of: almost certain reductions in many revenue streams to medical schools; the impact of inflation; and increased costs to the schools in complying with a host of government regulations. The Association is firmly convinced that the termination of institutional support proposed by this bill will ultimately prove self-defeating for the nation's scientific advancement, the viability of the schools and the advancement of the health of our citizens. The Committee's acceptance or rejection of the proposition advanced by S.799 must be a carefully weighed decision and one which is fully cognizant of the potential implications of such an action.
Special Project Grant Program

Special project grants complement in very important ways the other mechanisms for Federal assistance to medical education. Under this rubric, solutions to specific societal problems can be sought through what are really cost reimbursement contracts between the Government and institutions possessed of the resources to implement the project. These grants offer schools modest incentives to undertake a wide variety of innovative educational activities that the Federal Government views as having high priority in terms of the public interest.

The great virtue of these grant programs is that they can cover an extremely broad range of objectives and are ideal for capitalizing to the maximum on the rich diversity represented among the schools. However, special project awards seldom really reflect full costs. Without the availability of some other Federal subsidy, such as institutional support, the schools will be forced to subsidize these projects from their extremely scarce institutional resources.

The Association is heartened that S.799 reauthorizes several of the genres of activities, initiated under P.L. 94-484, that have proven successful in addressing problems of national concern. The AAMC would like to take this opportunity to specifically endorse the renewal authorities for: Training Grants in Family Medicine, General Internal Medicine and Pediatrics; Department of Family Medicine; Area Health Education Centers; and Educational Assistance to Individuals from Disadvantaged Backgrounds. All of
these programs have proven very successful in helping to ameliorate major problems confronting the health profes-
sions today: the geographic and specialty maldistribution of physicians; and, the recruitment and retention of minority and low income students in medical schools.

However, the Association is seriously disturbed by the fact that the proposed authorization levels for these programs---with the exception of Disadvantaged Assistance---are well below their current level of funding. As evidenced by the Table below, the levels proposed by S.799 would not maintain these programs at their FY 1980 level even in FY 1982, assuming that the full amounts authorized for them were appropriated.

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<td>Family Medicine Departments</td>
<td>9.5</td>
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<tr>
<td>Training for Internal Medicine, Pediatric &amp; Family Medicine</td>
<td>56.0</td>
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<td>Area Health Education Centers</td>
<td>21.0</td>
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*1982 constant dollars, based on the Administration's economic projections which reveal that the increase in the CPI was equal to 13.5% in FY 1980 and will decrease to 11.1% in FY 1981.
The Association believes that adoption of the authorization levels proposed would seriously undermine these programs and impede the ongoing efforts to ameliorate the shortage of primary care physicians and the problems of underserved areas. Specifically,

- The growing popularity of the primary care specialties is a hopeful sign that the primary care health needs of the Nation will be better served in the near future. These specialties are at a critical stage of development --- new programs must be designed, existing programs improved, curricula developed, facilities constructed or renovated, teachers recruited or trained. These programs have been highly effective in developing primary care professionals and sufficient funds are urgently needed to maintain momentum by providing support at a time when the other source of funding through reimbursement for medical services is being constrained.

- Area Health Education Centers. AHECs have proven to be successful in attracting and retaining health professionals in medically underserved areas in a positive and voluntary fashion. The Department of Health and Human Services has estimated that these programs currently serve a population of approximately 58 million people. Adoption of the funding ceilings embodied in 5.799 could only detract from and more than likely impair the efforts of this program.

Overall, despite the public and the Congress' desire to hold down Federal spending wherever possible, reduction of the authorization ceilings of programs that have been successful in ameliorating the problems of geographic and specialty maldistribution of physicians is self-defeating and should not be taken without thorough exploration.
Financial Distress

The Association is pleased to note that the bill retains and revises programs designed to assist medical schools in financial distress and that it establishes a separate authority for this purpose. The Association believes that this authority is essential to the continued viability of our country's predominantly minority institutions and probably for an increasing number of non-minority schools that will experience fiscal problems when other support programs are curtailed.

The AAMC is particularly heartened that S.799 recognizes that schools experience different levels of fiscal difficulty by establishing both short and long-term mechanisms to address these problems.

However, the Association is opposed to any requirements for an institution to obtain state funding in order to be eligible for the financial distress program. S.799 mandates that schools qualifying for assistance under the Advanced Grant Program must secure "a legally binding commitment to receive a grant or contract from a state or local government, private entity or combination thereof for the exclusive purpose of alleviating such school's financial distress." That virtually all of the institutions in chronic financial distress are private sector minority schools is well known. Since these institutions serve a national constituency, state governments have been very reluctant to come to their aid, as they would for a state controlled institution. Since the institutions in distress have no control over their access to state support, such a requirement is unfair and ill conceived.
P.L. 94-484 extended the existing grant program of assistance for construction and renovation of teaching facilities and authorized a new program to assist in the construction of ambulatory primary care teaching facilities. These programs were designed to achieve the dual goal of expanding enrollment and encouraging the teaching of primary care. In recognition of the growing perception that the stimulation of enrollment increases is no longer necessary or desirable, S.799 proposes to: repeal the enrollment increase requirement in the existing construction grant program; and relieve previous construction grant recipients of their obligations to increase their enrollments. The Association views these as timely modifications that represent sound public policy.

In addition, this bill proposes substantial revisions in construction authorities. It would: eliminate all new construction grant authority; and provide support through loan guarantees and interest subsidies only for the "construction, conversion, renovation, or modernization" of existing facilities for use as ambulatory primary care teaching facilities. The Association questions the wisdom of completely eliminating construction grant authority for existing schools. Many existing educational "plants" are clearly in need of replacement---a need which is sure to grow; and, the AAMC seriously doubts the viability of the mechanism proposed to address the already existing serious need for ambulatory teaching facilities in primary care. The Association strongly recommends that the Committee accord these problems a more thorough assessment.
Predominantly Minority Institutions

There are new as well as established medical schools whose student bodies are comprised predominantly of individuals from minority groups, drawn from all over the country. As private institutions, they have very limited call upon state support and private philanthropy has not met their needs.

Thus, these institutions which meet an important social goal—the education and training of physicians representative of the minority groups in our society—must depend heavily on the Federal Government for support. Most medical schools have made valiant attempts to expand enrollment of underrepresented minorities; the minority enrollment of first-year medical students increased from 292 in 1962 to 1,548 in 1980. However, our country still has a long way to go before it achieves equality in the health professions. Today, minorities constitute only 9% of the total population of first-year medical school classes. In its present form S.799 does not adequately address the needs of either these students or schools. Thus, the AAMC urges that the Committee make every effort to give sensitive attention to the plight of minorities and the existing minority institutions in formulating new legislation.
Overall Summary and Conclusions

The introduction of S.799 and the House proposal, H.R.2004 has opened debate on the policy issues fundamental to the future of the health of this nation. The AAMC has outlined to the Committee the broad policy perspective which it endorses on Federal financial assistance to medical students and to medical education and has evaluated the pending proposal in the light of this perspective; it stands ready, willing and able to provide any further assistance to the Committee that is desired.

But in closing, the point should be reiterated that the legislation that finally emerges through the long process of Congressional debate is of critical significance to a set of institutions whose health and well-being is of enormous importance to the nation. During the twentieth century, the quality of American medical education went from uneven and often mediocre to a level of uniform excellence. A glance at the advances in prevention, diagnosis and treatment, made possible by progress in medical sciences during only the past decade, gives ample credence to this statement. It must be emphasized that these accomplishments would not have been possible without Federal support. In the course of this notable growth, the health of the nation has benefited considerably and every evidence suggests that the best is yet to come.

The action taken by the Congress on this legislation will have a profound impact on the future of medical education and, through it, on the future health and vitality of our people.
Mr. Grossman. Thank you, Dr. Stemmler.
Dr. Bowie?
Dr. Bowie. Thank you, Mr. Grossman.
I am Walter C. Bowie, dean of the school of veterinary medicine at Tuskegee Institute in Tuskegee, Ala. I am here today to represent the Association of Minority Health Professions Schools, which includes the school of medicine at Morehouse College; the Meharry Colleges of Medicine and Dentistry, represented here today by interim president, Dr. Richard Lester; the Charles R. Drew Post Graduate Medical School; the Xavier University of Louisiana College of Pharmacy, represented here today by executive vice president Tony Rochelle; the Florida A. & M. University School of Pharmacy; the Texas Southern University School of Pharmacy; and the institution that I represent, the Tuskegee Institute School of Veterinary Medicine.

Our association is aware of the time and energy that this committee has invested in preparing sound legislation to address the health professions needs of our Nation. We are also aware of the severe budget limitations that have been placed on this committee by the state of our Nation's economy. Keeping this in mind, Senator Hatch and his staff have spent many hours visiting with health educators, reviewing legislative hearing records, and confronting the very real question of how to get the most out of limited dollar resources.

There is one aspect of the health manpower issue, however, that historically has not been adequately addressed—the responsibility of the Federal Government to support and multiply the successes of minority health professions schools in addressing a national priority.

This national priority is the production of more health care providers from disadvantaged backgrounds. This priority was articulated by Senator Hatch in his remarks when he introduced S. 799 on March 25, 1981. The members of the association agree that that perception of the need for more health professions personnel from minority and disadvantaged backgrounds is one that needs to be addressed.

The schools in our association have an unsurpassed record in addressing this national priority. Our schools have graduated 90 percent of all black veterinarians in the Nation, 50 percent of the Nation's black pharmacists, and 43 percent of the Nation's black physicians and dentists. In spite of the success of our efforts, blacks comprise only 1.7 percent of the physicians, 2.2 percent of the dentists, 2 percent of the pharmacists, and 0.7 percent of the veterinarians in this country. Similar deficiencies exist for health professionals from other minority groups.

In 1976, with the passage of Public Law 94-484, support was provided to health professions schools by the Federal Government to increase student enrollments. Through this support, attention was given to increasing minority student enrollment and to supporting training programs in primary care. Despite this support, even if we accept the possibility of a physician surplus in the foreseeable future, I think it is absolutely clear that there is no oversupply of minority health professionals.
In order for blacks to achieve parity of representation in the health professions, we need to increase the number of black physicians from the current 9,000 to 42,000; the number of black dentists from the existing 3,000 to 15,000; the number of black pharmacists from the current 2,500 to 15,000; and the number of black veterinarians from the existing 400 to 4,300.

In the absence of institutional support, it is obvious that other approaches must be supported to insure adequate numbers of health professionals from disadvantaged backgrounds. One approach is section 787(a) of the Public Health Service Act, which provides special project funding for educational assistance to students from disadvantaged backgrounds. Our association is pleased to note the continuation of this program in S. 799.

An additional approach is the direct support of health professions schools that serve as national priority institutions. Such institutions are those that are training the kind of health care providers needed by the Nation and whose student population is largely coming from disadvantaged or minority backgrounds. We believe that the mechanism for such a program is possible by adding a new feature to section 787 of the Public Health Service Act. Let me comment very briefly on this section of the legislation.

Section 787 of the Public Health Service Act has become known as the HCOP, or the health careers opportunity program, provision. Aside from the direct support to national priority institutions, this program is the only vehicle the Federal Government has to insure the recruitment, retention, and graduation of disadvantaged students from all health professions schools.

The association applauds the committee for recognizing the continued need for the HCOP programs, and recommends that the current funding level of $20 million be provided for the fiscal years 1982 through 1984.

The primary focus of the schools represented by this association is parallel and in keeping with the objective of the legislation as so carefully outlined by Senator Hatch in his introduction of this revised health manpower legislation. These institutions see as their reasons for being the emphasis on training in primary care, the preparation of students to go into the underserved areas, and the provision of program efforts designed to attract and retain disadvantaged students who seek careers in the health professions. We note particularly the committee's recognition of the need for assisting some of our institutions to survive limited periods of financial distress.

For all of the reasons given above, the institutions of this association are truly national priority institutions. Therefore, of primary importance to our institutions is the need to provide some general operational support because of our unique commitment to undertake the goals of this legislation. We therefore recommend that the committee expand section 787 of the Public Health Service Act so as to provide concurrent general support so urgently needed in order that our schools will be able to carry out our mission.

The association is pleased with the two-tier financial distress program provided by sections 166 and 167 in S. 799. In the advanced financial distress program, we recognize the need for schools to join in partnership with the Federal Government to
bring financial stability to the institutions. However, we are deeply concerned that the matching requirement in the first year of the contract period would preclude the participation of those schools for which we believe this section was intended.

It is clear today that none of our institutions would be eligible or would be able to receive benefits of this section because of the stringent and near-impossible requirements of the first year’s conditions.

To achieve the same consequences intended by this section, whereby schools in partnership with the public and private sectors bring financial stability to institutions in financial distress, we recommend and urge that the two-tier financial distress program be adopted as proposed by the chairman, but that the method of Federal participation be phased in over the 5-year period of the contract.

Let me then now summarize the rest of our concerns because of the time element, and I recognize that time is of the essence.

In summary, let me just say very briefly that we would like to see some serious consideration being given to the following components of the legislation: One, the enactment of a new feature of section 787 of the Public Health Service Act to provide direct, general support to national priority institutions that are training the type of health care providers needed by the Nation; two, the phase in of the matching grant requirement in the advanced financial distress program; three, the provision of adequate student financial assistance to students from disadvantaged backgrounds; four, the continuation of the health careers opportunity program at the current level of authorization; five, the inclusion of authority for construction grants to new, private, 2-year medical schools; six, the inclusion of an authority for conversion projects to assist new, private, 2-year schools of medicine to develop into degree-granting institutions.

To you, Mr. Grossman, and to the members of the committee, I wish to say that I appreciate this opportunity to represent the Association of Minority Health Professions Schools. We look forward to working very closely with you and the other members of the staff in insuring that adequate support is available to disadvantaged students and for the national priority institutions that have historically provided the opportunity for health careers to these students.

Thank you very much.

Mr. Grossman. Thank you, Dr. Bowie; that was very helpful.

[The prepared statement of Dr. Bowie follows:]
Testimony of
The Association of Minority Health Professions Schools
on
The Health Professions Educational Assistance
and Nurse Training Act of 1981
S. 799
and
The National Health Service Corps Amendments of 1981
S. 801

April 8, 1981
Chairman Hatch and Members of the Committee, I am Walter C. Bowie, Dean of the School of Veterinary Medicine at Tuskegee Institute in Tuskegee Institute, Alabama. I am here today to represent the Association of Minority Health Professions Schools, which includes the School of Medicine at Morehouse College; Meharry College of Medicine, Meharry College of Dentistry; Charles S. Drew Post Graduate Medical College, Xavier University of Louisiana College of Pharmacy; Florida A & M University School of Pharmacy; Texas Southern University School of Pharmacy; and Tuskegee Institute School of Veterinary Medicine.

Senator Hatch, our Association is aware of the time and energy you and Members of your Committee have invested in preparing sound legislation to address the health professions needs of our nation. We are also aware of the severe budget limitations that have been placed on your Committee by the state of our nation's economy. Keeping this in mind, you and your staff have spent many hours visiting with health educators, reviewing legislative hearing records, and confronting the very real question of how to get the most out of limited dollar resources.

There is one aspect of the health manpower issue, however, that historically has not been adequately addressed: the responsibility of the federal government to support and multiply the successes of minority health professions schools in addressing a national priority.

The national priority is the production of more health care providers from disadvantaged backgrounds. This priority was
articulated in P.L. 94-484, in the September, 1980 Graduate Med-
ical Education National Advisory Committee (GMENAC) report to
the Secretary, and in your remarks, Senator Hatch, when you intro-
duced S. 799 on March 25, 1981. The members of the Association
agree with your perception of the need for more health professions
personnel from minority and disadvantaged backgrounds.

The schools in our Association have an unsurpassed record
in addressing this national priority. Our schools have graduated
ninety percent of all black veterinarians in the nation, 50 percent
of the nation's black pharmacists, and 43 percent of the nation's
black physicians and dentists. In spite of the success of our
efforts, blacks comprise only 1.7 percent of the physicians, 2.2
percent of the dentists, 2.0 percent of the pharmacists, and 0.7
percent of the veterinarians in this country. (Table 1). Similar
deficiencies exist for health professionals from other minority
groups.

In 1976 with the passage of P.L. 94-484, support was provided
to health professions schools by the federal government to increase
student enrollments. Through this support, attention was given
to increasing minority student enrollment, and to support for
training programs in primary care. Despite this support, even
if we accept the possibility of a physician surplus in the foreseeable
future, it is clear that there is no oversupply of minority health
professionals. The facts are as follows:

During the ten year period from 1971 to 1981
the percentage of freshman medical students
who are black decreased from 7.1% to 6.6%.
The percentage of medical school graduates
who are black remains at less than 6%. (Table II)
From 1971 to 1979 the percentage of black freshman dental students declined from 5.2\% to 4.4\%. (Table III).

From 1971 to 1980 the percentage of black pharmacy students rose slightly from 3.7\% to 4.2\%. (Table IV). Approximately one-half of the black pharmacy students are currently enrolled in historically black schools of pharmacy.

In order for blacks to achieve parity of representation in the health professions we need to increase the number of black physicians from the current 9,000 to 42,000; the number of black dentists from the existing 3,000 to 15,000; the number of black pharmacists from the current 2,500 to 15,000; and the number of black veterinarians from the existing 252 to 4,300.

Beyond the issue of parity is the fundamental question of the patient population of practicing black physicians. As Dr. Alvin Tarlov, Chairman of GMENAC, and Chairman of the Department of Internal Medicine at the Pritzker School of Medicine at the University of Chicago, indicated in testimony before the House Subcommittee of Health and the Environment on March 4, 1981, 80 percent of the patient-load of black physicians is black, while only 7 percent of the patient-load of white physicians is black. The schools of our Association can be proud of our contributions to addressing the problem of provider maldistribution because 76 percent of the physicians graduated by our schools practice primary care, and 46\% practice in rural areas.

Studies performed by the University of Chicago, and funded in part by a grant from the Robert Wood Johnson Foundation, indicat...
that there is a category of Americans who are the hard-core "structurally underserved." It seems from these studies that there exists a significant group of Americans who do not see a physician at all. Reasons for this are cultural and language barriers, geographic isolation, and other factors. Most of the structurally underserved are found in inner city areas or in remote rural areas, and are usually socio-economically disadvantaged and often from minority groups. (Table V).

In the absence of general institutional support, it is obvious that other approaches must be supported to ensure adequate numbers of health professionals from disadvantaged backgrounds. One approach is section 787(a) of the Public Health Service Act which provides special project funding for educational assistance to students from disadvantaged backgrounds. Our Association is pleased to note the continuation of this program in S. 799.

An additional approach is direct support of health professions schools that serve as national priority institutions. Such institutions are those training the kind of health care providers needed by the nation, and whose student population is 50% or more from disadvantaged or minority backgrounds. We believe, Mr. Chairman, that the mechanism for such a program is possible by adding a new feature to section 787 of the Public Health Service Act. I am pleased to begin my discussion of S. 799 on that section related to "Educational Assistance to Individuals from Disadvantaged Backgrounds."
Educational Assistance to Individuals from Disadvantaged Backgrounds

Mr. Chairman, section 787 of the Public Health Service Act, (section 168 of S. 799) has become known as the HCOP (Health Career Opportunity Program) provision. Aside from direct support to national priority institutions, this program is the only vehicle the federal government has to ensure the recruitment, retention, and graduation of disadvantaged students from all health professions schools.

The Association applauds the Committee for recognizing the continued need for HCOP and recommends that the current funding level of $20 million be provided for fiscal years 1982-1984.

Mr. Chairman, as you know, the primary focus of the schools represented by this Association is parallel and in keeping with the objective of the legislation as so carefully outlined by you in your introduction of this revised health manpower legislation. These institutions see as their reasons for being the emphasis on training in primary care, the preparation of students to go into the underserved areas, and the provision of program efforts designed to attract and retain disadvantaged students who seek careers in the health professions. We note particularly the Committee's recognition of the need for assisting some of our institutions to survive limited periods of financial distress.

For all of the reasons given above, the institutions of this Association are truly national priority institutions. Therefore, of primary importance to our institutions is the need to provide some general operational support because of our unique commitment to undertake the goals of this legislation. We therefore recommend
that the Committee expand section 787 of the Public Health Service Act (which provides educational assistance to individuals from disadvantaged backgrounds) so as to provide concurrent support so urgently needed in order that our schools will be able to carry out our mission.

Financial Distress

The Association is delighted with the two-tier financial distress program provided by sections 166 and 167 in S. 799. As you know, Mr. Chairman, we have been advocating this approach for many years now.

In the Advanced Financial Distress program we recognize the need for schools to join in partnership with the federal government to bring financial stability to the institutions. However, we are concerned that the matching grant requirement in the first year of the contract period would preclude the participation of those schools for which we believe this section was intended. It is clear today that none of our institutions would be eligible or able to receive the benefits of this section because of the stringent and near impossible requirements of the first year's conditions.

To achieve the same consequences intended by this section, whereby schools in partnership with the public and private sectors bring financial stability to institutions in financial distress, we recommend and urge that the two-tier financial distress program be adopted as proposed by the Chairman, Senator Hatch, but that a substitute method of federal participation be reintroduced as was
earlier endorsed by Secretary Schweiker who was at the time a Member of this Committee.

We therefore urge this section read as follows:

"No school may receive support under this section for more than five years. No grant or contract for support under this section shall be in an amount greater than (1) 75 percentum in the third year, (2) 50 percentum in the fourth year, and (3) 25 percentum in the fifth year, or the average annual amount received in the first two years of federal grant or contract support under this section."

We believe this would achieve all of the objectives of the Committee in reducing the federal involvement in financing the programs of institutions; at the same time, it would permit a logical and orderly method for involving private, state and other resources to become available to us in a manner that will ensure permanency and stability.

In order to ensure appropriate allocation of the dollars provided for sections 166 and 167, we also recommend separate funding authorizations for each section.

Student Assistance

Mr. Chairman, we are concerned about the increasing number of low and middle income students who cannot afford a health sciences education. We have historically sought out and encouraged young people to develop their talents and to acquire needed skills. These skills are being used to improve the quality of life for all Americans. Yet, the economics of the 1980s could force our institutions to seek only those students who could afford to pay
from their own resources for graduate and professional education. Therefore, we support a student financial assistance program that would maintain the concept of choice.

A student financial need profile was presented by member institutions of the Association to the House Subcommittee on Health and the Environment on October 5, 1979 and again on March 21, 1980. The student financial need profile reflects the following.

Meharry Medical College - "In keeping with this historic and unique mission the College enrolls more disadvantaged students than any other medical school in the United States. Some 86% of our student body requests and receives financial aid to help them pay tuition and other expenses."

School of Medicine at Morehouse College - "Seventeen of the students in the Charter Class (24 students) were recipients of National Health Service Corps Scholarships, another was the recipient of an Exceptional Financial Need Scholarship, one was the recipient of an Armed Forces Health Professions Scholarship. Three of the remaining students received scholarships and loans from various private sources, including medical school funds."

Xavier University of Louisiana School of Pharmacy - "Our current tuition rate of $2,650 per year is below the national average of $3,100 for private schools of pharmacy, but the economic status of our students in proportionately far lower than that of their peers in other institutions."

Given the financial need profiles of students enrolled in the institutions of our Association, an effective student assistance program is needed.

We note with some disappointment the absence of a scholarship grant program in S. 799. While we recognize the short-term costs
of a scholarship program, we are painfully aware of the long-term costs of an inadequate supply of targeted health care professionals. A high percentage of these targeted health professionals have already been identified as socio-economically disadvantaged. Increased loan burden after undergraduate school debt is a certain disincentive for disadvantaged students to pursue a health career. We recommend, Senator Hatch, the retention of at least the Exceptional Financial Need program, with modifications that provide for a range of grant awards indexed to a range of income circumstances. Within a defined ceiling, we believe this approach will eliminate the arbitrary cut-off of awards between students with only $100 difference in their incomes.

We are supportive of a federally insured loan program that would provide low interest subsidized loans to needy students seeking a career in the health professions.

We have also been supportive of the National Health Service Corps program. We have noted in S. 799 the transfer of authority for the program from Title VII to Title III of the Public Health Service Act. We in the Association are aware of the cost implications of the Corps program, and therefore strongly urge continued support for other programs that provide student financial assistance.

Facilities Construction

We are pleased that the Committee has included support for the construction, conversion, renovation or modernization of teaching facilities. We are concerned, however, that this section does not
provide priority funding for the construction of basic sciences facilities to assist private two-year medical schools in becoming four-year schools of medicine, nor does it provide specific conversion support to assist private two-year schools meet the conditions of the Liaison Committee on Medical Education (LCME).

Therefore, we recommend that priority funding be given to private two-year medical schools in the construction of basic sciences facilities, and that conversion support to private two-year schools of medicine be granted, the amount of which shall be $50,000 for each third-year student as existed under previous authorities.

Conclusion

Mr. Chairman, in summary, we urge the following:

1. The enactment of a new feature of section 787 of the Public Health Service Act to provide direct general support to national priority institutions that are training the type of health care providers needed by the nation.

2. The phase-in of the matching grant requirement in the Advanced Financial Distress program.

3. The provision of adequate student financial assistance to students from disadvantaged backgrounds.

4. The continuation of the Health Careers Opportunity program at level funding.

5. The inclusion of authority for construction grants to new private two year medical schools.

6. The inclusion of an authority for conversion projects to assist new private two year schools of medicine to develop into degree granting institutions.

Mr. Chairman and Members of the Committee, I appreciate the opportunity to represent the Association of Minority Health Professions Schools before you today. We look forward to working closely with you and your staff in ensuring that adequate support is available to disadvantaged students, and for the national priority institutions that have historically provided the opportunity for health careers to these students.
### Table I

**NATIONAL MINORITY HEALTH PROFESSIONALS**

<table>
<thead>
<tr>
<th>HEALTH PROFESSIONALS</th>
<th>TOTAL</th>
<th>BLACK/%</th>
<th>PARITY</th>
<th>NEEDED/%</th>
<th>BLACK/BLACK PARITY</th>
<th>WHITE/WHITE PARITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>348,443</td>
<td>6,106/1.7</td>
<td>41,813</td>
<td>35,707/10.3</td>
<td>1:4,001</td>
<td>1:540</td>
</tr>
<tr>
<td>Dentists</td>
<td>125,000</td>
<td>2,780/2.2</td>
<td>14,405</td>
<td>11,625/9.3</td>
<td>1:8,785</td>
<td>1:1,510</td>
</tr>
<tr>
<td>Optometrists</td>
<td>24,242</td>
<td>186/0.7</td>
<td>2,909</td>
<td>2,723/11.3</td>
<td>1:49,951</td>
<td>1:7,695</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>122,500</td>
<td>2,501/2.0</td>
<td>14,700</td>
<td>12,199/10.0</td>
<td>1:11,151</td>
<td>1:1,542</td>
</tr>
<tr>
<td>Podiatrists</td>
<td>8,500</td>
<td>400/4.7</td>
<td>978</td>
<td>578/6.8</td>
<td>1:610,87</td>
<td>1:22,800</td>
</tr>
<tr>
<td>Osteopaths</td>
<td>17,960</td>
<td>325/1.8</td>
<td>2,065</td>
<td>1,742/9.7</td>
<td>1:75,184</td>
<td>1:10,490</td>
</tr>
<tr>
<td>Veterinarians</td>
<td>36,000</td>
<td>252/0.7</td>
<td>4,320</td>
<td>4,068/11.3</td>
<td>1:110,678</td>
<td>1:5,179</td>
</tr>
</tbody>
</table>

Prepared by: NC Health Manpower Development Programs
Room 201 NCNS Plaza
136 E. Rosemary Street, 322-A
Chapel Hill, NC 27514

### Table 11
BLACK ENROLLMENT IN FIRST-YEAR CLASSES IN U.S. MEDICAL SCHOOLS
(1971-1980)

<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER AND PERCENT OF ENROLLMENT</th>
<th>TOTAL FIRST YEAR ENROLLMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971-72</td>
<td>882 7.1</td>
<td>12,261</td>
</tr>
<tr>
<td>1972-73</td>
<td>957 7.0</td>
<td>13,677</td>
</tr>
<tr>
<td>1973-74</td>
<td>1,027 7.3</td>
<td>14,154</td>
</tr>
<tr>
<td>1974-75</td>
<td>1,106 7.5</td>
<td>14,763</td>
</tr>
<tr>
<td>1975-76</td>
<td>1,036 6.8</td>
<td>15,295</td>
</tr>
<tr>
<td>1976-77</td>
<td>1,040 6.7</td>
<td>15,613</td>
</tr>
<tr>
<td>1977-78</td>
<td>1,085 6.7</td>
<td>16,136</td>
</tr>
<tr>
<td>1978-79</td>
<td>1,064 6.4</td>
<td>16,530</td>
</tr>
<tr>
<td>1979-80</td>
<td>1,108 6.5</td>
<td>16,930</td>
</tr>
<tr>
<td>1980-81</td>
<td>1,128 6.6</td>
<td>17,186</td>
</tr>
</tbody>
</table>

**SOURCE:** DATA FROM PUBLICATIONS OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES, ONE DUPONT CIRCLE, WASHINGTON, D.C. 20036
### Table III
**MINORITY STUDENTS IN FIRST YEAR OF DENTAL SCHOOL**

**ACADEMIC YEARS 1971-72 THROUGH 1978-79 1/**

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Total First Year Students</th>
<th>Total Minority First-year Students</th>
<th>Percentage Minority Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971-72</td>
<td>4,705</td>
<td>412</td>
<td>8.8%</td>
</tr>
<tr>
<td>1971-73</td>
<td>5,287</td>
<td>475</td>
<td>9.0%</td>
</tr>
<tr>
<td>1973-74</td>
<td>5,594</td>
<td>529</td>
<td>9.8%</td>
</tr>
<tr>
<td>1974-75</td>
<td>5,649</td>
<td>551</td>
<td>9.9%</td>
</tr>
<tr>
<td>1975-76</td>
<td>5,824</td>
<td>637</td>
<td>11.2%</td>
</tr>
<tr>
<td>1976-77</td>
<td>5,869</td>
<td>650</td>
<td>11.1%</td>
</tr>
<tr>
<td>1977-78</td>
<td>5,390</td>
<td>641</td>
<td>10.9%</td>
</tr>
<tr>
<td>1978-79</td>
<td>6,301</td>
<td>681</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

---

1/ Excludes University of Puerto Rico.

2/ The data for 1977-78 differ from earlier years because of changes in racial/ethnic categories used for data collection. In 1977-78 there were 110 first-year students under a new category "Hispanic." Also, the former category "Other Minority" was eliminated.

* Hispanic including Puerto Ricans in U.S. Schools.

NB Blacks = 11.6% of total U.S. population. Hispanics = 5.6% and Asians (all types) = 0.9%.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Total Enrollment</th>
<th>White Americans</th>
<th>%</th>
<th>Blacks</th>
<th>%</th>
<th>Hispanics</th>
<th>%</th>
<th>Native Americans</th>
<th>%</th>
<th>Asian Ancestry</th>
<th>%</th>
<th>Foreign</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1971-1972</td>
<td>16,476</td>
<td>13,831</td>
<td>90.0</td>
<td>618</td>
<td>3.7</td>
<td>--</td>
<td>203</td>
<td>1.2</td>
<td>8</td>
<td>.04</td>
<td>816</td>
<td>4.9</td>
<td>--</td>
</tr>
<tr>
<td>1972-1973</td>
<td>18,445</td>
<td>16,295</td>
<td>88.3</td>
<td>659</td>
<td>3.6</td>
<td>372</td>
<td>254</td>
<td>1.37</td>
<td>29</td>
<td>0.1</td>
<td>720</td>
<td>3.9</td>
<td>488</td>
</tr>
<tr>
<td>1973-1974</td>
<td>20,830</td>
<td>18,358</td>
<td>88.1</td>
<td>619</td>
<td>3.0</td>
<td>314</td>
<td>343</td>
<td>1.7</td>
<td>25</td>
<td>0.1</td>
<td>697</td>
<td>3.3</td>
<td>788</td>
</tr>
<tr>
<td>1974-1975</td>
<td>22,688</td>
<td>19,899</td>
<td>87.7</td>
<td>727</td>
<td>3.2</td>
<td>377</td>
<td>278</td>
<td>1.2</td>
<td>32</td>
<td>0.1</td>
<td>690</td>
<td>3.0</td>
<td>1,062</td>
</tr>
<tr>
<td>1975-1976</td>
<td>23,836</td>
<td>20,741</td>
<td>87.0</td>
<td>915</td>
<td>3.8</td>
<td>470</td>
<td>359</td>
<td>1.5</td>
<td>36</td>
<td>0.2</td>
<td>799</td>
<td>3.2</td>
<td>1,006</td>
</tr>
<tr>
<td>1976-1977</td>
<td>23,465</td>
<td>20,552</td>
<td>87.5</td>
<td>938</td>
<td>4.0</td>
<td>481</td>
<td>353</td>
<td>1.5</td>
<td>37</td>
<td>0.2</td>
<td>761</td>
<td>3.2</td>
<td>824</td>
</tr>
<tr>
<td>1977-1978</td>
<td>23,273</td>
<td>20,371</td>
<td>87.1</td>
<td>984</td>
<td>4.2</td>
<td>533</td>
<td>360</td>
<td>1.5</td>
<td>39</td>
<td>0.2</td>
<td>809</td>
<td>3.4</td>
<td>810</td>
</tr>
<tr>
<td>1978-1979</td>
<td>23,078</td>
<td>20,108</td>
<td>87.1</td>
<td>942</td>
<td>4.1</td>
<td>457</td>
<td>376</td>
<td>1.6</td>
<td>34</td>
<td>0.1</td>
<td>911</td>
<td>3.4</td>
<td>707</td>
</tr>
<tr>
<td>1979-1980</td>
<td>22,569</td>
<td>19,470</td>
<td>86.3</td>
<td>959</td>
<td>4.2</td>
<td>438</td>
<td>410</td>
<td>1.8</td>
<td>36</td>
<td>0.1</td>
<td>971</td>
<td>4.3</td>
<td>714</td>
</tr>
</tbody>
</table>

Source: American Journal of Pharmacy Education 1980

*Total number enrolled in the traditionally black colleges and Schools of Pharmacy
Physicians Per 100,000 Population

% Without A Physician


Americans Having Difficulty Getting a Personal Physician 1963 - 1976
Mr. Grossman, Dr. Estes, could you summarize your statement? We will enter the full statement in the record.

Dr. Estes. Yes; thank you, Mr. Chairman.

GMENAC has already delivered its report and has concluded that the absolute numbers of physicians is no longer a problem and that a surplus may be present in 1990. This committee also projected that the number of primary-care physicians, such as family physicians and primary-care internists and pediatricians, would be at about the proper level by 1990.

However, this report was based on an assumption that the current number of training programs in these primary care specialties would remain present as they are now throughout this decade of the 1980’s. There is good reason to believe that this will not be the case unless continued support is available for these programs.

Recommendation 21 of the GMENAC report states that it is their recommendation that support for primary care and family medicine be continued during the next period of time.

My own characterization of these programs is that they are hothouse plants that are unable at this moment to stand the rigors of the outside world. They cannot survive for two major reasons. They must derive their support by one of two or three mechanisms.

They must derive their support from income from patient care, from sponsoring hospitals, or from sponsoring medical schools.

Current insurance-based, fee-for-service payment systems place a high value on the performance of technical services, such as surgical procedures, diagnostic exams, and laboratory tests. But the backbone of primary-care practice is listening, the provision, the education of the patient, and the prevention of illness through these mechanisms and processes. These activities, under most insurance plans, are either not covered at all, or when they are covered, the payments allowed are insufficient to cover the cost of providing services. Thus, the primary-care physician is at a considerable competitive disadvantage when compared to other physicians.

The seasoned, primary-care physician practicing in his own office is able to overcome this by providing a very highly efficient, tight office practice that builds on a lot of prior knowledge of the patient. The teaching environment in which these physicians are being trained cannot approach this level of efficiency, and most experts in the field estimate that no more than one-third to one-half of the operating costs of running these clinics could, under optimal circumstances, be provided by patient care income.

Why can they not be supported by the hospitals of which they are a part? These are programs which, in general, do not encourage patients to come into the hospital; they tend to keep patients out of the hospital rather than utilizing fully the hospital’s facilities and services. In a time when the hospital also is facing cuts in medicare and stringencies of other types, hospitals trustees are often willing to see the family practice residency go in order to forgo an increase in the per diem cost.

The third option is further support from the medical schools. We have already heard that the medical schools are facing stringencies of their own in the financial area. Primary-care programs in general, and family medicine programs in particular, have not always
been welcomed in the medical schools. These programs are not understood by highly specialized and subspecialized faculties, and under demand of stringencies in cost everywhere, there is some evidence that those schools might be willing to see these programs go rather than to support them and to further cut other programs.

Medical schools, like hospitals, are having a hard time keeping costs down. These programs have enabled family medicine, primary care, internal medicine, and pediatrics to be established and to pick up speed, but their stability in this setting remains to be seen.

In addition, the withdrawal of Federal funds for family medicine and primary care, while funds for research through NIH are preserved, may give deans and traditional medical school faculty the wrong message, that the geographic and specialty distribution of physicians is no longer important and that medical school priorities could revert back to the 1960 emphasis on research, high technology, and supersubspecialization, without regard to public needs.

Are these programs worth saving? My own answer is a resounding "Yes," and I believe that a majority of the public could agree. These programs are producing products which provide cost effective, reasonably priced medical services which are readily accessible and much more evenly dispersed than could otherwise be provided. The experience of the past indicates that these programs cannot and will not be produced unless special programs are in place.

Experience of the past 10 years indicates that the products of these programs have indeed provided primary care and have distributed themselves more widely than other physicians. The evidence from family medicine is most impressive. The attrition from this field has been almost nonexistence. Half of the graduates have gone into towns of less than 25,000 people. Evidence indicates that they do provide less expensive care.

The next question that I think should be addressed is, can these programs ever survive? My answer is "Yes," but with a stringent qualification. Currently, there are no major rewards for cost-saving behavior on the part of either the physician or the patient. I believe that the currently proposed procompetitive health plans, by providing a mechanism for rewarding cost-effective health behavior by physicians, will provide an environment in which primary care can not only survive, but perhaps flourish.

The current payment system provides great financial rewards to physicians who do more, especially technical procedures, and penalizes those who spend time and effort to prevent illness and who believe that listening sympathetically can be better sometimes than a test or a tranquilizer.

So, I answer that modification of the current payment system which will encourage groups of physicians, insurance companies, HMO's, and other entities to provide highly effective care will provide the primary-care physician with a means to survive and, in addition, will provide training programs with an opportunity to survive as well. In the absence of these, I think the ground is shaky.

In summary, it is essential that family medicine and other primary care residency training programs be carefully nourished and
protected over the next few years. Otherwise, they may not survive 
and the gains of the past 10 years will be lost. 
Thank you very much for allowing me to present my views. 
[The prepared statement of Dr. Estes follows:]
In the late 1960's and early 1970's, there was a broad perception of an inadequate supply of physicians, an uneven distribution between generalist and specialty/subspecialty physicians, and an equally uneven distribution between rural and inner city areas and the more affluent suburbs and moderate size cities.

In order to correct these problems, the Federal Government began to reward medical schools for increasing the numbers of students accepted into medical schools. The Federal Government and the States also encouraged the creation of new medical schools. These activities were aimed at increasing the total supply of physicians, but without specifically directing the specialty training of graduates of medical schools.

By the early 1970's it was apparent that these efforts at increasing numbers were not correcting geographic or specialty maldistribution. The year 1971 marked the first targeted support of family practice residencies. In 1976, specific authority to support family practice and primary care internal medicine and pediatrics training was granted, plus a requirement that medical schools achieve a certain percentage of "primary care" training positions in their affected residencies. At the same time The Graduate Medical Education National Advisory Committee (GMENAC) was created to analyze national data and make recommendations regarding further support and future policies in medical education.
A short five years later, GMENAC has delivered its report, concluding that the shortage of absolute numbers of physicians is over, and that a surplus may be present in 1990. This Committee also projects that the number of primary care physicians—family physicians, primary care internists, and pediatricians—would be at about the proper level by 1990.

However, this report was based on an assumption that the current number of training programs in these primary care specialties would be present throughout the decade of the 1980's. There is good reason to believe that this will not be the case unless continued support is available for these programs.

At this moment, these programs are hot-house plants, unable to stand the rigors of the world in an unprotected state. It is my firm opinion that unless protected, many will fail, and that we will not achieve either the numbers of primary care physicians needed in 1990, or the even geographic dispersal of physicians, which we need so badly to provide a degree of evenness of access to medical care throughout our nation.

There are a number of questions to be asked at this point, but the main issues are: 1) is the hot-house plant worth saving? and 2) can the plant survive after a longer period of protected existence? These are important questions, because I do not believe that the U.S. public, and particularly the U.S. taxpayers are in a mood to support a program which is a frill rather than a necessity; nor are they willing to support something which must be forever supported, without hope of independent survival. I would like to spend my time in speaking to these two questions.

To leap to the bottom line, I believe that the plant is worth saving, and I believe that it can survive in the hard, cruel world after a bit of toughening, and when the climate becomes a bit more moderate.
First, why can't it survive now? The current insurance based fee-for-service payment system places a very high value on the performance of technical services, such as a surgical procedure, a highly technical diagnostic examination, or a laboratory test. The backbone of a primary care practice is the provision of counseling, the education of the patient, and the prevention of illness through these processes. These activities, under most insurance plans, are not covered at all. When they are covered, the payments allowed are often insufficient to fully cover the cost of providing these services. Thus the primary care physician is at a competitive disadvantage when compared to other physicians.

A seasoned, experienced primary care physician survives by providing these services in a highly efficient, tight office practice that builds on prior knowledge of the patient, and is able to use its time maximally. The teaching environment, in which such physicians are trained, cannot approach this level of efficiency. Young, learning physicians are slow, and they often require one-to-one teaching. As a result, no more than 1/3 to 1/2 of the operating costs of the model teaching clinics associated with such programs can be covered by patient-charges.

Why can't the financial gap in such programs be supported by the hospitals of which they are a part, or by the medical schools which sponsor them? Primary care programs are a particularly difficult problem for the hospital, because they tend to keep patients out of the hospital, rather than to utilize the hospital's facilities and services. In a time when the hospital is attempting to cope with rapidly rising costs, and to keep its per diem costs to a minimum, adding the cost of these training programs to the
bills of hospitalized patients is not a popular solution. Hospital trustees are often willing to see the family practice residency go, in order to forego an increase in the per diem bed charge.

Primary care programs in general, and family medicine programs in particular have not always been welcomed in medical schools. These programs are not understood by highly specialized and subspecialized faculties. For the most part, it was the demand of the public through their governmental representatives, that has enabled these programs to be established. Federal and State initiatives, by providing special funding to these programs, have allowed them to be established and to survive in a sometimes hostile environment.

Medical schools, like hospitals, are having a hard time in keeping costs down while also absorbing the withdrawal of capitation funds and tightened research awards. GMENAC has created the impression that the manpower problems have been solved, and many medical faculties, when faced with the necessity of picking up costs which have been previously been borne by a Family Medicine training grant or a Primary Care Pediatrics Training grant, will now be willing to see such programs disappear rather than to see other programs tighten their belts even further.

In addition, the withdrawal of Federal funds for family medicine/primary care training, while funds for research through the NIH are preserved, gives deans and traditional medical school faculty the wrong message: that the geographic and specialty distribution of physicians is no longer important, and that medical school priorities can revert back to the 1960 emphasis on research, high technology, and super-subspecialization.
Are these programs worth saving? My own answer is a resounding "YES!", and I believe that the great majority of the public would agree. These programs are producing products which provide cost effective, reasonably priced medical services which are readily accessible, and more evenly dispersed than could otherwise be provided. Experience of the past indicates that these physicians cannot and will not be produced unless such special programs are in place. Experience of the past 10 years indicates that the products of these programs have, indeed, provided primary care, and have distributed themselves widely. The evidence from Family Medicine is most impressive. The attrition from the field has been almost non-existent. Half of the graduates have gone to towns of less than 25,000 people. Evidence indicates that they do provide less expensive care.

Can these programs ever survive? Again, my answer is "Yes", but with a qualification. I believe that the currently proposed "pro-competitive" health care plans, by providing a mechanism for rewarding cost effective health behavior by physicians, will provide an environment in which primary care can not only survive, but flourish. The current payment system provides great financial rewards to those physicians who do more, especially technical procedures, and penalizes those who spend time and effort to prevent illness, and who believe that listening sympathetically can be better than a test or a tranquilizer.

Any modification of the current payment system which will encourage groups of physicians, insurance companies, HMO's and other entities to provide highly cost effective care will provide the primary care physician,
and indirectly, the training programs for producing such physicians with a much stronger and more stable environment for both survival and growth. In addition, it will also promote the effective incorporation of physician’s assistants and nurse practitioners into primary care settings.

My message is that, until such time as the procompetitive health care proposals have been considered and (hopefully) passed, it is essential that family medicine and other primary care residency training programs are carefully nourished and protected. Otherwise they may not survive, and the gains of the past ten years will be lost!

Thank you for allowing me to present my views.

Mr. Grossman. Thank you very much, Dr. Estes.

I will follow the pattern that we did with the last panel, which is that I will ask one of Senator Hatch’s questions and then when we send you the transcripts from the hearing, there will probably be further questions from Senator Hatch and other Senators.

I will start with Dr. Stemmler. Dr. Stemmler, your testimony indicates that you have an in-depth knowledge of medical education and the complex problems which face all of our institutions training health professionals. You stated that medical education is “far more expensive than most other graduate or professional education programs.” At the same time, you also recognize the very real economic constraints that we are laboring under.

Is your organization attempting to examine alternative methods of medical education which might be successful in training highly competent physicians, yet at significantly less costs than our traditional approach?

Dr. Stemmler. You can tell Senator Hatch that we do not have an organized, official study that is now ongoing with respect to modifications in the cost of medical education. I think, however, it ought to be recognized that those questions are continuously being explored on an institution-by-institution basis.

The point, though, to remember is that although American medical education is extremely expensive—and I emphasize American medical education to distinguish it from education that is conducted in some other countries, which is obviously much less costly in terms of actual money; however, in terms of the quality of the individuals produced, with our costs, we produce the most highly qualified professionals in the world.

We are very concerned that in looking only at cost that we not undermine the quality of physicians that the United States now produces.

Mr. Grossman. Dr. Bowie, what efforts are being made to seek funding from private sources for financially distressed institutions?

Dr. Bowie. Let me address that in a very general way and then more specifically for Tuskegee Institute.

As we tried to point out in our testimony, we recognize the importance of seeking additional support from non-Federal sources,
and I believe that all of the schools that have been in this program of financial distress have been seeking to undertake the funding of their programs from sources other than Federal support.

I think it is important for us to point out, however, that the task force report of DHEW in 1979 pointed out and recognized the fact that there was going to be a rather extended period of time that was going to be required for these schools to come out from under the financial constraints under which they had historically been operating.

I think that with that in mind, there is some recognition, as I review the draft of the legislation, to suggest that at least a minimum of 5 years may well be needed for these institutions to get in place those programs that are required in order to find the funding that is essential to offset the Federal support.

I think that if you look at the institutions themselves and the reports that have been coming each year in regard to the way in which they seek to identify and recognize and provide the other support that is required other than Federal, I think you will that there are several approaches. Each institution, I believe, has a plan of its own.

With respect to Tuskegee, we have embarked upon a $20 million fundraising drive for the institution. I think it is important for me to point out at this stage that President Reagan, I believe, in some of his comments has clearly recognized the importance of the historically black colleges. I think it is significant to note that President Reagan had committed himself to coming to Tuskegee on April 12 to be the speaker for our centennial activities. In light of what has happened, I am pleased to say that that recognition of the importance of these institutions is being carried out by Vice President Bush.

So, I think there is ample evidence to suggest that there is recognition on the part of this administration of the importance of these institutions.

We think it is important for Congress to continue to work with these institutions that have had a very long and sustained problem. We recognize that it is important for us to deal with this problem; we are working at this problem. We believe that it can be resolved in a partnership relationship. We think that the final answer is Federal support, or some support for these institutions for some extended period of time.

Mr. Grossman. Thank you.

Dr. Estes, the intent of the initial health manpower legislation was that the Federal Government would provide seed money to facilitate establishment of training programs in family medicine and primary care in internal medicine and pediatrics. After almost a decade of support, you have indicated that these programs are not yet mature or indeed even capable of financial independence. How can we wean these programs from Federal support?

Dr. Estes. First of all, I would like to say for the record that the establishment of these programs could not have been accomplished without the Federal support in the past. So, I think all of us associated with these programs are grateful for that.

Changes in the medical manpower system require a great deal of time. Remember that it takes 7 years to get a product through, and
the sustenance of the program requires support at all levels within
the medical center.

All of us in medical schools are aware of the fact that the
student is taught and learns from all levels beyond him. It is
necessary that all levels of faculty be acquainted with family medi-
cine and primary-care internal medicine and what it can do. It is
not time for this infiltration of information to be complete in our
faculty at this moment. It will require another increment of 5 to 10
years, in my estimation, for this to occur.

In 1978, I was the chairman of an IOM committee that looked at
primary care, and one of the conclusions of this group was that
primary care would never achieve equity until there was some
solution to the payment problem. That payment problem, I think,
is paramount and is necessary for the weaning of these programs
and any other primary carelike programs. They are not able to
sustain themselves under a system that is competitively at their
disadvantage. This is why I stated that I personally favor the
procompetitive systems that are now being proposed, because these
will encourage groups to put together cost effective programs that
will be able to compete competitively in the world that is out there.
I think that is going to be necessary to wean them—the difference
in the payment system.

Mr. GROSSMAN. Thank you.

I want to thank all the witnesses on this panel.

Dr. Stemmler?

Dr. STEMMLER. Well, could I make a final comment?

Mr. GROSSMAN. Yes.

Dr. STEMMLER. I want to disassociate myself for the moment
from the Association of American Medical Colleges and from my
own institution and speak only as a private citizen who is very
interested in the right of access by the public to their elected
representatives.

I think that the hearing just ending has been a disservice to that
process, due to the absence of the Senators. I feel very badly about
doing so, but I think it needs to be said.

Thank you, Mr. Grossman.

Mr. GROSSMAN. Thank you.

At this point I order printed all statements of those who could
not attend and other pertinent material submitted for the record.
[The material referred to follows:]
Mr. Chairman

I am most pleased that your Committee is today giving such expeditious attention to the reauthorization of the Nurse Training Act.

In my judgment, as a nation we have for a long time now, been facing a serious nursing shortage, but we have been extremely shortsighted in our unwillingness to develop creative solutions. The primary reason behind our reluctance has been our inability, or perhaps our purposeful hesitancy, to make necessary fundamental modifications in our current health care delivery system.

We have always acted as if nurses will always be willing to be treated as if they were second-class citizens, rather than true health professionals. We have passed laws assuming that they did not mind having others take the glory and monetary remuneration for their services. In short, we have not been willing to accord them true professional dignity and recognition. I wonder if the fact that 98 percent are females is not significant in this regard.

There can be no question that our earlier efforts to date have drastically failed and that no matter how many dollars we continue to spend, the constant turnover of qualified professional nurses will continued unabated. In fact, just last year, in the State of Hawaii, a Joint Hospital-Nursing Association Task Force estimated that it cost my constituents over $7 million each year merely to replace those nurses in our hospital system who have retired -- $7 million not to train their replacements, but merely to orient them
Statement by Senator Daniel K. Inouye
Page Two

to their new jobs, pay off retirement benefits, etc. Clearly this is an absolute waste of much-needed health care funds by anyone's standards.

Today, I would just like to highlight one type of programmatic initiative that I sincerely hope will be contained in your final proposal. First, there must be a clear and firm commitment for Advanced Training programs. Our nation's certified nurse-midwives and certified psychiatric nurse practitioners in particular, have a long and honorable tradition of providing high quality care. From all the evidence that I have seen, the quality of their services are second to none, and nurse-midwives in particular, are actually preferred by many American women to their medical colleagues. Accordingly, I sincerely hope that your Committee recommendations will give our Appropriations Committee sufficient flexibility so that we might actually increase our commitment to Advanced Training programs during the next fiscal year. In this regard, I would also hope that you would give every consideration to directing the Health Care Financing Administration (HCFA) to provide our nation's nursing schools with sufficient resources to develop model "Teaching Nursing Homes", in a manner compatible with that of the traditional Teaching Hospital. Nursing home care currently accounts for nearly 8.4 percent of our health care expenditures and is considered by HCFA to be the most rapidly growing category of health care expenditures. Yet, I have seen no evidence that we really have any long-term strategy to address this growing problem. In all seriousness, I ask who better than our
nation's nursing schools have the type of expertise necessary to adequately develop high quality teaching programs for this segment of our population? In this light, I also feel that high priority should be given to providing Nursing Schools with Special Project support. For example, I have recently become quite aware of the truly unique stresses that military nurses, such as those who served in Vietnam, continue to experience. Unfortunately, it would appear that this population has also been largely overlooked by the medically-oriented rehabilitation programs, in this case those of the Veterans Administration. Once again, I feel that it is our nation's schools of nursing that are in the position to truly address these needs, if only we would provide them with sufficient financial resources. In summary, I honestly feel that our nursing programs possess the potential for truly revolutionizing our present health care program, if we would only stop thinking of health care as solely the province of doctors and realize that there are many other professional disciplines involved.

If we are truly committed to providing high quality health care to our nation's citizens, and especially to those who are traditionally underserved, such as the elderly and our youth, then we must make a firm commitment to increase, and not cut back, on our commitment to our nation's nursing schools.
Implications of the Projected Doctor "Surplus":
Summary of Important Findings from
Four Recent Studies

Jack Rodgers
March 13, 1981
Revised: March 27, 1981

U.S. Department of Health and Human Services
Public Health Service  Health Resources Administration
Bureau of Health Professions
DHHA Report No. 81-17
Introduction

The number of active physicians in the United States is expected to increase by roughly 150,000 or 36 percent during the period 1979-1980. During the same period, physician density will increase from 185.1 to 277.3 physicians per 100,000 population (U.S. Department of Health and Human Services, 1980a). The implications of this expanded supply of physicians for the access to health care, for the geographic distribution of general practitioners and for health care costs were the subjects of four recent studies conducted by the Division of Health Professions Analysis (DHPA).

The purpose of this report is to present summaries of these two contract and two in-house studies supported by DHPA. The summaries were taken from reports written by the principal researchers. All four studies and their implications for the U.S. health care sector are being integrated in a forthcoming publication (U.S. Department of Health and Human Services, 1981).

The first summary presents results from a study by Professor James B. Ramsey of New York University, entitled "A Re-Evaluation of Supply and Demand Concepts in Physician Care" (Contract No. HPA 232-79-0068). Ramsey attempts to replicate the findings from four past studies of physician behavior, three of which gave rise to various "supplier-induced-demand" concepts. Each data set was subjected to a battery of sophisticated specification error tests which are designed to test for reliability of econometric models. Ramsey concludes that none of the studies support the "supplier-induced-demand" theory. Instead, the results support the orthodox demand-supply model.
The second study summarized is a study by Dr. Donald R. House, Resources Research Corporation, entitled "The Study of the Effect of Physician Supply on the Supply, Mix and Cost of Health Services" (Contract No. HRA 232-79-0101). House demonstrates that the "supplier-induced-demand" model which he terms the "demand creation" model rests on a relatively weak theoretical foundation. If the demand creation model is formally specified, its empirical predictions are indistinguishable from those of the orthodox demand-supply model. Therefore, the demand-supply model is adequate for forecasting the effects of an increasing stock of physicians.

The third summary presents results from an in-house study by Dr. L. Jackson Brown and Jack Reid entitled "Are the Manpower Markets for General Practitioners Working? Implications of New Evidence for Geographic Distribution" (DMPA Report No. 81-13). Brown and Reid's research results show that market forces are allocating general practitioners across counties. They conclude that the typical market for GP's is in disequilibrium, and new GP's are being distributed into markets as a result of demand shifts. One important implication of their research is that the placement of National Health Service Corps physicians in local markets is a destabilizing factor in these markets.

The final summary presents forecasts from an in-house study by Dr. Jack Rodgers entitled "Long-Run Forecasts of Physician and Hospital Prices and Expenditures" (DMPA Report No. 81-5). Rodgers uses an orthodox demand-supply model to forecast health care prices and expenditures. The model forecasts that increases in the supply of physicians during 1975-1990 will eventually lead to a decline in the real price of physician services and an increase in the price of hospital services.
A RE-EVALUATION OF SUPPLY AND DEMAND CONCEPTS
IN PHYSICIAN CARE

(new contract No. HRA 232-79-0068)

New York University, Professor James B. Ramsey
Project Director

Summary

A reliable model is one which is explicitly derived from a well-tested theory which in turn is known to be relevant to the situation in question. The simplifications needed to produce an estimable model should be relevant, useful, and stable over the estimating, forecast, or policy period. The data used to estimate the coefficient values and to produce hypothesis tests must closely measure those values which the theory indicates are of interest or are contained in the model’s structure. Valid statistical procedures must be used and the residuals should be tested fully for the detection of non-randomness.

The outcome of such a process is a reliable model and one for which one can trust the theoretically assigned probability levels.

Clearly, no model is perfectly reliable and the policy-maker can have degrees of confidence in the results. Modest levels of some aspects of unreliability can be translated into modified probability statements, but more serious levels of unreliability imply that little in the way of useful policy implications can be drawn. Indeed, one can easily be in a situation wherein no reliance at all can be placed in the empirical results.

This paper explores the reliability of four studies of the market for physicians’ services. The area has been a center of controversy in recent years, with several researchers contending that the market
behaves most unusually, and that surprising policy measures are therefore to be recommended, in particular, that the supply of physicians should be restricted in order to reduce price.

Our work explores the analytical and particularly the statistical reliability of work by Feldstein (1970), Fuchs and Kramer (1972), Brown and Lapan (1972), and Hixson (1979). Their data and estimates are subjected to a battery of tests designed to discover non-randomness and dependence in the residuals. The detailed analysis of all the alternative studies and data sets is not complete so that a final overall evaluation of these models is not yet possible. Nevertheless, a reasonably clear picture of the empirical situation is beginning to emerge from the analysis.

First, given the detailed analysis concerning the definition and measurement of the variables involved, the outcomes of the specification error tests and the tests for serial independence, the various experiments run and the sensitivity analysis, it is clear that all the models are to some extent or another misspecified. It is further clear that the models proposed to date are inadequate to explain the observed data.

More specifically, it is clear that the apparent high level of auto-correlation of the residuals must be analyzed and removed before any confidence can be had in any of the models. The observed serial patterns may merely be due to a complex auto-regressive structure in the disturbance terms. What is more likely is that the net effect of a series of model mispecifications is producing the apparent result. For a very simple example, consider that an important variable has been omitted from the regression and that its time series structure is a complex auto-regressive one or even a moving average process. The omission of such a variable,
especially if not easily approximated in terms of powers of the conditional
mean of the dependent variable, would produce the test results observed in
the Feldstein equations.

Secondly, the removal of the serial independence if inherent in the
disturbance terms could well lead to significant and highly informative
results from the specification error tests once the serial independence is
removed.

Considerable attention was paid to the definition and measurement of the
constituent variables, and the Ortho tests indicate a further reason for
care, considerable evidence of high levels of near-singularity. One
immediate implication is that great care must be taken in measuring the
variable values and in choosing approximate algorithms for evaluating the
data. The presence of near singularity and inappropriate algorithms may mask
the presence of otherwise valuable information. It is already clear that
modest alterations in the set of observations used to obtain estimates, or
straightforward, but justified, modifications of the variables can have a
dramatic impact on the values, significance, and even signs of the
coefficients. In no manner of speaking can one claim that even a moderately
reliable model has been obtained.

The unreliability of the models including the associated statistical
assumptions, coupled with a dubious set of variables, means that at the
moment no useful theoretical conclusions can be drawn. The basic simple
competitive market model has not yet been rejected by the analysis; there are
too many concomitant and substantial sources of error to contend with for
one to be able to reach such a conclusion.
Further, one can say even less about the implications of these results for more complete and more sophisticated versions of economic theory which, a priori at least, appear to be more relevant than the current naive formulations.

What is abundantly clear is that the physician services market is not as yet understood and there are no reliable models, although Hixson's model may provide a suitable base for developing an improved analytic structure. What has also been learnt is the urgent requirement for better data more carefully measured. Some disaggregation by sub-markets is obviously required as well.

Policy guidance is inappropriate from our results, except to emphasize most strongly that in a situation of great uncertainty, extreme care must be taken in advocating new policy, particularly counter-intuitive policy. The uncertainty of one's information and its inherent risks need to be incorporated in evaluating policy options.

At the moment, the overall weight of evidence and received theory would indicate that the odds are in favor of a traditional market in physician services. To put the matter otherwise, once a reliable model has been generated the odds are in favor of that model being consistent with conventional theory.

If the conventional theory is right an increase in long-run physician supply will benefit all consumers, but in particular those now receiving marginal care, e.g., small towns and villages in the country. A decrease will harm all consumers, but especially the marginal consumers, and consumption items, for example, preventive health care for children.
However, if some form of the supply-induced-demand theory were to be correct an increase in supply would increase medical care only slightly, but would raise prices. A decrease in physician supply would lower care, but would lower prices as well; at least so it is claimed.

Because the theoretical development of the supply-induced demand hypothesis is incomplete, the above "beneficial" predictions are hazardous, but are the best results from the consumer's viewpoint claimed by its proponents for an as yet undemonstrated situation. Consequently, even if the odds were even between received theory and the supply-induced demand hypothesis, one must conclude that the optimal policy is still to encourage the supply of physicians, or at least take a neutral stance. At greater than even odds for received theory, then consumers can be expected to be overwhelmingly better off by encouraging physician supply, not discouraging it.
Today there is a growing controversy concerning the effects continued increases in the stock of physicians will have on the medical marketplace. The controversy is evident even within the Department of Health and Human Services where the Graduate Medical Educational National Advisory Committee (GME-NAC) forecasts a "surplus" of physicians of 70,000 by 1990 while the Bureau of Health Professions of the Health Resources Administration forecasts equilibrium between demand and supply. At stake in this controversy is the health manpower policy aimed at controlling costs.

Most are aware of the Federal government's continuing attempts to contain health care costs. Between 1955 and 1978, rising health care expenditures increased the health care sector's share of GNP from 4.4% to 9.1%. The controversy over the effects of a physician surplus is central to a successful containment policy. Conventional wisdom argues that expansion of the stock of physicians will enhance competition and thereby promote lower rates of inflation in the industry. A second view (gaining recognition) argues that any surplus will transform itself into unnecessary increases in demand. In support of this school of thought, one may turn to the economics literature which presents the supplier-induced demand or targeted income hypothesis. This literature concludes that an excess supply of health manpower will not retard fee or price increases but
instead will foster demand creation, fueling inflation and overutilization of care. The existing maldistribution will not be improved, and a prudent cost containment policy would reduce the growth rate of physician supply and impose strict controls over their geographic distribution.

Demand creation in this context refers to successful efforts among physicians to increase the demand for medical care. For a given stock of physicians, demand creation efforts cause increases in physicians' fees and/or overutilization of professional services. Its intended purpose is to enhance the economic status of the physician. Through demand creation, each physician can deliver the same quantity of care but at higher fees. These higher fees increase or at least maintain the net income of the practice in spite of the growing physician stock. Believing that physicians might never be satisfied with present incomes, some argue that they maintain a targeted income which places a limit upon demand creation efforts. Each new medical school graduate brings to the marketplace a new targeted income which must be met with additional health care expenditures. Fewer physicians means fewer targets and a reduced health care bill for society. This theory therefore implies that a smaller stock of physicians serves as a viable cost-containment policy.

On a superficial level the demand creation approach has substantial appeal. There exist studies which show that where there are more surgeons, there is more surgery; where there are more hospital beds, there are more hospitalizations. The fact that physician fees appear to be higher where there are more physicians per capita is proof enough for many that the demand creation model is valid. Yet accepting or rejecting any theory is much more involved than what this implies. To be reliable, a model must support predictions which are consistent with empirical facts. And to derive these predictions, the model must be complete, logical, and thoroughly understood.
Purpose of the Report

This research evaluates the demand creation school of thought as represented in the economics literature. Demand creation had its beginnings as a serious explanation of physician behavior in 1970 and has evolved through a small number of contributors. And since the Congress must consider health manpower legislation, it is necessary to determine what promise the demand creation approach affords. This economics literature is the only substantive material offering demand creation analysis of the medical market. As an alternative theory with some legitimacy, the Bureau of Health Professions must consider the possible use of demand creation in forecasting the impact of the growing stock of physicians upon the future medical market. This research, therefore, must evaluate the demand creation model and issue recommendations to the Bureau of Health Professions regarding the advisability of adopting the demand creation model as a forecasting tool. The results lend judgment regarding the continuation of current policy as a means of controlling costs.

Research Methods

Evaluation of the demand creation model begins with an in-depth examination of the foundational literature. Finding the model incomplete, a new theory was developed which would permit empirical tests as a basis for model selection. Three theoretical models of physician behavior were constructed: an orthodox demand-supply model, a demand creation model, and an expanded demand-supply model with patient waiting time. Due to the technical difficulty of the material, the models are contained in a companion volume entitled, "Theories of Physician Behavior: Demand Creation and Its Alternatives." Properties of these three models are explored as are the major types of evidence which such models are asked to explain. Data sources sufficient to distinguish among the three models were unavailable. We have, however, developed extensive
directions for the construction of future data sets which will support the necessary tests. The Bureau of Health Professions' forecasting model and its underlying premises are reviewed in the context of existing support for the demand creation approach and the 1990 responses to the future physician stock are considered.

**Results and Recommendations**

The demand creation model is incomplete for two reasons. First, it is based on a relatively weak foundation. Second, the model itself is not closed, i.e., additional relations must be specified for the model to yield predictions concerning physician behavior. The completed version of the model makes predictions which are generally indistinguishable from the orthodox demand-supply model. The exception is that in predictions of the impact of a growing physician stock upon fees, the demand creation model is consistent with either increases or decreases in fees when the stock of physicians increase. Surprisingly, the demand creation models were developed as an explanation of the empirical positive relation between physician density and fees but as we have shown, these models are consistent with any empirical fact. In addition, when asked to consider other equally important evidence, the models become troublesome and inaccurate.

The demand creation model when completed cannot explain any empirical facts not explained by an expanded demand supply model. Accordingly, the Bureau of Health Professions is advised to continue using the orthodox demand-supply forecasting methods. At present, there is insufficient reason to adopt a demand-creation model for forecasting the future effects of a growing physician stock. Continued policy expanding this stock will be successful in both reducing inflation in the health care sector and improving the geographical distribution of physicians.
Summary

Are market forces allocating general practitioners geographically? The evidence generated from this study indicates the answer is yes. This summary will briefly review that evidence and identify those conclusions that can and those that cannot be drawn from the evidence.

The approach that this study used to address the research question is as follows: First, equations representing causal (structural) models of medical services markets in equilibrium and different types of disequilibrium were developed. Next, these models were solved for their reduced-form. Finally, this set of reduced-form equations was further analyzed to derive the empirical patterns one would expect to see under circumstances of equilibrium and disequilibrium. This led to a series of predictions concerning the size and sign of certain regression coefficients and the behavior of the error terms under conditions of correct specification and of misspecification of the reduced-form equations. These predictions follow logically from the original structural models and allow the construction of hypotheses that discriminate empirically between markets in equilibrium and markets in disequilibrium.
Four separate hypotheses emerged from the analysis. One described the pattern of empirical events that would occur if markets were in equilibrium and no other misspecifications were embedded in the model. Another described the pattern if markets were in disequilibrium and the model was otherwise correctly specified. A third and fourth, described the empirical patterns expected if misspecifications other than equilibrium/disequilibrium conditions were committed.

To test these hypotheses, the number of GP's in all non-SMSA counties in the United States was analyzed using linear regression. The empirical results of that analysis overwhelmingly contradicted the predictions of all but the hypothesis of disequilibrium. Thus, the hypothesis of equilibrium and the two on other forms of misspecification can be rejected in favor of the hypothesis that markets for GP's are in long-run disequilibrium and that they are adjusting to market forces engendered by exogenous changes in demand.

The study was then extended to an analysis of the market behavior exhibited by three different types of counties: Those designated by the Federal Government as physician shortage counties and staffed with a physician under the National Health Service Corps program; Those counties so designated but not staffed; And those counties not designated as shortage counties. Events had created the conditions of a quasi-experiment. Each group of counties was analyzed with data from 1975, before NHSC physicians had been placed. Then each was re-analyzed with 1978 data after NHSC placements had occurred in the one group.
The results of the analysis for two groups of counties, those not designated and those designated but not staffed, were very similar to previous results. They were in disequilibrium adjusting at about the same speed found in the overall analysis. Moreover, their behavior did not change much between 1975 and 1978 indicating that no structural change in causal forces had occurred in the interim.

This was not the case for the counties that had been both designated as shortage areas and staffed with NHSC physicians. In contrast to other counties, these counties were not showing market adjustment activity in 1975. Instead they were essentially static indicating they were in long-run equilibrium at a time other counties were losing GP's. But, when these counties were examined with 1978 data a marked change was observed. At that time, they were in disequilibrium showing the most rapid adjustment of any group of counties studied.

Thus, the results indicate the two groups of counties in which intervention did not occur were very similar to one another in their market behavior and also very similar to the behavior of all non-SMSA counties. In addition they showed no structural change over the time period. In contrast, the counties that had experienced intervention between 1975 and 1978 were dissimilar to the other markets in their behavior before the intervention (i.e., they were in equilibrium while the others were not) and experienced marked structural change afterwards (i.e., they were then in disequilibrium and adjusting rapidly). The placement of NHSC physicians was the only apparent change that affected these groups of markets differentially.
What conclusions can be drawn from all of this? First, these results offer strong evidence that market forces are allocating general practitioners across counties. The final estimating equation and the empirical patterns predicted were derived from an original structural model in which supply is endogenously responding to exogenous demand shifts. Not only can it be determined that the markets for general practitioners are functioning, their speed of adjustment can be estimated since the coefficient that indicates that speed is derived from an original structural with that same interpretation.

The fact that other types of physicians or the quantity of medical services were not observed argues for care in drawing inferences, but it does not invalidate the conclusions thus far drawn. Even if other types of physicians are substituting for general practitioners, the fact remains that GP's are flowing into and out of counties and a market disequilibrium model rationalizes that flow. What can not be said is whether the net quantity of medical services or the total number of physicians in a market are increasing or decreasing. That would require arguing past the evidence.

Second, the results offer strong evidence that the placement of NHSC physicians in a market is retarding the replacement by market forces of general practitioners subsequently lost to the market area. This follows from the fact that an endogenously adjusting supply in the presence of exogenous demand shifts is not sufficient to explain the structural change that occurred in that group of markets after NHSC physicians were placed there. Instead, one must argue that it is the exogenous shift in supply due to the placements
that is driving the system by throwing those markets into a condition of excess supply. Market forces are attempting to reduce that excess by retarding the market replacement of GP's leaving. Those who would quarrel with the market explanation are left to come up with a consistent and explicit alternative. Along that line it doesn't seem reasonable to argue that a disjunctive leap in the trends in demand has occurred for some mysterious reason in only one set of markets.

Here again, with this conclusion, care must be taken not to argue past the data. All physicians were not observed, therefore, one cannot argue that total physician manpower has decreased (or increased for that matter), much less the quantity of medical services delivered. But one can argue that whatever the total manpower is, it is less than it would have been if market forces were not retarding replacements, and that should placements cease the tendency would be to return to the appropriate long-run equilibrium associated with existing demand conditions.
LDNG-RUN FORECASTS OF PHYSICIAN AND HOSPITAL PRICES AND EXPENDITURES
(DHPA Report No. 81-5)

Dr. Jack Rodgers

This study reports the use of an econometric model to forecast health care prices and expenditures. The model represents the current status of research conducted in the Bureau of Health Professions for several years. The object of this research is to develop a capability to forecast national health care prices and expenditures in each of the major service categories—dental, physician, hospital, pharmacy, and long-term care. Forecasts of dental prices and expenditures have been reported elsewhere (Hixson, 1980; Hixson and Mocniak, 1980). The specification of an econometric model of physician and hospital services has also been documented previously (Hixson, 1979). The empirical basis of this Bureau of Health Professions econometric model is a set of national time series data for the years 1949-75 which is based on standard series reported and updated annually in the Statistical Abstract of the United States and other common sources.

Forecasts from the econometric model are presented in Table 1. Each forecasted value is indexed to the base year 1975 to facilitate comparison of changes over the forecast period. The real price of physician services is forecast to fall by 7.7 percent between 1975 and 1990 while the real hospital price level rises 20.3 percent during the same period. Partially because of these price changes, the quantity of physician services rises by 52.8 percent while the quantity of hospital services rises only 34.4 percent.
Since cost containment is currently an important national policy goal, total and per capita expenditures on health care services are of great interest. The model forecasts a 41.0 percent increase in expenditures on physician services (which is 23.7 percent on a per capita basis) and a 61.7 percent increase in expenditures on hospital services (which is 41.8 percent on a per capita basis).

The forecasts from the model described in this paper reflect the effects of increases in both resources and regulations. As a result of increased medical school enrollments, the stock of physicians will increase through 1990 and beyond. During the recent past and into the foreseeable future, growth in beds and other hospital assets will be controlled by Certificate of Need and other devices. The result is downward pressure on prices in the physician services sector with continued increases in hospital prices. The forces on hospital demand will include increased population, increased income, and falling real prices for physician services.

The model can be used to show how changes in the number of physicians and hospital beds will affect long-run developments and the price quantities of physician and hospital services. The comparative statics of a four-equation, two-market system are somewhat more complicated than that for the single market with two equations. For instance, a decrease in the number of physicians will increase the price of physician services in the single market with no interaction. In the four-equation model, a decrease in price for physician services decreases the demand for hospital services thus putting downward pressure on the price for hospital services.
Table 2 shows how changes in the numbers of physicians and hospital beds affect the 1990 equilibrium real prices and quantities. A 10 percent reduction in 1990 stock of physicians (shown as Alternative 1 in Table 2) will increase the 1990 price of physicians to 95.9 compared with the baseline (Table 1) forecast of 92.3. A 10 percent reduction in the 1990 stock of physicians decreases the hospital price below the forecast in Table 1 (111.4 compared with 120.3). As might be expected the quantity of physician services declines. However, the quantity of hospital services also shows a decline relative to the baseline forecasts.

An increase in the number of hospital beds (shown as Alternative 2 in Table 2) causes the real price of hospital services to fall relative to 1975 and relative to the baseline 1990 forecasts. The 1990 real physician prices increase slightly above those in Table 1. Quantities of both physicians and hospital services increase relative to the baseline forecasts.

At present the Graduate Medical Education National Advisory Committee (GMENAC) is recommending a reduction in enrollments at medical colleges (U.S. Department of Health and Human Services, 1980b). The result of such a policy change would be higher prices for physician services than will be the case if enrollments continue along present trends. On the other hand, the model predicts that a smaller stock of physicians will reduce the demand for hospital services.
Caution must be exercised in interpreting the results of a time series econometric model based on so few observations. The forecasts and comparative static results presented above should be viewed as only rough indicators of certain forces at work in the health care industry. For instance, since the model includes only one measure of hospital physical capital, beds are probably a proxy for total physical assets. Thus, the model should be interpreted as indicating how changes in hospital capital will affect movements in equilibrium real prices and quantities. Also, the model is too highly aggregated to show how changes in the complicated regulatory environment will affect future outcomes. For example, supply responses to price changes may be prevented by certificate-of-need requirements or other governmental controls.

These weaknesses notwithstanding, the forecasts indicate that strong forces are at work in the health care market place which result from the increasing number of physicians and controls on investment in physical capital.
## Table 1
FORECASTS OF NATIONAL HEALTH CARE PRICES AND EXPENDITURES
(1975 = 100.0)

### PHYSICIAN SERVICES

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
<th>Quantity</th>
<th>Per Capita Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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<tr>
<td>1990</td>
<td>92.3</td>
<td>152.8</td>
<td>141.0</td>
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Annual rate of Change:

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<th>Per Capita Expenditures</th>
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</thead>
<tbody>
<tr>
<td>1975-1980</td>
<td>-0.4</td>
<td>3.2</td>
<td>2.7</td>
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<tr>
<td>1975-1990</td>
<td>-0.5</td>
<td>2.8</td>
<td>2.3</td>
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### HOSPITAL SERVICES

<table>
<thead>
<tr>
<th>Year</th>
<th>Price</th>
<th>Quantity</th>
<th>Per Capita Expenditures</th>
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<td>100.0</td>
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<tr>
<td>1980</td>
<td>110.3</td>
<td>111.2</td>
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<tr>
<td>1990</td>
<td>120.3</td>
<td>134.4</td>
<td>161.7</td>
</tr>
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Annual Rate of Change:

<table>
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<tr>
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<th>Price</th>
<th>Quantity</th>
<th>Per Capita Expenditures</th>
</tr>
</thead>
<tbody>
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<td>2.1</td>
<td>4.1</td>
</tr>
<tr>
<td>1975-1990</td>
<td>1.2</td>
<td>2.0</td>
<td>3.2</td>
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Table 2
COMPARATIVE STATICS
(1975 = 100.0)

<table>
<thead>
<tr>
<th>Alternative</th>
<th>1990 Prices</th>
<th>1990 Quantity</th>
<th>1990 Expenditures</th>
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<tr>
<td>0</td>
<td>92.3</td>
<td>152.8</td>
<td>141.0</td>
</tr>
<tr>
<td>1</td>
<td>95.9</td>
<td>142.6</td>
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HOSPITAL SERVICES

<table>
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<th>1990 Prices</th>
<th>1990 Quantity</th>
<th>1990 Expenditures</th>
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<tbody>
<tr>
<td>0</td>
<td>120.3</td>
<td>134.4</td>
<td>161.7</td>
</tr>
<tr>
<td>1</td>
<td>111.4</td>
<td>132.8</td>
<td>148.0</td>
</tr>
</tbody>
</table>

0: 1990 Table 1 values
1: 1990 stock of physicians is ten percent below 1990 Table 1 values. (Beds at Table 1 value)
2: 1990 stock of beds is at 1975 level. (Physicians at Table 1 value)
REFERENCES

Publications


Rodgers, L. "Long-Run Forecasts of Prices and Expenditures for Physician and Hospital Services," Profile of Medical Practice 1981, American Medical Association, Chicago, IL, 1981.


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April 13, 1981

The Honorable Orrin Hatch, Chairman
Committee on Labor and Human Resources
United States Senate
Washington, D.C. 20510

Dear Senator Hatch:

Enclosed is a statement of the Association of American Veterinary Medical Colleges which we respectfully request be included in the record of hearings of the Committee on Labor and Human Resources on S. 789. The Association of American Veterinary Medical Colleges is concerned that national health professions education policy is being developed on the basis of the supply of physicians and the reported earning power of physicians. Many health professions have different circumstances, and their students and schools have different needs from those of medical students and medical schools. We appreciate this opportunity to express some of the problems and needs of veterinary medical students and schools.

While we hope we may have an opportunity, along with some of the other health professions associations, to meet with you and discuss some of our unique problems, we will appreciate the enclosed statement being made a part of the record of hearings on S. 789. We will be pleased to work with you and the committee staff to develop specific proposals for amendments to accomplish the purposes of our recommendations. Thank you.

Sincerely,

M. M. Decker, D.V.M.
Washington Representative

Enclosure
STATEMENT
OF THE
ASSOCIATION OF AMERICAN VETERINARY MEDICAL COLLEGES
FOR THE
RECORD OF HEARINGS
OF THE
COMMITTEE ON LABOR AND HUMAN RESOURCES
UNITED STATES SENATE
ON
S. 799

APRIL 8, 1981
The Association of American Veterinary Medical Colleges appreciates the opportunity to submit this statement for the record of hearings of the Senate Committee on Labor and Human Resources. The Association of American Veterinary Medical Colleges includes in its membership the twenty-five schools and colleges of veterinary medicine currently in operation and two developing colleges.

S. 799 proposes significant departures from the current national health professions education policy. We have two major areas of concern we wish to express. One concern, our first priority, is for the students, their abilities to finance their education, and the prospects of only those of very significant financial means having access to a veterinary medical career. Secondly, we are concerned that the elimination of institutional support mechanisms will result in poorer quality educational programs and reduction in enrollment, i.e., reduced educational opportunities for students.

In the past few decades, startling changes have occurred in the veterinary medical profession. While the original and most obvious service—the delivery of direct health care to animals and the relationship of that service to food supplies and the nation's economy—remains a basic and vital function, it is but one part of a larger responsibility. Thousands of veterinarians work for governmental agencies at all levels, helping to implement regulations designed to assure that only safe, wholesome animal products are marketed for human consumption. Others are involved in public health matters such as controlling and preventing the direct hazards to human health from transmissible animal diseases and the dangers arising from toxins and environmental pollutants. Comparative medicine, that area of study that deals with the interface between animal and human medicine, demands the skills and attention of investigators trained in schools of veterinary medicine. If those on the front
lines of veterinary medical activity are to have the knowledge and tools to perform effectively, research in the laboratories and in the field must be relentless, and it must be pursued by highly trained professionals.

Veterinary medicine is a biomedical science of such breadth that its members are now among those best-equipped to deal effectively with the complex interrelationships among human beings, animals, and the environment. If society is to continue to benefit from advances in veterinary medicine, there must be no lapse in the quality of those trained to pursue it. Currently about 8,150 students are enrolled in twenty-five colleges and schools of veterinary medicine in the United States. About 1,950 new veterinarians will be graduated this year. Clearly, any significant reduction in the quality of training would impair a vital national resource. Nevertheless, several factors are threatening to do just that, foremost among them the financial squeeze.

The cost of veterinary medical education ranks among the highest in the health professions, far beyond the amount that can be recovered from tuition and other usual sources of college income. Twenty-one of the veterinary medical colleges are in state universities, and these states cannot be expected to continue to finance the major part of the nation's costs for veterinary medical education. Like schools devoted to training physicians, veterinary medical colleges maintain a high ratio of faculty to students, particularly in the clinical aspects of training. Veterinary schools face high costs in recruiting and maintaining high quality faculties, they must provide expensive laboratories and equipment for teaching the full range of biomedical sciences, and they must provide those vital arenas of instruction, modern teaching hospitals.

Unlike their counterparts in human medicine, those responsible for training veterinarians must prepare their students to deal with complex
health problems of not one but many species. They must do this without access to some major sources of income available to medical schools. Most significant for animal health care, there are no third-party payer systems available to owners of animals requiring medical care. This results in severely limiting the service income of veterinary medical teaching hospitals. Income in such hospitals rarely provides more than half the needed support.

With costs of veterinary medical education approaching $20,000 per year per student, it would be folly to presume that the students can carry the major part of the financial burden of their education. While physicians are often seen as able to command high incomes and therefore repay large educational debts, the situation for veterinarians is quite different. Starting salaries average about $18,500.

In most respects, we believe, the previous health manpower laws have been effective in achieving the national priorities in veterinary medical education. Capitation grants have provided funds which could be used to improve the quality of educational programs. The declining level of capitation grant funds in recent years has resulted in many losses which reflect immediately on educational quality, and they include reduced purchases of library books and other autotutorial resources, reduced employment of technicians to aid the faculty, and, in some cases, reductions in faculty numbers. We believe the decisions to terminate institutional support will continue to reduce the quality of education unless alternate sources of such funding are developed. The limited financial resources of the states make it improbable that many of them will be in a position to provide increased financing for veterinary medical education. This leaves the burden largely with the students, so student financial aid will become even more important for the future.
Capitation grants have also helped provide access to veterinary education to students from all states, although veterinary schools exist in only 24 states. One likely result of the elimination of capitation grants will be reduced educational opportunities for students from states without veterinary schools. This will probably contribute to geographic maldistribution, particularly in large-animal medicine. Current public concern over levels of state spending inhibits sufficient expansion of state appropriations for veterinary medical education. To attempt to close the income-cost gap by further limiting the enrollment of out-of-state students would be tempting but shortsighted. Because of the geographic locations of the institutions, many states would be underserved, and entire regions of the country would be shortchanged.

Please consider the following recommendations for amendments to S. 799:

We are pleased to see that S. 799 proposes to continue the institutional financial distress grants. Without this source of funds in recent years the School of Veterinary Medicine at Tuskegee Institute could not have continued as an accredited veterinary medical college. That school serves a unique role in veterinary medical education and contributes through its distinguished faculty in many significant ways to the advancement of veterinary medicine. It must have this source of financial assistance until it can complete currently planned operational, managerial and financial reforms. We recommend changes in S. 799 in accord with the April 8 testimony of Dean Walter Bowie to make this program a continuing effective means of assistance to Tuskegee Institute and other health professions schools in similar circumstances.

Continuation of the Health Professions Student Loan Program is extremely important to veterinary medical students since it provides a major source for them of moderate interest rate loans. We are pleased to see that S. 799 proposes to extend the HPSL program; however, we believe it is essential
that S. 799 provide for continuing appropriations so that students in existing and developing schools may rely on this source of loan support. Without continuing appropriation authority, access to HPSL loans will be available to only a very few students, probably only those who have borrowed from this source in the past. Unless loans are available from this source, students will be forced to seek high interest rate Health Education Assistance Loans, which is an unsatisfactory alternative. New graduates with massive high interest rate loans to repay will be forced to select the highest-paying jobs. Economic factors will prevent them from taking jobs in which service may be more essential or continuing their education for service in currently undersupplied specialities. Notions we hear regarding reducing student financial aid programs simply do not, in our opinion, recognize the realities of current costs of health professions education. The Health Professions Student Loan program, with provisions for loan forgiveness for specified professional service, and the Guaranteed Student Loan program have been of major assistance to veterinary medical students. We believe that these programs must be continued and expanded, especially in view of the diminished institutional support and the increases in the students' share of educational costs.

Extension of the scholarships for students of exceptional financial need is a vital action to help assure that students from low income backgrounds may prepare for a health profession. While few veterinary students have had the benefit of such scholarships, we believe the program will be even more essential in the future, and we recommend its extension and the extension of such scholarships through the second year of professional education.

We hope that the Congress will continue to recognize the increasing necessity of federal financial aid for health professions students. In view of
the diminishing institutional support, adequate resources for student assistance must be available or the health professions will soon be restricted to only the very wealthy.

Veterinarians trained as specialists in biomedical research, livestock production research, pharmaceutical product development, and veterinary medical education are scarce. The numbers are too limited now for the existing demands, and economic pressures on institutions and students indicate that this situation will continue unless action is taken now to provide incentives and resources for post-doctoral education. Veterinary pathologists and toxicologists and laboratory animal veterinarians are currently needed in significantly greater numbers than are available.

The General Accounting Office reported on March 30, 1979, that it had found in its review of the National Cancer Institute's carcinogenesis program that a major factor causing failures in the program was "... a shortage of toxicologists and veterinary pathologists ..." This is only one illustration of an extensive problem which is not improving. The National Academy of Sciences is currently studying this matter with the intent of documenting the nature of these health manpower supply problems. Large debts to be repaid after graduation from veterinary medical colleges discourage or prohibit new graduates from continuing their education unless appropriate stipends are available. The veterinary medical colleges cannot provide the post-doctoral education opportunities without additional funding for that purpose. We recommend that a new special project program be authorized to provide through grants or contracts the necessary funds to expand post-doctoral education in several veterinary medical specialties.

Last year we made recommendations which we thought were appropriate regarding federal sharing in the cost of health professions education and
specifically veterinary medical education. Our problems of operating quality programs in veterinary medical education continue as do the problems of our students. Another year has passed, and the sources of financial support for our programs and our students have become more uncertain while the costs continue to climb. Demands for veterinary services, escalating costs of educating veterinarians, and severe limitations on sources of income for veterinary medical schools have put these vital programs in jeopardy.

We appreciate this opportunity to comment on S. 799.
Health Professions Educational Assistance
and Nursing Training Act of 1981

S. 799

Statement of:

The Association of University Programs
in Health Administration

April 9, 1981

Gary L. Filerman, Ph. D.
President

202/659-4354
Health Administration Training

Health administration graduate training involves a two year masters degree. Accredited programs may be located in a variety of schools, including medicine, business, public health, or graduate schools, all offering equivalent degrees. The curriculum includes the study of health institutions, medical care practices, health economics, management skills, and behavioral sciences.

The programs provide important services to the health service delivery system. In addition to attracting, training, and placing needed management talent, health administration programs:

- Provide management consultation to all kinds of health services.
- Teach health service organizations and health economics to students in other health professions.
- Do research on management problems and policy issues.
- Advise state legislatures and other agencies on health care policy.
- Provide a significant portion of all continuing education opportunities designed to strengthen the competence of practicing health service administrators.

There are accredited programs in forty universities. Twelve are in schools of public health and twenty-eight in other settings, including one operated by the U. S. Army.
The Need

There is an acute shortage of trained health administrators in many kinds of delivery organizations. Only large general hospitals have adequate professional management. The greatest needs are in rural hospitals, HMO's, home-health agencies, group practices, community health centers, and state and local government agencies.

- Program graduates have many job offers.
- Starting salaries average almost $20,000, reflecting the high demand.
- There are career long opportunities for every graduate - less than 5% of all graduates have left the field.
- The most professionally oriented nursing home administrators belong to the American College of Nursing Home Administrators, but only 35% of their members are college graduates and only 10% have health administration training.
- There are 5,000 home health agencies. A 1975 AUPHA study showed that 90% of their administrators had no administrative background.
- In 1979, 27.3% of the members of the Hospital Financial Management Association lacked a bachelor's degree. Only 14.6% were trained at the master's level.

In 1979, for the first time, half of the graduates did not go to general hospitals. As a direct result of federal support for expanded enrollment, production was sufficient to begin to direct some graduates into the managerially underserved sectors of the system.
The many executives of health delivery organizations who lack professional training need the continuing education and technical assistance provided by the programs. Continuing education also focuses on maintaining the skills of program graduates and is particularly important to assure effective assessment and use of new managerial and health technology.

State agencies are major clients of health administration programs. The programs provide mid-career training of individuals who move from clinical and technical roles into administration. If the states assume greater responsibility for federal programs through block grants, the programs will be asked to produce new staff for them, up-grade the competence of current program managers and provide direct consultation on program planning, management and evaluation. Because many states lack health administration programs, a number are functioning as regional resources.

Federal Support

The increased demands of all kinds on health administration programs result in large part from federal initiatives. Agencies which administer Medicaid and Medicare require program graduates and services. Put the key factor is that federal funds, controls and accountability have greatly increased the complexity of managing all health services, creating the high demand for appropriately trained managers in even the smallest unit. In fact, the small units lack the technical skills to back up the general administrator, so they spend large sums for outside backup.
Until 1977, only programs in schools of public health had any consistent federal support - and that was as part of the school. In 1977, the Congress, with bipartisan and administration support, enacted Senator Schweiker's amendment which provided modest support to the programs outside of public health schools. The law recognized a clear federal responsibility to improve the management of organizations which expend billions of federal dollars to implement federal health programs.

Under the block grant programs, the need will continue - it will grow to the extent of management development needs in state agencies.

Because the programs are small and in the process of developing the capacity to meet the nation's needs, only a modest amount of support can be used effectively. There is an acute shortage of appropriate faculty. Direct federal support for programs outside of public health schools was, therefore, limited to $5,000,000, which was divided between $3M to increase the capacity of the programs and $2M to support training of experienced health workers. Non-public health programs had to meet criteria which reflected the nation's needs:

- **quality** - the program must be accredited
- **growth** - enrollment must increase
- **critical mass** - a minimum of 25 graduates
- **non-federal support** - non-federal support of $100,000 must be assured,
  in effect, creating a matching effort in which the federal grant gradually decreases as the number of eligible programs increase.
This approach proved very successful, beginning development of a national system of health management training centers. Non-federal support increased, enrollment expanded, there has been a marked increase in continuing education offerings and other managerial backup to the system.

S. 799

S. 799 would dismantle this expanded effort and do it precipitously. While other health professions have been anticipating an end to institutional support, health administration and public health have repeatedly been assured of their continuing national priority.

S. 799 assumes, incorrectly, that all health professions (except nursing) are oversupplied. If S. 799 is passed:

- The number of health administration graduates will drop at least 20%, virtually assuring that all will go to the large general hospitals which offer the best salaries.

- Mid-career training - much of it for state agencies - will end. Only traineeships make mid-career training possible.

- Non-federal matching funds will be reduced. The inducement to maintain current levels will be gone.

- Continuing education, a low university priority, but a high health administration and public health priority, will be the first activity to go.
Some health agencies, HMO's, long-term care, and rural services will be the hardest hit.

Administration efforts to reduce waste, fraud, mismanagement, and abuse will be undermined.

The bill authorized $3 million for public health and health administration, all in project grants — only $4 million of which is earmarked for schools of public health and graduate programs in health administration. This authorization does not provide the maintainence of effort necessary to meet the stated objectives of the Administration — it is, in fact, one million less than the 1982 budget.

RECOMMENDATION

First Priority:

The bill be increased to $135 million, $12 million to be allocated to loans to health students other than medicine and nursing. The other students are for practical purposes excluded from the student aid programs in the bill as introduced.

Three million dollars to be authorized for health administration capacity development grants, contingent upon non-federal funds of $150,000 (up from $100,000 at present) the first year, $175,000 the second year, and $200,000 the third year.

The $5 million in the bill would be allocated entirely to public health.
Second Priority:

Increase the public health and health administration authority to 66 million as in the President's budget for the first year, increasing the authority to $7,000,000 in 1983 and $9.0 million in 1984. Allocate 66% for project grants (including student support) to schools of public health and 34% to programs in health administration. Suggested language is attached.
Section 790 (a) The Secretary may make grants to, and enter into contracts with, schools of public health and graduate programs in health administration to assist such schools or programs in meeting the costs of projects (including financial assistance in the form of traineeships or assistantships) to plan, develop, operate, or maintain teaching programs in -

(1) biostatistics or epidemiology;
(2) health administration, health planning, or health policy analysis and planning;
(3) environmental or occupational health;
(4) diet and nutrition;
(5) maternal and child health;
(6) preventive medicine or dentistry;
(7) gerontology; or
(8) techniques for the evaluation of the cost, quality, and effectiveness of organizational structures and technology in the delivery of health care.

(b) That 66 percent of the amounts appropriated to carry out subsection (a) shall be awarded to schools of public health and 34 percent of the amounts appropriated to carry out subsection (a) shall be awarded to graduate programs in health administration.

(c) There be authorized to be appropriated to carry out the provisions of this Section $6,000,000 for the fiscal year ending September 30, 1982, $7,000,000 for the fiscal year ending September 30, 1983, and $9,000,000 for the fiscal year ending September 30, 1984.
Statement of the
Association of Teachers of Preventive Medicine
regarding
S. 799
Health Professions Educational Assistance
and Nurse Training Act of 1981

Submitted to
Senate Committee on Labor
and Human Resources
April 22, 1981
The Association of Teachers of Preventive Medicine is pleased to submit the following comments on S. 789, the Health Professions Educational Assistance and Nurse Training Act of 1981. The remarks which follow are also endorsed by the American College of Preventive Medicine, the professional society for preventive medicine physicians and a sister organization.

The Association of Teachers of Preventive Medicine is a small academic society composed of some 600 individual members who are largely medical faculty and some 60 medical school departments of preventive medicine. The Association has as its overriding goal the advancement of prevention as a component of health professions education.

It is widely recognized that we are rapidly approaching what could be termed a crisis situation in the health care field. Although, as stated recently by the Surgeon General, the health of the American people has never been better, our nation's annual health care bill has skyrocketed to a level unthought of just years ago. This condition cannot go unchecked -- with that all can agree. However, questions and disagreements as to how we, as a nation, are to address this problem will continue to abound as we attempt to grapple with this very complex issue.

In our view, long-term control of health care costs will only be achieved by integration of prevention within the health care system. Our current model of health care is in reality the science of diagnosis and treatment. As a result, the system itself is a model of "crisis management," intervening after the fact with costly remedies rather than acting to anticipate and avoid the occurrence of ill health and disease. Under such a model, solutions
to contain costs can only have short-term impact because they do not cut to the core of the problem with our health care system. The adage of "an ounce of prevention" is indeed true, yet we have consistently failed, in any meaningful way, to integrate prevention into our health care policies and programs.

If a change is to be affected in our health care system to integrate the science of prevention, we must first impact upon the knowledge and attitudes of the individuals who run that system -- health professionals, particularly physicians. Unfortunately, today's average practicing physician has little or no comprehension of the potential role of preventive medicine in the practice of medicine. Frequently patients are more knowledgeable in this area than are their physicians. Yet there exists a body of knowledge which, if properly taught, could have a measurable impact on physicians' skills and, hence, the health of their patients. And here we speak of health in terms of health maintenance and the avoidance of costly disease, rather than treatment of it after the fact. In the aggregate, the implications for cost savings are potentially enormous.

Prevention, though a small field, is dynamic in its concepts and goals. Preventive medicine is the branch of medicine that is primarily concerned with preventing physical, mental and emotional disease and injury, in contrast to treating the sick and injured. The paramount goal of this area of specialization is to promote and preserve individual health status. Additionally, it is concerned with the well-being of the community, and the efficient and effective management of scarce resources.
The distinct body of knowledge known as preventive medicine can be traced at least to 1913, when the first edition of Rosennau's Preventive Medicine and Hygiene was published. Since that time the body of knowledge has been extended and its focus has shifted in response to changing patterns in the incidence of disease. For instance, early in this century, preventive medicine was concerned primarily with communicable diseases, while today one major focus is on chronic conditions such as respiratory and heart disease, while another is health maintenance and enhancement.

Training and practice in preventive medicine build upon a diverse, multi-disciplined base. The "core" sciences of preventive medicine include epidemiology, biostatistics, environmental health, nutrition, clinical preventive medicine, the behavioral sciences, management and health care systems analysis.

Preventive medicine practitioners are engaged in teaching, research, administration, and the delivery of personal health services. Teachers are responsible for instilling an awareness and knowledge of prevention in all medical students, through curriculum developed and taught by departments of preventive and community medicine, or through integrated curriculum in other clinical fields. Non-physician public health personnel are also trained by preventive medicine specialists within both medical and public health school settings. Researchers in the field are engaged in a wide array of activities, ranging from the study of risk factors and distribution of disease (epidemiology) to the design and evaluation of programs to promote health and prevent disease. Physician administrators occupy key positions in public and private settings, such as state and local health departments, and health maintenance organizations.
organizations, where they are responsible for planning and implementing personal and community health services. Finally, practitioners deliver a variety of prevention services in the community setting, be it the workplace, school, or locality.

In 1979 Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention called for a second public health revolution in the United States. In conducting such a campaign, the importance of prevention and the role of the physician specialist in preventive medicine cannot be overstated. While the incidence of chronic diseases is on the rise, a growing body of knowledge must now be translated into practice. Apart from tremendous returns in human productivity and cost savings, an investment in prevention promises the potential of avoidance of needless human suffering.

PREVENTIVE MEDICINE AND MEDICAL EDUCATION

Our present model of medical education in the United States was largely shaped by a famous report, which included the following among its observations:

"...The practitioner deals with facts of two categories. Chemistry, physics, biology enable him to apprehend one set, he needs a different perspective and appreciative apparatus to deal with the other, subtle elements. Specific preparation is in this direction much more difficult; one must rely for the requisite insight and sympathy on a varied and enlarging cultural experience. Such enlargement of
the physician's horizon is otherwise important, for scientific progress has greatly modified his ethical responsibility. His relation was formerly to his patient - at most to his patient's family; and it was almost altogether remedial. The patient had something the matter with him; the doctor was called in to cure it. Payment of a fee ended the transaction. **But the physician's function is fast becoming social and preventive, rather than individual and curative.**

Upon him society relies to ascertain, and through measures essentially educational to enforce, the conditions that prevent disease and make positively for physical and moral well-being (emphasis added)...\(^1\)

To the intelligent and conscientious physician, a typhoid patient is not only a case, but a warning: his office is equally to heal the sick and to protect the well...\(^2\)

That was written in 1910, in the "Flexner Report" on Medical Education in the United States and Canada, a report which otherwise revolutioned the course of medical education, (in most respects.)

Fifteen years later, in a retrospective study of the 1910 report, Abraham Flexner wrote the following:

"Curiously enough, despite the increasing importance of preventive medicine, consequent
upon the advance of bacteriology and the
clearer knowledge of the futility or limi-
tations of many therapeutic measures, hygiene
continues to occupy a decidedly subordinate
position in the undergraduate curriculum;
and even incidental treatment of the pre-
ventive aspects of disease, though increasingly
common, is still far from general."

In 1932 a Commission on Medical Education of the Association
of American Medical Colleges (AAMC) made the following observation:

"Medical education should emphasize to
students the influences of urbanization, industrialization, and present day
conditions of living which are important
in the causation, treatment, and prevention
of disease...it is important that the
physician be acquainted with the social, economic, and other environmental factors
which have an influence on the individual
and his health."

In 1945, a Committee of the AAMC, formed to investigate
the teaching of preventive medicine and public health in medical
schools, again found "over shortcomings in this area. Among
other things, the report examined the importance of a distinct
department of preventive medicine, as well as the necessity
of increasing the proportion of medical school curriculums
devoted to prevention. Committee recommendations, which were
approved by the AAMC Executive Committee, included:
1. That the objective in each medical school be to provide a separate department of preventive medicine and public health and that for purposes of evaluating the organization for teaching preventive medicine and public health in any given school, the combination of preventive medicine and public health with some other department be regarded as unsatisfactory after July 1, 1948...

2. That there be set aside for the teaching schedule of the department of preventive medicine and public health, four percent of the total hours available in the curriculum of undergraduate medical education, and that after July 1, 1948, any medical school providing less than this amount be considered deficient in this regard...

5. That the various departments of the medical school in their respective fields, strive for the greatest practicable contribution in teaching the preventive aspects of disease; that in the highest degree possible, the teaching of preventive medicine and public health be integrated with clinical teaching.
and that the greater part of the instructional staff in the department of preventive medicine and public health be given hospital and clinic appointments."

In more recent years, both medical school curriculum and residency training in preventive medicine have been the subject of a number of studies. In 1975, a task force on Education and Training of Health Manpower for Prevention (National Conference on Preventive Medicine) found evidence of insufficient training of prevention within medical schools as well as shortages of specialty trained practitioners in the field. The task force recommended that federal health manpower legislation be enacted which would a) encourage a preventive emphasis on the basic curricula for health personnel b) provide career development support for training of teachers of prevention, and c) encourage projects to integrate prevention in programs to train primary health care personnel.

In 1978 these recommendations was confirmed by an Institute of Medicine report entitled A Manpower Policy for Primary Health Care. The report found that "...insufficient attention has been devoted to teaching and research in behavioral and social sciences, to the coordination and continuing of health care, and to clinical experience in
outpatient settings." It therefore recommended that

"Undergraduate medical education should provide students with a knowledge of epidemiology and aspects of behavioral and social sciences relevant to patient care."

Last year the first Surgeon General's Report on Health Promotion and Disease Prevention was issued. In addition to proposing a strategy for the integration of prevention within our health care system, it discussed at length the manpower implications of such a strategy. Again, evidence of future shortages in the field of preventive medicine was cited, as well as an insufficient emphasis on prevention in the training of physicians.

In December 1979, the Department of Health, Education, and Welfare submitted a report to Congress on community and public health personnel. Among other things, this report contained the following recommendation for action by the Federal government:

"Encourage and support the development of capabilities to provide training in health promotion, disease prevention, and other public health content in the curriculum of schools of medicine, osteopathy, dentistry, optometry, pharmacy, podiatry, veterinary medicine, and in schools offering preparation in the allied health programs."
Clearly there has been long-standing consensus that our health care system, particularly the educational system, should place greater emphasis on prevention. This consensus, however, is in stark contrast to current realities:

- Of the nation's 125 medical schools, at last count only 88 have departments of preventive medicine or its equivalent. A number of these are today threatened with closure due to shrinking budgets. Others have already been forced to close down since the last count was made.

- Federal support for generic special projects in preventive medicine within medical schools has dropped precipitously, from $1.1 million in FY 79 to zero in FY 80.

- It has been estimated that less than 1.5% of the total undergraduate medical curriculum is devoted to prevention, in contrast to the 4% recommended above by the AAACP.

- Of the 41 active accredited residency programs in preventive medicine, most have only a few funded positions.
available. For 1980-81, the mean was 6.6 funded positions per program.

- Although it has been estimated that 3,600 public health and general preventive medicine specialists will be needed in 1990 to meet demand, at the current rate at which they are being graduated from residency training programs, only 2,800 will be available in that year.

- Federal support for residency training has also declined in recent years. Whereas in 1973 $1.2 million was committed for this purpose, in 1978 and 1979 that level of support dropped to approximately $100,000. In FY 1980 approximately $275,000 was made available for this purpose.

Although preventive medicine needs have been repeatedly stressed they have seldom been met. The reasons are obviously complex. Chief among these has been the minimal commitment of financial resources within medical schools to departments of preventive medicine. Without these resources, existing departments, even where they do exist, are unable to develop the faculty, and hence the curriculum, for long-term impact upon medical student education. Without that impact, we are unable to recruit new physicians into the field, further
Then medical students do express an interest in specializing in preventive medicine after graduation, they are faced with uncertain and fluctuating prospects for support during their residency training years. Many residency program directors resort to turning away prospective residents because the resources simply do not exist to support them. Government stipend support is particularly important for the preventive medicine resident because stipends cannot be provided out of patient care revenues as with other "bedded" specialties. An extra year of post-MD academic training is required for board certification. Preventive medicine residents are not hospital based during the remainder of their training, thus program directors cannot offset training expenses by providing services for remuneration. Finally, after graduation preventive medicine specialists generally occupy positions in the public health sector at salary levels which are much less lucrative than private practice, making repayment of educational loans much more onerous.

The current state of affairs has therefore led to extreme shortages in many preventive medicine areas. In addition to impacting on the delivery of public health programs and prevention research, this has obviously had an impact on the status of prevention within the medical school curriculum, thereby completing a vicious cycle

Without the required
manpower pool, advancement will be impossible. Certainly if our health care system is to place greater emphasis on prevention, a change must be effected in the attitudes and behavior of medical students and physicians. Federal manpower policy must foster an integration of prevention principles within manpower education. The commitment must be made now to develop the necessary manpower base to carry out this mission.

In light of the foregoing, we are deeply disturbed that S 799 contains no provision for the support of either medical school departments or residency training in preventive medicine. Enactment of legislation without provision for training in prevention would, in fact, exacerbate the current situation since the authorities for existing support, under P.L. 94-484 although meager, would be eliminated entirely. At a point in time when prevention is being spoken of as the hope of the future in terms of health care cost containment, such an aura of events would translate to a severe diminution in the visibility of prevention within the medical school curriculum.

We are pleased that the Administration has recommended $3 million in new funding in this area for 1982, and would urge that S. 799 be amended to include specific program support for both departments and residency training in preventive medicine.

Confronting, as we do, a future of diminished resources which must be allocated among competing demands, it is important that we invest wisely with an eye to future returns. As health care costs have skyrocketed in recent years, alternative forms of cost containment have been examined. None offers more promise than prevention. Clearly, if the goal of our health care system is to
assure optimal health at minimal cost, disease prevention holds an important key. S. 799 will, therefore, be amended to provide the opportunity to unlock and apply knowledge which from as far back as 1910 has been generally recognized as being vital to our nation's health and well-being.

Footnotes

1 Medical Education in the United States and Canada. The Carnegie Foundation for the Advancement of Teaching, N.Y., N.Y., 1910, p. 26

2 Ibid., p. 68


4 Final Report of the Commission on Medical Education, Association of American Medical Colleges, N.Y., N.Y. 1932


6 A Manpower Policy for Primary Health Care, Institute of Medicine, Washington, D.C. 1978, pp. 77, 101

TESTIMONY OF THE AMERICAN MEDICAL STUDENT ASSOCIATION
SUBMITTED TO THE
U. S. SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES
ON
NATIONAL HEALTH SERVICE CORPS AMENDMENTS

Kathleen Jennison
National President
American Medical Student Association

John Cari
1st Year Medical Student
George Washington University
School of Medicine

Patrick S. Romano
2nd Year Medical Student
Georgetown University
School of Medicine

April 3, 1981
The American Medical Student Association is a National organization of 22,000 allopathic and osteopathic medical students at over 130 schools throughout the United States. We are a completely independent organization committed not only to representing our members, but also to advocating better health care for all Americans. We appreciate this opportunity to submit testimony on S.801, and thereby share the results of our members.

Various provisions of S.801 are of major concern to AMSA.

We feel that S.801 not only will impact on the availability of financial assistance to medical students from disadvantaged backgrounds, but more importantly, will substantially decrease the Health Manpower sources for millions of Americans residing in medically underserved areas.

Our specific areas of concern regarding S.801 are:

1.) geographic population and institutional criteria used in designation of Health Manpower shortage areas
2.) continuity of communication between federal and local health agencies regarding evaluation of health manpower needs within Health Manpower Shortage Areas
3.) Elimination of National Health Service Corps scholarships
4.) Expansion of the Independent Practice Option for National Health Service Corps scholarship recipients
Entities Eligible for Designation as HMSA's

A major concern of our organization is the change that S.801 would effect regarding the designation of Health Manpower Shortage Areas (HMSA's). The current language of H.R. 7203 states the definition of a HMSA as "(A) an area in an urban or rural area (which need not conform to the geographic boundaries of a political subdivision and which is a rational area for the delivery of health services) which the Secretary determines has a health manpower shortage, (B) a population group which the Secretary determines has such a shortage, or (C) a public or nonprofit private medical facility or other public facility which the Secretary determines has such a shortage." We believe that the deletion of Sections (B) and (C), as proposed in S.801, would be an error which would lead to much greater level of imprecision in designation of HMSAs.

As of December 31, 1980, 1921 sites had been designated as HMSAs. 1790 were geographically-based, 33 were population-based, and 48 were institutionally-based. Designations of population groups included the elderly, immigrant workers, Hispanic and Indochinese refugees, American Indian groups (outside areas traditionally served by the Indian Health Service), and medically indigent sub-populations (with income averages less than 200% of poverty level).

Designations that were institutionally-based included state prisons, public inpatient psychiatric facilities, institutions for the mentally retarded, and ambulatory care services within tertiary care institutions.

Elimination of population and institutional criteria for HMSA designations will impair the Secretary's ability to evaluate the true medical needs of a community. It will ignore such inherent factors of population subgroups as their inability to support physicians in a traditional fee-for-service scheme, cultural and language differences between the population and fee-for-service physicians who practice among other population groups in the same geographic area, and specific medical needs of a population that would not be addressed by private sector physicians due to lack of economic power. This Committee has heard previous testimony, especially from Dr. L. Harvey Estes, Jr., and Dr. Gregory Culver, documenting the widespread unmet medical needs that exist in urban areas despite the presence of tertiary care centers.
Soliciting Input From Local Organizations

The concern we have regarding the elimination of population and institution-based criteria for HMSA designation is far greater than expressed thus far, however. It has logically been argued until this time that such population groups would have adequate representation and participation in the processes that could culminate in designation as a HMSA. The mechanisms for their representation and participation have been the local Health Systems Agency (HSA) and the State Health Planning and Development Agency (SHPDA). It concerns us that the language of S.801 specifically excludes passages from Section 332 of the Public Health Service Act that provide for these avenues of local response: "The Secretary shall take into consideration the following:

"Sec.332(c) (1)(A) The recommendations of each health systems agency... (B) The recommendations of the State Health Planning and Development Agency.... (2) The recommendations of the Governor of each State in which the area, population group, medical facility, or other public facility under consideration for designation is in whole or part located."

The Administration's current plan to eliminate the HSAs and SHPDAs does not provide an alternative mechanism for local or regional input into the designation of HMSAs. It seems quite paradoxical to this organization that the stated philosophy of the Administration is decentralization of governmental responsibility for provision of medical services in an effort to make such systems more responsive, when the changes of language proposed in S.801 would do exactly the opposite. The changes would eliminate the mechanisms through which local governments may express their unique needs for financial, technical, and manpower support. In addition, specific changes involving the deletion of Sec. 332 (g) would eliminate individual recommendations to the Secretary for designation of an area, population, or institution as a HMSA.

Although the Administration seems to indicate that HSAs and SHPDAs are yet another instance of the federal government superimposing control on an already adequate state network, this is in many, if not most cases, a misconception.

In fact, information provided to Rep. Henry Waxman's staff regarding HR 7203 of the 96th Congress, demonstrated that in 1979, the federal government and HSA agreed on whether or not a HMSA classification was appropriate in 86% of all cases considered. In 12% of the cases, the federal government disapproved of establishment of a HMSA, while the HSA approved. In only 2% of the cases did the federal government approve designation of a HMSA opposing
the recommendation of the HSA. Thus, with regard to designation of specific geographic, population, or institutionally-based groups as HMSAs, an unusually high level of accord was achieved between federal and local agencies. In 1979, 641 out of 700 requests for HMSA designation were approved, 463 of which originated within the HSAs and 21 of which originated within SHPDAs. Since it is these agencies which present and reflect local needs and management of health care facilities within their jurisdiction, we find it surprising that the Administration seeks their elimination. This effort is particularly confusing in light of the fact that only a minority of states have integrated such agencies within their Departments of Health. Two examples of such programs are found in California and Pennsylvania. Some states have cooperative health statistics programs to assess current health care needs and predict future demand. Many states, however, will be left without a mechanism specifically designed to assess and initiate the implementation of changes in health care delivery.
National Health Service Corps Scholarship Program

The American Medical Student Association (AMSA) wishes to reaffirm its support for the National Health Service Corps Scholarship Program. We have ardently voiced this position since the 1960s, even before the official establishment of the NHSC by the Emergency Health Personnel Act Amendments of 1972, Public Law 92-585.

Despite increases in the total supply of health professionals in the United States, a severe maldistribution of health manpower was perceived nationwide. In 1975 this prompted Dr. Malcolm Todd, then president of the American Medical Association, to state before the House Committee on Interstate and Foreign Commerce that, "Unless we can come up with acceptable incentives for rural and inner-city practice, we're going to have the same (distribution) problem in 1980 that we do now."

The NHSC Scholarship Program was seen then, as it must be today, as the major attempt by the federal government to target physician manpower to those rural and inner-city areas feeling the manpower shortage most acutely. Contrary to the Graduate Medical Education National Advisory Committee (GEMENAC) report, the Carter Administration, in testimony before this committee in the 96th Congress, estimated that by 1990, over 16,000 additional physicians and mid-level professionals will be required to provide service in medically underserved communities and institutions: 7500 in rural areas, over 5000 in inner-cities, and over 3,500 in prisons and mental institutions. The Administration's intent to eliminate Corps scholarships for fiscal year 1982 does not reflect the unmitigating nature of the economic forces that have prevented fee-for-service physicians from establishing practices in such underserved areas.

AMSA recognizes various economic factors which have largely determined the geographic distribution patterns of physicians and other health personnel in the past. These have included expected levels of reimbursement and income and the economic ability of patients to utilize local medical facilities, made possible to a large extent by third-party payments. Other factors have frequently been mentioned as influencing practice location, including area of birth or previous residence, the locale of one's medical education, and social and cultural characteristics of the community in which establishment of a practice is considered.
These factors will continue to play a role in determining the geographic distribution of physicians in the future. However, their significance will be minimized by the economic realities that physicians who have incurred substantial debt will face. Our organization’s testimony on another bill currently before this Committee, S.799, provides an excellent perspective on those economic realities.

Based on current Treasury Bill rates, the physician entering practice subsequent to a three-year postgraduate course would have to repay $25,265 on a principal of $4,000, borrowed in annual increments of $1,000. Between 1968 and 1978, the average amount of student debt rose from $3,050 to $10,450, an increase of nearly 250 percent. Subsequent data provided by the Association of American Medical Colleges indicated that in 1978 and 1979, the number of graduating physicians having incurred debt increased to 76 percent of the total. The average level of that indebtedness of graduating students increased simultaneously to $15,800 in 1979. Needless to say, these trends have seriously concerned our organization as well as medical school administrators and faculty.

AMSA’s concerns regarding the changes made by provisions in S.801 center on its impact on the service aspect of the NHSC. A second issue of great concern, intricately tied to the first, is the effect that this bill will have on the future composition of medical school classes.

AMSA’s testimony on S.799 provides statistical documentation of the currently declining enrollment of minority groups as a percentage of the total. The NHSC Scholarship Program has specifically sought to correct this problem. Between academic years 1973-74 and 1977-78, a significant share of the 4,566 new scholarships awarded were provided to members of underrepresented groups.

While Black students comprised only 6.1 percent of total medical school students, 19.5 percent of NHSC scholarship recipients were black. While only 2.7 percent of medical students were of Hispanic origin, Hispanic students represented 3.9 percent of scholarship recipients. While American Indians totalled only 0.3 percent of all medical students, fully 1.2 percent of NHSC scholarship recipients were American Indians.

A major study done by the American Association of Medical Colleges (AAMC) found that 78.8% of black medical students are interested in a shortage-area practice versus only 45.6% of white students. The proportion of black
medical school graduates who eventually establish practices in underserved areas has been variously estimated at 50-75%. By eliminating the National Health Service Corps scholarship program, S.801 would discourage minority students from attending medical school when those students are the most likely to maintain practices in shortage areas.

Scholarship for First-Year Students of Exceptional Financial Need (EFN)

Through EFN, medical education has become a reality for many students from severely limited financial backgrounds. Under this program, scholarships are available to full-time students of medicine and other health professions. These scholarships cover all reasonable educational expenses, including a stipend of $485 per month.

In fiscal year 1981, 700 EFN scholarships were awarded to students of exceptional financial need, a majority of whom are from groups that are under-represented both in medical practice and in medical schools. This is a limited program, however, and only provides for first-year scholarships. The 700 EFN students who received scholarships for the current academic year were designated as priority candidates for National Health Service Corps scholarships provided in fiscal year 1982. Since maintenance of good academic standing at the institution in which the EFN recipient matriculated was the sole criterion for this priority classification, the elimination of new NHSC scholarship awards appears to violate a contractual obligation between the Secretary and the students. Many EFN recipients specifically chose to attend medical school based on the availability of these funds, and did not anticipate that they would be forced to incur substantial debts for their medical education. Since the recipients are from lower socio-economic backgrounds, requiring them to incur such debts precludes the possibility of their returning to an underserved area, which most probably could not support a traditional fee-for-service physician.
Independent Practice Option

AMSA would like to commend the expansion of the Independent Practice Option (IPO) as a means of fulfilling the service obligation of scholarship recipients. We feel it is essential that scholarship recipients be encouraged to practice in HMSAs following fulfillment of the obligatory service period. It must be noted, however, that the retention rate has greatly increased since 1973. A 1978 General Accounting Office report, Progress and Problems in Improving the Availability of Primary Care Providers in Underserved Areas, noted that the very low retention rate prior to 1976 was largely due to recruiting policies followed prior to fiscal year 1974. Until that time, the report stated, most Corps physicians had draft obligations, and many had not completed their residency training.

The provision in S.801, Sec. 338C, that would provide subsidies for physicians practicing under the IPO is commended by this organization. The sliding scale incentive during the four years of obligatory service apparently is intended to provide the physician with a larger subsidy during the initial stages of independent practice, while decreasing the amount consecutively over the service period.

We feel that the subsidy levels proposed in Sec. 338C would only provide sufficient supplements to the incomes of physicians practicing in Priority 3 or 4 HMSAs. These levels, therefore, would establish an inherent economic prejudice against Priority 1 and 2 areas in which the need for placement of a Corps provider is most appreciable. This would also contradict past policy of the NHSC which emphasized placement of Corps personnel first in Priority 1 and 2 areas. We profoundly disagree with the Administration's view that simple supply-side economics will eventually provide for adequate distribution of physicians in all communities, regardless of the socio-economic composition of the individual communities. Despite any future surplus of physicians that may occur, the economic realities of independent practice make it far more suitable for Priority 3 or 4 areas. We must stress that this argument is based solely from a hypothetical economic perspective and does not reflect any change in our position that most areas which have traditionally been unable to support fee-for-service physicians will continue to be unable to do so. This is especially so, in light of the spiralling costs of both medical education and health care. It is essential that adequate health care be provided for such
AMSA opposes amendments to Section 338 (F) that would provide for the conversion of NHSC scholarship contracts to loan agreements under which the recipient is relieved of any service obligation. Rather, we would ardently urge that service contingent loan forgiveness programs be provided for physicians entering into independent practices in health manpower shortage areas, as designated under Section 332. Attempts to make rates of repayment more favorable to students, still falls short of eliminating the need for the physician to generate income within a fee-for-service scheme above a level necessary for personal support. Similar repayment schemes, concluded a 1975 GAO report, did not have a significant impact on influencing medical school graduates to locate in shortage areas. It is our contention that if the increased level of indebtedness has stimulated significant interest in such programs, that Priority I and 2 areas will, once again, be subject to economic forces which provide physicians with a greater likelihood of success in less underserved areas.

It is our firm belief that the current system of financing medical education requires most individuals to incur dramatically increasing levels of personal debt. This, in turn, makes it economically impossible for all but a small number of students to consider establishing practices in underserved areas.

On behalf of our membership, we would like to express our sincere appreciation for this opportunity to submit testimony on S.801. We look forward to working with this Committee in providing quality, cost-effective health care for all Americans.
American Academy of Pediatrics

Testimony

submitted to the

Committee on Labor and Human Resources

for the

Health Professions Educational Assistance and Nurse Training Act of 1981

S 799

April 8, 1981
Mr. Chaitman, this testimony is submitted for inclusion in the hearing record on the Health Professions Educational Assistance and Nurse Training Act of 1981 (S. 799), which proposes to amend Titles VII and VIII of the Public Health Service Act. Policies and recommendations contained herein are those of the American Academy of Pediatrics, an international professional association whose more than 22,000 member physicians are dedicated to the well-being of infants, children and adolescents.

That commitment ever in mind, there are thus several aspects of S. 799 which warrant comment, foremost among them:

- **Training Grants.** It is the considered view of the Academy that especially during a period of scarce resources, the primary care specialties should not receive arbitrarily disproportionate federal assistance. Nor should general pediatrics and general internal medicine be lumped together in their funding arrangements. We urge that such impediments in the legislation at issue be removed. Specifically, we propose that separate and distinct grants from the Department of Health and Human Services be made to 1) plan, develop and operate approved residency training programs in general pediatrics, 2) plan, develop and operate teaching programs for medical students in general pediatrics; and 3) plan, develop and operate programs for the training of physicians who plan to teach general pediatrics.

Total authorizations for the above mentioned initiatives should be set at not less than $15 million during each of the next three fiscal years as, in our judgment, that is the minimum sufficient to meet basic maternal and child health interests. The relative availability of funds for research and training in the 1960s promoted the growth of subspecialization. The influence of these subspecialties and of the service funds associated with them was an important factor in bringing about emphasis on residency training in inpatient settings at the expense of training in ambulatory care. Traditionally, departments of surgery and medicine, as compared to departments of pediatrics, have received disproportionate levels of hospital and medical school support because of the revenue generated from their hospitalized patients. Lower rates of hospitalization and greater volume of ambulatory care have been contributing factors and make it very difficult for general pediatric training programs.

Turning for a moment to the proposed bill's Student Assistance provisions, suffice to reiterate established Academy views. Medical students should be limited to an aggregate $80,000 in federally insured loans for their education, including tuition, fees and reasonable living expenses. Interest rates
should be fair and variable in regard to need. Repayment on principal and interest should be deferred during medical school and length of residency, service in the armed forces, Peace Corps or National Health Service Corps. Repayment ought to be permitted over 10-15 years and begin 9-12 months after graduation.

The Academy also favors partial forgiveness of loan principal and interest in return for minimum of two years service in the NHSC or in a shortage area: 15 percent for one year; 20 percent each for second and third year; and 25 percent for the fourth year. The amount of debt that can be paid in this fashion is 80 percent of the principal. Of course, in cases of death, permanent disability or the like, the loan should be totally discharged.

With respect to Enrollment Commitments, the Academy applauds the provision of this legislation that aims to release recipients of grants, loan guarantees and interest subsidies (such as medical schools) from any contractual obligation to fulfill related enrollment increases. It is an effort long overdue.

But there are other efforts equally overdue -- efforts not addressed in this bill but which must be addressed soon if the government is genuinely serious about seeking to deliver adequate, cost-effective health care to all Americans. Clearly today, advances in prevention and control of traditional acute and infectious diseases permit the pediatrician to devote more time and attention to what have been relatively neglected areas -- chronic disease; the increasing number of behavioral problems of childhood and adolescence; and what we call biosocial problems -- those health problems socially induced or complicated by social and environmental factors. Because coping with the challenges of modern society will cause an increase in the incidence of biosocial problems, modern pediatric training must be directed more specifically to the treatment of those problems.

The content of experience in biosocial pediatrics should include normal and abnormal growth and development, basic behavioral science information, reactions of children of various ages to illness, education for healthy lifestyles and familiarity with the principal literature regarding child development. Residents should also learn about the nature of psychologic and achievement tests, the principal psychologic therapies, the principles of psychopharmacology, and the techniques of family counseling. They should be familiar
with the development characteristics of the parent-child interaction, child care practices and dysfunctions in parenting.

Residents should learn to manage such family crises as death and bereavement, suicide attempts, sexual assault, accidents, child abuse, birth of a defective child, separation, divorce, abortion, and a wide range of common behavioral disorders. Furthermore, they should be able to work with the family to resolve problems in parenting, well child care, adoption/foster care, school adjustment, and learning. They should be familiar with the role of the pediatrician in the management of disease states in which psychological elements play an etiologic or contributory role.

There has been also a dramatic increase in our recognition of child health problems associated with poverty, a deteriorating physical environment, changing family structures and other social and psychological factors. There is growing evidence that encouragement of health promotion and changes in lifestyle may become more important than medical intervention in affecting morbidity and mortality. The pediatric community recognizes that pediatric education must respond to these changes in child health needs. We ask Congress to follow suit by authorizing the funds to allow us to develop and maintain an educational program relevant to those needs.

Pediatric programs have, in fact, begun to evidence a shift in emphasis toward treatment of biosocial disorders through a strengthening of ambulatory training. But the shift has been slight, and the bulk of pediatric training still takes place in hospital settings even though the burden of care for children with such problems remains largely in the community. We simply cannot continue to all but ignore the relationship between biosocial and developmental disorders such as early family adjustment difficulties and school failure and adverse health effects of those problems. A recognition of that relationship mandates pediatric education which emphasizes the processes of human growth and development and their relationship to health and disease.

Because pediatrics is a primary care discipline, and because most pediatric problems are best handled on an outpatient basis, pediatric education should utilize the skills and demonstrate the commitment to personal, continuous care practiced by the general pediatrician. The current preponderance of hospital-based teaching in the pediatric curriculum is one indication of the dissonance between current
pediatric education and the health needs of children. By
the completion of formal postgraduate training, most
pediatricians are extraordinarily skilled at diagnosing and
managing illness, especially that of hospitalized children.
As a consequence of concentrating pediatric resident education
on illness, many if not most pediatric residents have only a
rudimentary knowledge of the concept of normality and partic-
ularly of the variability surrounding the "average" with
regard to child development and health status.

In the future, pediatricians will be called upon more and
more to manage children with emotional disturbances, learning
disabilities, chronic illnesses and other problems of a
developmental, psychological and social nature. They will
provide increased amounts of health care to adolescents.
They will be expected to manage their practices efficiently,
collaborate with other members of the health care team and use
community resources to enhance the effectiveness of services
to children and their families.

The ambulatory experience responds to these needs by developing
skills in counseling, anticipatory guidance, developmental
appraisal, referral, consultation, use of screening procedures
and practice management. Skills relating to the care of
children with chronic illnesses and handicapping conditions
are particularly important. Finally, the ability to coordinate
services, plan comprehensive care and mobilize available
community resources is essential to provide ambulatory care
of high quality. To accomplish all this, there remains a
distinct need for faculty development and greater support
for research related to ambulatory care. **Full-time faculty
members in ambulatory pediatrics need formal training in
the discipline. It is no longer acceptable to assume that
any pediatrician can teach ambulatory pediatrics.**

Unfortunately, the pediatric community finds itself in the
unenviable position of responding to a dramatic shift in
educational need in an atmosphere of fiscal restraint. More-
over, increasingly larger percentages of medical school funds
are being devoted to the delivery of patient care, a develop-
ment which we recognize is a justified response to the public
demand for quality health but one which means that other
sources of support are necessary if service programs in
educational centers are to improve the teaching environment --
particularly through the development of model ambulatory care
programs. An appropriate program of grants for general
pediatric training could respond to this need by earmarking
funds for the development of ambulatory pediatric models. We
would reiterate, also, that the Academy does not seek additional pediatric residency positions but, rather, the means to improve the quality of existing residency training and provide the necessary redirection of content.

The need for federal support of ambulatory training programs derives also from the present pattern of reimbursement for pediatric services by third party payors. The funds used to support pediatric residencies are pooled from many sources, including Medicaid, other patient-care revenues, state appropriations and grants. Current reimbursement formulas directly and indirectly detract from the importance of ambulatory care and diminish pediatric department operating budgets by imposing restrictions on full reimbursement for ambulatory care. Medicaid reimburses well below the actual cost of providing ambulatory care in a teaching setting, and many private insurance policies do not cover ambulatory care. Sixty-five percent of families have no insurance covering office visits to a physician. Furthermore, procedure-dominated reimbursement systems tend to discriminate against the provision of preventive services, which constitute a large proportion of good pediatric practice. Simply stated, pediatric residency programs cannot further expand into ambulatory teaching without independent support. Only separate and dedicated federal funding can accomplish this teaching and training objective.

We believe increased financial support channeled into faculty salaries to be the most effective use of increased funding. Current circumstances find medical school faculty commonly forced to "earn their keep" by delivering medical care during non-teaching hours. This obviously detracts from teaching time and effectiveness. In the pediatric field, this problem is compounded by the generally longer hours required of practicing pediatricians and the above-mentioned disproportionate financial stress on pediatric departments. A more substantial federal support program would free pediatricians on medical school faculties to do their job, namely, to teach pediatrics to the best of their ability.

As the emphasis on teaching ambulatory care increases, pediatric departments will need to cope with the serious shortages of faculty to teach in such areas as adolescent medicine, learning disabilities, care of the chronically ill, ambulatory care, community pediatrics and the behavioral sciences. Faculty development in these areas will require financial support for fellowship, and research positions in these disciplines. This means that pediatric education, which is already costly,
will grow even more so if it responds to the obvious health needs of our nation's children. In the past we have been much slower to finance ambulatory and preventive care than catastrophic or tertiary care. However, it is increasingly clear that economical and effective health care depends much more on the former than the latter. We ask you to recognize this situation in this and future health manpower funding proposals.

Finally, the American Academy of Pediatrics would like to offer its services to aid in implementing some of the suggestions made above.
Honorable Orrin G. Hatch  
Chairman  
Committee on Labor and Human Resources  
United States Senate  
Washington, D.C. 20510

Dear Senator Hatch:

The Association of American Medical Colleges (AAMC) would like to take this opportunity to express its views on S.801, "The National Health Service Corps Amendments of 1981" and requests that this statement be entered into the hearing record.

The AAMC serves as the national voice for the 126 U.S. accredited medical schools and their students; more than 400 of the major teaching hospitals; and over 70 academic and professional societies whose members are deeply engaged in teaching, research and in patient care. As such, the AAMC is an interested party in the development of legislation to revise the National Health Service Corps and its feeder mechanism, the Scholarship Program.

National Health Service Corps (NHSC) Program

The AAMC---a longstanding advocate of the NHSC as an effective and socially desirable instrument to improve the specialty and geographic distribution of physicians---has become progressively more concerned that the costs of this Program will drain large amounts of funding from the increasingly scarce resources available for other vital programs. There has been a growing conviction that the NHSC has become an unnecessarily expensive solution to the maldistribution problems in the Nation. There has also been concern that these problems no longer demand efforts as strenuous as in the past. These assertions should not be interpreted to mean that the AAMC believes that the Federal Government has no responsibility to assist in correcting the maldistribution of health professionals or indeed that these maldistributions no longer exist. Rather, it is an expression of the Association's concern that the Corps, in its present form, does not appear to be

April 22, 1981
the most cost-effective mechanism through which to address these problems and that in light of the amelioration of these problems---in part attributable to the NHSC---the magnitude of current needs now merits reevaluation. For these reasons, the Association believes that further growth of the Corps should not be permitted.

While the Association is pleased that S.801 provides that the Corps be maintained at a steady state, it hopes that members of the Committee recognize the necessity of reassessing the country's needs and exploring less costly means of meeting them. The Association would suggest that the Committee consider expanding the popular loan forgiveness provision in the Health Professions Student Loan (HPSL) Program---which has been oversubscribed---to all Federal loans. Funding such a program at a modest level would provide the opportunity to test the viability of loan forgiveness in current economic circumstances as a less expensive complement or alternative to the National Health Service Corps Program.

Finally, the Association would like to take this opportunity to express its support for the proposals advocated by this bill to encourage use of the Program's Private Practice Option, as one means of alleviating the burgeoning costs of the Corps and meeting the needs of underserved area. Specifically, the Association endorses those provisions of S.801 that would:

- Require the Secretary to provide subsidies for those individuals who choose this option.
- Grant the Secretary the authority to negotiate the conversion of the services obligation of individuals electing independent practice into a loan with favorable interest rates and repayment terms.

National Health Service Corps (NHSC) Scholarship Program

Consonant with the view that the Corps Service Program has grown too costly, the AAMC believes that its feeder mechanism, the Scholarship Program, should be scaled down accordingly and therefore supports the bill's intent to provide only continuing awards. The Association also strongly endorses those provisions of the bill that would grant the Secretary the discretionary authority to convert a student's service obligation into a 7% loan. The AAMC believes that permitting the Secretary such flexibility is essential in terms of both the public interest and sound economic policy.
Finally, the Association would like to strongly emphasize that, although not originally intended as such, the NHSC Scholarship Program has proven to be a necessary component of the student aid structure available to medical students. In academic year 1979-1980, 4,401 medical students received approximately $49.8 million in aid under this Program—more than half of the funds appropriated. Thus, it has proven to be a substantial form of aid and the impact of the loss of these funds must be considered. Therefore, restoration of funds in this amount through some more generous authorizations for other student aid programs is vital to the continuation of adequate student assistance.

If I or members of my staff can supply you with further information, please don’t hesitate to contact me.

Sincerely,

John A. D. Cooper, M.D., Ph.D.
SUMMARY STATEMENT
of the
AMERICAN MEDICAL ASSOCIATION
before the
Committee on Labor and Human Resources
United States Senate

RE: Health Manpower Legislation - S. 799;
and the
National Health Service Corps - S. 801

April 21, 1981

This summary will briefly set out key points of S. 799 and S. 801
and the AMA position on those points.

S. 799 - "Health Professions Educational Assistance and Nurse Training
Act of 1981"

Noninterference with Administration of Institutions (Section 107). The government will not have the authority to direct, supervise or control
the personnel, curriculum, administration or instruction at health educa-
tion institutions. SUPPORT.

Health Professions Data (Section 107). The Secretary will be authorized
to collect data, including information on practice characteristics, on health
professional personnel, and make projections on the future needs of health
personnel. The refocusing of the data collection to the broad range of
health personnel is supported. However, data on practice characteristics
should not be collected, and studies concerning future health personnel
needs should be continued by non-government organisations, using a variety
of models.

Construction Assistance (Sections 121, 122, and 123). Loan guarantees
and interest subsidies will be available to nonprofit private entities, and
enrollment increases tied to construction funds will be repealed. The ANA
endorses these two provisions. However, funds should be directed toward
renovation and modernization of existing facilities. Funds should also be
available to public educational entities for modernization and renovation
projects.

Italicized type indicates the AMA position.
Student Assistance (Part C). Changes in the Health Education Assistance Loan (HEAL) program:
- Consolidate loans with those made under the Higher Education Act of 1965. SUPPORT.
- Increase maximum annual HEAL loan to $20,000 for medical students ($80,000 maximum cumulative total). SUPPORT.
- Defer payment of interest for an additional year (currently three years). SUPPORT.
- Authorize a graduated repayment plan. SUPPORT.
- Repeal class size restrictions tied to the percentage of the class receiving HEAL loans. SUPPORT.
- Allow HEAL monies to be used for living expenses. SUPPORT.

Changes in the Health Professions Student Loan (HPSL) program:
- Set interest rates at 9%. SUPPORT.
- Authorize no additional HPSL funding. OPPOSE.

Repeal of General Institutional Support (Section 153). This type of support should be phased-out and should not be abruptly discontinued.

Repeal of Exceptional Financial Need Scholarships (Section 153). OPPOSE. A wide range of educational financing mechanisms should be available.

Special Project Grants (Part D).
- Family Medicine (Grants to schools to aid academic administrative units). SUPPORT.
- Support services in underserved areas. SUPPORT.
- Physical and Rehabilitative Medicine. SUPPORT.
- Training in Family Medicine, General Internal Medicine, and General Pediatrics. SUPPORT.

Financial Distress Grants (Section 166). A two part program with advanced grants available for certain institutions. SUPPORT. However, the AMA recommends modifications that would extend the authorized funding period and allow for multi-year grants, in conformity with the AMA proposed bill.

S. 801 - "National Health Service Corps Amendments of 1981"

Designation of HMSSAs (Section 3). Factors for designating an HMSSA:
- Area cannot be reasonably accessible to an adequately served area. SUPPORT.
- The likelihood that the demand for care will not be met within two years. SUPPORT.
- Comments of local medical and professional societies. SUPPORT. However, medical societies should have approval authority, with further authority in the Secretary to override any arbitrary society action.
Assignment of Corps Personnel (Section 4).
Assignments made after a determination of need by the Secretary. SUPPORT. Local medical and professional societies will be allowed to submit comments. SUPPORT. However, medical societies should have approval authority, with further authority in the Secretary to override any arbitrary society action.

Provision of Services by NMS Members (Section 6). Services are to be provided in cooperation with and not in competition with other providers in the NMSA. SUPPORT.

Scholarship Program (Section 10).
Continuation of existing scholarships. SUPPORT. No new scholarships. SUPPORT. Independent Practice Option. SUPPORT. Mandatory acceptance of assignment under the Independent Practice Option. OPPOSE. Service Obligation Conversion. SUPPORT. the authority to negotiate service obligation change, but OPPOSE granting the Secretary unilateral authority to convert new scholarships into a loan.

National Health Service Corps Field Strength. The field strength of the Corps should not exceed the needs of shortage areas designated 0-1 and 0-2 under current designation criteria.
The American Medical Association takes this opportunity to submit comments on S. 799, the "Health Professions Educational and Nurse Training Act of 1981," and S. 801, the "National Health Service Corps Amendments of 1981." These comments will be set out in two sections. The first will present the general views of the AMA on the issues of institutional support, financial aid, and the National Health Service Corps, and the second section will comment upon specific elements of S. 799 and S. 801.

GENERAL COMMENTS

The AMA views two factors as being singularly important to assuring the strength of medical education. First, the institutions themselves must have sufficient resources to provide education of high quality; and second, the students who wish to pursue careers in health
professions must have the resources to meet the costs of this education. In order to accomplish these goals, we believe that it is in the best interests of medical schools, the government, the medical profession, and especially patients, that the relationship between government and medicine be as constructive as possible. In the end, our paramount concern and goal must be the provision of medical care of high quality.

**Institutional Support**

The separate legislation passed in the House and the Senate last year and S. 799, currently before this Committee, offer aid to health professions schools through a variety of resources. The AMA strongly endorses the concept of having multiple sources for aiding medical schools. In addition to the aid which has been available through federal programs under the Public Health Service Act, state aid to many health professions educational institutions, and the support of individuals, foundations, and industry and business have proven to be invaluable.

General institutional support has been an investment of public funds that has successfully aided in improving the quality and availability of medical education and medical care. The expenditure of these grants has the advantage of allowing the schools to have the flexibility to meet their individual needs and the needs of the community they serve. However, the AMA recognizes that even these expenditures must be reviewed in light of competing priorities for limited resources.

Special project grants have also proven to be beneficial. In authorizing grant monies, the government has succeeded in furthering important goals, such as the bolstering of primary medical care in the United States. The
availability of special project grants has benefited those institutions that have availed themselves of this source of funds.

Funds for aiding institutions in financial distress and for the modernization of existing facilities have an immeasurable value as a means of maintaining the quality of medical education. Without resources for these purposes, the ability of some medical schools to graduate a well prepared class of young physicians would diminish. Such funding should take precedence over future federal investments in the start-up of new medical schools. However, in supporting assistance for modernization of existing facilities and for institutions in financial distress, the AMA recognizes that such funds cannot act as a permanent crutch for schools in need of modernization or in financial distress.

In light of the growing trend for elimination of general institutional support for medical schools, as exemplified by S. 799, it is our view that the medical community and the medical schools must diversify further sources of financial support for medical education. While the federal role has been significant in the last decade, medical education has also enjoyed support from various other sectors of society. It will now be incumbent to increase this latter base of support to assist in meeting funding requirements.

Student Assistance

The cost of financing a medical education can only be described as staggering. Annual tuition figures in excess of $10,000 are becoming commonplace, and we are deeply concerned over the financial burdens being placed on students and the impact of high tuition upon new practitioners.
The AMA believes that access to medical education must not be allowed to become limited on the basis of income. To prevent this, student assistance must be of the highest priority for government action. Financial aid must be available to make the choice of medicine as a career a viable one for qualified applicants. The AMA is committed to seeing that financial resources are available to qualified aspiring health professionals.

We believe that an effective and appropriate mechanism for government participation in medical education is a strengthened program of guaranteed loans. Such a guarantee program would encourage private lenders to make money available to students and serve to minimize the strain on government resources. The AMA recommends that repayment of loans under such a program be deferred during the period of medical school training, as well as through residency training, when income limitations might pose a hardship in meeting loan obligations. Consideration should also be given to interest subsidies for the length of training, and to setting the rate of repayment to the ability of the individual to repay the principal of the loan. Loan forgiveness arrangements, at realistic rates of forgiveness, entered into following completion of medical training when the young physician can better assess the various available alternatives, could encourage service in areas lacking adequate medical services. This would result in the location of physicians in such areas who are more likely to desire to serve in the area following fulfillment of their payback obligation.

While the AMA strongly endorses the guaranteed loan mechanism, we believe that additional mechanisms can, and should be available to help finance medical education. For example, service arrangements, such as the
military scholarship programs and financial grants-in-aid for able but economically disadvantaged students should be available. Furthermore, state aid to students in health professions educational institutions must be encouraged.

Nurse Training

On a daily basis, physicians providing medical care to patients in hospitals are working under a handicap of a shortage of qualified nursing staff. The AMA supports continued federal assistance to programs of basic nurse training in order to meet the nation's nursing needs. This assistance should be provided to both the training institution and to the nursing student.

National Health Service Corps (NHSC)

The goal of the Corps should be to place assignees into areas of legitimate need with the expectation that a long-term commitment for serving the community will evolve. In this fashion, the NHSC should be able to fulfill its function of making medical and other health care available to an underserved population. Accordingly, NHSC service should be under circumstances approximating and compatible with private practice in the community. The AMA also supports the private practice option where such service is consistent and compatible with private practice modes in the community. The field strength of the Corps should not exceed the needs of the shortage areas designated 0-1 and 0-2 under current designation criteria.
Data Collection

S. 799 would amend the section of the Public Health Service Act that authorizes the Secretary "to collect, compile, and analyze data on health professions personnel." As amended, the Secretary would not be mandated to establish a uniform health professions data reporting system, and the data would not center on medical and dental practice. In addition, the Secretary will study the need for and supply of health personnel and provide "projections relating to such need and supply in the future."

The AMA believes that the data collection segment of the existing law should be modified, and we therefore endorse the proposal to repeal authority to establish a data reporting system that focuses on physicians and dentists. However, we are concerned about the possibilities of collecting data on "practice characteristics" and using such data to make projections on the need for health professionals in the future. The AMA has developed draft legislation (attached) to address this.

The mandate to collect data on practice characteristics should be deleted from the law. Such specific data, when coupled with the other information collected, could serve to identify individual practitioners. The AMA is concerned with the possibility that information may be improperly disclosed.

We are also concerned that the Secretary's authority to make projections on the future needs of health personnel could have the potential of shaping the future directions in medical education and the education of other health care personnel by using a single study as the basis for planning. The Graduate Medical Education National Advisory Committee (GME/NAC) is an example
of an organization that has set out to project future medical practitioner needs. GHENAC has completed its study, but its methodologies and findings are highly controversial and have been widely criticized. The AMA strongly recommends that studies concerning the need and supply of health care personnel be continued in the most cost-efficient manner by non-governmental organizations, using a variety of models and assumptions based on data and analyses of trends.

Construction Funds

The proposed legislation makes construction funds available in the form of loan guarantees and interest subsidies to assist nonprofit private entities to carry out approved construction projects. S. 799 does not authorize any funds for grants to public or other nonprofit institutions. Additionally, the statutory enrollment increases that are tied to construction funds will be repealed.

The AMA supports the provision that would delete the enrollment increase requirement that is currently tied to receipt of construction funds. However, we are concerned over the limited nature of the entities eligible to receive construction funds under the proposal before the committee. We would recommend that such funds be available to more than just nonprofit private entities, and that these funds be limited in use to renovation and modernization of existing facilities.

The AMA recognizes that funds for construction assistance are limited, and it is our belief that expending these monies for construction of new medical schools would not be appropriate at this time. Many medical schools
need to upgrade their facilities, and we believe that any funds allocated for construction assistance would generate the greatest return if they are funneled toward modernization and renovation of existing facilities.

General Institutional Support

Unlike H.R. 2004, the health manpower bill currently under consideration in the House, and the health manpower legislation that passed in both the House and the Senate last year, S. 799 would abruptly end general institutional support.

As we have already pointed out, general institutional support of medical schools has served the public interest by aiding and improving the quality and availability of medical education and medical care. While the amount that an institution can receive under this program is not great, these funds are flexible and enable medical faculties to focus their use on their institution's needs and the needs of the community. We are concerned that an abrupt discontinuation of these funds will force institutions to retrench some of their essential programs, particularly in the services basic to medical practice, and to look to other government programs or to increased tuition as a means to recapture these funds.

The AMA recommends that the general institutional support program be phased-out. Such a phase-out would allow for those institutions that rely on these monies time to develop other sources of funds while continuing without the substantial disruption that would be caused by the total elimination of the program.
Financial Distress Grants

The bill before the committee provides for a dual program for institutions in financial distress. The first program would allow institutions that have not received funds under the existing program for the past three years to enter into grants or contracts with the Secretary to help them meet costs, accreditation requirements, or carry out operational reforms. The second program would establish "advanced financial distress grants" for Schools of Medicine, Osteopathy, Dentistry, Optometry, Podiatry, Veterinary Medicine or Pharmacy if those individual institutions have previously received financial distress funds for the past three years. Institutions eligible for advanced grants may receive these funds for up to five years and are obligated to find additional nonfederal support and to work to eliminate the need for further federal support.

The AMA believes that financial distress grants can serve a valuable need in aiding institutions whose financial problems have reached crisis proportions. The financial problems of some schools, particularly those schools enrolling a large proportion of minority students, are deeply rooted and do not appear susceptible to short-term solutions. For this reason, the AMA has developed draft legislation (attached) to address this need. We do support the intent of the financial distress provisions of S. 799. However, the AMA is concerned over the fact that the bill only authorizes funds for this program through FY 1984. We would recommend that the program be authorized for five years, and that multi-year grant authority with advanced funding be available so that the purpose of these grants can be fulfilled. Finally, we are concerned over the fact that the program is only authorized...
$9 million annually, and that this may prove inadequate. As structured, financial distress grants would only be available for a limited period of time and institutions receiving these monies would have to work to create solvent programs. Failure to do so would result in the ultimate failure of the institution. It is our view that if an institution is worthy of receiving a financial distress grant, there should be adequate funds to aid the institution in becoming fiscally sound.

Student Assistance

S. 799 would continue the Health Education Assistance Loan (HEAL) program and allow loans issued under this program to be consolidated with those issued under the Higher Education Act of 1965. Additionally, restrictions on the percentage of a class receiving HEAL loans will be repealed, and funds received under this program will be allowed to be used for living expenses. Payment of interest will be deferred for an additional year, and students of medicine will be able to borrow up to $80,000 with an annual limitation of $20,000. Finally, borrowers under this program may elect a graduated payment plan with smaller initial payments upon completion of training. The bill would also discontinue additional funding for the Health Professional Student Loan (HPSL) program, with the program continuing to use funds that exist in the revolving fund. HPSL interest rates will be set at 9% annually. S. 799 would also repeal the Exceptional Financial Need scholarship program.

As stated above, the availability of financial aid for medical students is of paramount importance. With medical school tuition rising,
and with institutions looking for additional sources of revenue, a limitation on the availability of financial aid could have the effect of creating medical school classes that are not representative of the population as a whole. Students entering medical school should have the opportunity to apply for financial assistance from a variety of programs. We note with concern that existing federal programs would be severely limited under the bill before this committee, and could have the effect of precluding qualified applicants from attending medical school.

Some of the changes in the HEAL program that are proposed in S. 799 are overdue, and we endorse them as practical actions that can only benefit loan recipients. The proposed graduated payment plan, the additional deferral of interest payments, the authority to use HEAL money for living expenses, the ability to consolidate HEAL loans with Higher Education Act loans, the repeal of class restrictions coupled with HEAL loans, and the increase in the amount students can borrow under the HEAL program all represent positive steps. These actions will allow for more flexibility in the HEAL program and AMA supports them.

The HEAL program is continued with $100 million being authorized on an annual basis for FYs 1982, 1983, 1984, 1985, and 1986. While we laud the fact that this program is being continued and that funds will be available through 1986, the total amount being authorized for the next five fiscal years will still fall $20 million short of the authorized funding level for FY 1980. Coupling this with the reductions proposed for the HPST program and the Exceptional Financial Need program, the very real possibility exists that medical students will be facing a financial crisis in the immediate future. We urge the committee to closely examine
the programs for student assistance before any cuts in the programs are made. Additionally, we would recommend that a program for student assistance, providing for flexibility in funding and career choice, along the lines that we have discussed in the earlier portion of this statement, be initiated.

National Health Service Corps

S. 801 would make major changes in the basic structure of the National Health Service Corps program. Under this bill, health manpower shortage areas will be redefined so as to include only geographic areas, and in the designation process the Secretary of HHS will consider the ratio of available health manpower, access to care, and the likelihood that the demand for care will not be met within the next two years. In making designations, local medical and professional societies will be given an opportunity to comment on the proposed designation. Assignments of Corps personnel to the shortage areas will only be made after a determination of need by the Secretary, and after local medical and professional societies had been afforded an opportunity to comment on assignments.

The NHSC scholarship program would also be the subject of significant alterations under S. 801. First, the program would be shifted to Title III of the Public Health Service Act in recognition of the fact that the NHSC is designed to offer medical services in areas of legitimate need, and is not designed to be primarily a financial assistance program for medical students. Under the bill before this committee, scholarship contracts made in FY 1982 would provide the Secretary the option to convert the service contract into a 7% loan obligation upon completion of training.
with the service obligation being eliminated. The Secretary would also have authority to negotiate similar modifications with pre-FY 1982 scholarship recipients, and the Secretary would be able to establish lower interest rates for those individuals who establish independent practice in a shortage area. The scholarship program would be continued with funding adequate to only continue existing scholarships, with no new scholarships being offered. Finally, the independent practice option would be encouraged.

The AMA has recently completed a lengthy analysis of the National Health Service Corps program. The AMA is in agreement with the intent of the provisions of S. 801 that would authorize greater medical community input into the designation and placement of Corps personnel. We also agree with the proposal that would limit NHSC scholarships to those who have existing scholarships. However, the provisions of S. 801 should be modified so that the goal of the Corps, i.e., long-term community service, will be accomplished.

The designation and staffing process should be reformed to specifically authorize approval by local and state medical societies prior to the designation of a shortage area and the assignment of Corps personnel. Of course, the Secretary should have the authority to override a medical society decision in the unlikely event of an arbitrary withholding of approval. With such provisions, as provided in earlier law, areas with manpower needs would more likely be served on a long-term basis.

The new provision in the independent practice option that would obligate physicians who elect this option to accept Medicare assignment or be found in breach of their contract would most certainly be counterproductive. As a matter of fact, to attach such conditions under the label of "independent"
practice is at best an anomaly. A provision mandating the physician to accept assignments (generally a reduced fee) in all cases regardless of individual circumstances does not create a practice environment that is conducive for the physician to create a long-term practice. We are concerned that a requirement for acceptance of Medicare assignment would actually discourage the desire to fulfill a service obligation through the private practice mode, when in fact, encouragement should be provided. Incentives for long-term private practice are needed, and mandatory acceptance of Medicare assignments would not lead to the development of a viable practice.

The AMA would recommend that the buy-out option provision be altered to authorize the Secretary to only negotiate a buy-out option with NHSC scholarship recipients. The provision included in S. 801 that would authorize the Secretary the option unilaterally to convert a scholarship into a 7% loan and eliminate the service obligation does a disservice to the scholarship recipient. Those individuals in the NHSC pipeline desiring to continue their Corps scholarship would discover that their obligations could be radically changed upon completion of training. Under the proposed change, an individual who truly desires to serve in an underserved area as a Corps member could find him or herself with an obligation to pay off a substantial loan obligation. Ideally, the Secretary should only have the authority to negotiate such a contract modification with all NHSC scholarship recipients.

CONCLUSION

The American Medical Association would be pleased to work with the committee and its staff in the development of health manpower legislation.
We are well aware of the need to keep the federal budget within reasonable limits, and the necessity to balance this need with the government’s role in health manpower programs. In recognizing the desire to pare the federal budget, we accept the fact that health manpower programs will not be funded at the same levels as in past years. We urge the committee to review these issues with care, and to consider not only the budgetary impact of such decisions, but to consider how those actions will affect the nation’s ability to deliver quality medical care both now and in the future.
DATA COLLECTION AMENDMENTS

This bill would amend provisions of the health manpower law pertaining to data collection on health manpower by deleting authority of the Secretary to collect "practice characteristics" of practitioners, by deleting physicians and dentists as a special class from whom data are collected and by prohibiting HHS collection of identifiable information.
A BILL

To amend the Public Health Service Act to protect the privacy of health professionals.

1. Be it enacted in the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. Section 708(a) of the Public Health Service Act (relating to the collection of health professions data) is amended as follows:

(a) In the first sentence delete the words "including a uniform health professions data reporting system," and add "and such other demographic features,"

(b) In the first sentence delete the words "which shall basically include data respecting all physicians and dentists," and add "and such other demographic features,"

(c) Delete the second sentence in its entirety;

(d) In the third sentence delete the words "practice characteristics", and add "and such other demographic features,"
Information regarding health professions personnel as the Secretary may require and insert in lieu thereof the following: "

no information shall be transferred by any entity to the Secretary under this section, collected by the Secretary under this section, or maintained in any record under this program that would identify any individual health professional.

SECTION 2. Section 708(a) of the Public Health Service Act is hereby repealed.

SECTION 3. Subsections "(f)" and "(g)" of this section are redesignated as "(e)" and "(f)" respectively.
FEDERAL FINANCIAL ASSISTANCE TO HEALTH PROFESSIONS SCHOOLS IN FINANCIAL DISTRESS

The financial problems of some health professions educational institutions have reached crisis proportions. The financial problems of some schools, particularly minority schools, are deeply rooted and do not appear susceptible to short-term solutions.

This proposal revises federal legislation to provide financial support until such time as the school's finances are stable. Under existing law, certain health professions educational institutions have been receiving assistance under the federal financial distress grant program. However, it is apparent that the level of funds available from this program is not sufficient to resolve severe financial problems.

This draft bill extends and revises the current financial distress grant program, with minority enrollment being an important factor in awarding grants. Major changes from current law found in the draft bill include: (1) annual authorization of $25,000,000 (up from $5,000,000); (2) a five-year authority (instead of three); (3) no reductions in subsequent year grant amounts; and (4) multi-year grant authority with advance funding (current grants are annual and must be reapplied for each year).

- AMERICAN MEDICAL ASSOCIATION -
DEPARTMENT OF FEDERAL LEGISLATION, DIVISION OF LEGISLATIVE ACTIVITIES
To amend the Public Health Service Act to provide federal assistance to health professions schools in serious financial distress.

Be it enacted by the Senate and the House of Representatives of the United States of America in Congress assembled,

Section 1. Section 788 of the Public Health Service Act is amended by—

(a) deleting the terms "medicine," "osteopathy," "dentistry," and "or public health" from Subsections (b)(1) and (b)(3),

(b) inserting the term "or" in Subsections (b)(1) and (b)(3), as amended above, between the terms "pharmacy" and "podiatry;"

(c) deleting the terms "medicine," "osteopathy," "dentistry" and "and public health" from Subsection (b)(1)(A)(1),

(d) inserting the term "and in Subsection (b)(1)(A)(1), as amended above, between the terms "pharmacy" and "podiatry," and

(e) by adding a new subsection (g) as follows:

"(g)(1) The Secretary may make grants to schools of medicine, osteopathy, dentistry or public health which are in serious financial distress for the purposes of assisting in--"
"(A) meeting the costs of operation of any such school of medicine, osteopathy, dentistry and public health,
"(B) meeting accreditation requirements, if they have a special need to be assisted in meeting such requirements,
"(C) carrying out appropriate operational, managerial, and financial reforms on the basis of information obtained in a comprehensive cost analysis study or on the basis of other relevant information,
"(D) meeting the costs of maintaining the quality of their educational programs, or
"(E) meeting the costs of strengthening their academic resources and capabilities.

"(2) Any grant under this subsection may be made upon such terms and conditions as the Secretary determines to be reasonable and necessary, including requirements that the school agree--
"(A) to disclose any financial information or data deemed by the Secretary to be necessary to determine the sources or causes of that school's financial distress,
"(B) to conduct a comprehensive cost analysis study, and
"(C) to carry out appropriate operational, managerial and financial reforms as the Secretary may require, except that the Secretary shall not require changes in the educational component of the school's program.
"(3) A recipient of a grant under this subsection must provide assurances satisfactory to the Secretary that the applicant will expend in carrying out its function as a school of medicine, osteopathy, dentistry or public health, as the case may be, during each fiscal year for which such grant is awarded an amount of funds from non-federal sources which is at least as great as the average amount of funds expended by such applicant for such training in the two years preceding the year in which the grant is awarded.

"(4) The Secretary shall determine the amount of such grants based on criteria published in accordance with Section 553 of the Administrative Procedure Act. The Secretary shall give special consideration to applications for grants from schools of medicine, osteopathy, dentistry or public health having significant enrollments of students from ethnic or racial minorities or from low income families.

"(5) The Secretary may provide to any school eligible for a grant under this subsection technical assistance to enable the school to conduct a comprehensive cost analysis study of its operations, to identify operational inefficiencies, and to develop or carry out appropriate operational, managerial and financial reforms.

"(6) Notwithstanding any other provision of law, the Secretary may award grants under this subsection of such duration as will best meet the financial needs of the school receiving such grant. In
order to award grants of duration longer than one year, the Secretary may obligate funds for such grants for use in a fiscal year in advance of the enactment of appropriations for that year, provided that, if the total funds appropriated for this subsection for a particular fiscal year are not sufficient to meet fully the amounts obligated for that year by the Secretary under grants awarded under this subsection, the amount to be received by each school for that fiscal year shall be an amount that bears the same ratio to the amount previously obligated for that school for that year as the total of the amounts appropriated for that fiscal year bears to the total amount that would be required to make awards to schools for that fiscal year.

(7) There are hereby authorized to be appropriated for purposes of this subsection $25,000,000 for the fiscal year ending September 30, 1981 and for each of the four succeeding fiscal years."
Testimony

Submitted to the

Senate Committee on Labor and Human Resources

On behalf of the

Association of American Universities/American Council of Education/National Association of State Universities and Land-Grant Colleges

April 20, 1981
Testimony Submitted to the Senate Committee on Labor and Human Resources on the Cumulative Impact of Reductions in Higher Education Funding on Health Programs

This testimony is submitted in behalf of the Association of American Universities/American Council on Education/National Association of State Universities and Land-Grant Colleges Joint Committee on Health Policy. The membership of the associations comprising the Joint Health Policy Committee represent a majority of institutions of higher education in the United States that provide the training of most members of the health professions, the training of professionals who conduct research, and are the sites for the conduct of the preponderance of biomedical research in this country. We have feared that the complexity of the national budget coupled with the complexity of major research intensive institutions might result in a lack of attention to the cumulative impact of budgets actions across a wide array of health and research programs.

The expression - "The whole is larger than the sum of its parts" - applies equally today to the major research-intensive university as well as to the proposed budget changes for FY 81 and FY 82. There is no other committee in either house of Congress that has as much impact on the university as this Committee with its jurisdiction over the Department of Health and Human Services, the National Science Foundation, the Department of Education, and even the National Endowments for the Arts and Humanities. However, we are compelled to point out that other committees of the Congress as well as Executive Agencies also have jurisdictions which impinge significantly on our total structure.

Over the past several decades our institutions, with the financial assistance of the federal government, have created great academic health centers. The health center has become a driving force for excellence for the entire campus. The quality of education programs even at the undergraduate level often is rooted in the sophisticated research and training programs for the health professions. The quality of excellence that permeates research conducted in all disciplines frequently is enhanced by the momentum created by the academic health center. It also is true that the fiscal stability of our campuses is greatly affected by the fiscal condition of the academic health center, which both attracts funds for the conduct of research and training and demands, in turn, large funding to carry on productive programs.
We believe that the federal government and our own education and research community have reason to be proud of what we have accomplished together in just the past few decades. The preeminence of this country in biomedical research can be measured in a number of ways: Nobel prizes awarded to American scientists; significant advances in knowledge in biomedicine leading to improvement in health for all citizens of the world; numbers of American citizens and visitors from foreign countries being trained for careers in health care in our nation's universities and teaching hospitals. In response to a national determination that a shortage of physicians and other health professionals existed, our campuses expanded rapidly. Now, national concern has shifted to the potential surplus of health professions. Without exaggeration, we are profoundly concerned for the future condition of the health education and research enterprise that we have built together.

We have attached a document to our testimony that outlines the entire range of proposed federal budget savings that have an impact on the fiscal stability of higher education institutions. If all of these were to be implemented simultaneously, the impact on our institutions would be extraordinary. Some of the smaller and free standing medical schools and other health professions institutions might be particularly vulnerable to program reduction. Among them are institutions that especially serve minority students, presenting special social implications. The major institutions will not close their doors. Instead, they will be forced to trim back what they do in education and research programs and particularly in research training, foregoing excellence and becoming used to mediocrity.

These multiple budget cuts will affect the fundamental structure of academic institutions. Intentional and planned academic program cutbacks raise deep concerns, but cutbacks not academic may be equally serious by damaging inadvertently some link in the total academic structure.

To address the issue of health manpower: a large number of our students come to health professions programs already bearing substantial debts incurred during their undergraduate education. Budget proposals before Congress may eliminate or at least diminish student assistance programs of all kinds. The ability to pay for health professions training has suffered since institutions have
lost capitation programs, received less funding from the states because of local economic exigencies or the reduction of funds in other federal programs. Tuitions will have to be raised. Access for health professions education to all economic classes of our country will be more difficult. New openings into the National Health Service Corps will not exist. Subsidized student loans will be greatly modified; our graduates will no longer reflect all economic and social strata but will disproportionately reflect higher income backgrounds.

Some students will bet on themselves and their futures and incur extraordinarily high debts. Our worst "case" estimates indicate that young physicians just beginning in practice may have a cumulative annual debt service ranging between $15,000 and $27,000. These debts will preclude some of the finest talents in research from entering those career specialities where rewards are lower. It will reduce the number of interested and qualified health professionals who will be able to afford primary care as a specialty. Academic medicine, which, after all, is the basis for the next generation of practitioners and research scholars will become less attractive. In basic research, young researchers tend to be most productive and most innovative. These bright young researchers should be encouraged, not lost, at their most valuable period.

It is equally important to note that the term "health professionals" does not mean only M.D.'s. Other health professions education is also lengthy, costly and often does not provide the future earning potential of physicians in highly specialized private practice. Nevertheless, this distinction among the health professions, and within medicine itself, is not taken into account in current or proposed legislation.

Students in the health professions have relied heavily on the Guaranteed Student Loan Program. It is inevitable that major changes will take place in that program to cut costs in the federal government. Some of the proposed changes could make those loans extremely expensive. Other changes at the undergraduate level involve a cut for FY '81 of 40% in the National Direct Student Loan Program specifically designed for low income students, serious and significant changes in the EEOG-Pell Grant program that could revoke the changes enacted in the Middle Income Student Assistance Act requiring middle income students to borrow more.
To shift from health manpower to biomedical research, there are two major academic elements in biomedical research: training of the next generation of research scholars and the actual conduct of research by faculty and associates. In our testimony to this committee on April 1st, we delineated in some detail our concern with the proposal for eliminating all institutional allowances and indirect cost for the National Research Service Award program. We reemphasize that those funds are essential and are needed to help pay faculty to conduct training, to pay for supplies and essential instruments and equipment. If the federal government provides only stipends for students these programs will be radically altered. The universities will not be able to sustain training programs of excellence if they are required to subsidize all the related costs of these programs. For example, Johns Hopkins University School of Medicine has estimated the impact of several Administration proposals: for research training, a loss of $731,000 in institutional awards and $150,000 in individual awards; for investigator initiated research a loss of approximately $300,000; for health manpower, $307,000 in institutional assistance and a significant loss of student aid (70% of students take loans which total approximately $2M/year). At Washington University School of Medicine and at the University of California San Francisco School of Medicine the estimated losses from reductions in training grant programs alone are $2 million annually for each institution. The same numbers are presented in virtually every one of our university health centers.

As we indicated earlier, it is extremely important to note that some of the more serious implications for academic medicine lie in programs outside of the jurisdiction of this committee. The programs of our teaching hospitals are an integral part of our academic enterprise. Among the 325 non-federal members of the Council of Teaching Hospitals, 65 hospitals (20%) have over 25 percent Medicaid admission. Therefore, proposed cuts in both Medicaid and Medicare programs are likely to have a disproportionately deleterious effect on those very institutions that are training tomorrow's physicians and researchers. Let me give you some examples. In the State of Missouri about a dozen hospitals care for 90% of the State's Medicaid patients. At the University of Illinois 60% of patients treated at the university hospital are from families with an income of $7,500 or less. These institutions would receive substantially less funds in reimbursements under Medicaid because of the proposed
We are told by our colleagues at Stanford University that the cumulative impact of Budget Committee proposals for cuts in the Finance Committee (Medicare and Medicaid programs) would result in a loss of $10.7 million for that university's hospital in FY'82.

Different institutions naturally are affected in different ways. Eliminations of the NIOSH program would have dire consequences for public health schools. Other programs are limited to few institutions. At the Health Services Administration, two relatively small research and training programs in maternal and preventive health care research are marked for elimination. The University of Alabama at Birmingham, which in the past two decades has grown into one of the preeminent medical centers in its region, stands to lose approximately $2 1/2 million for research training funds because of those cuts. Other institutions are affected by other cuts, but every institution is feeling the cumulative rate of the new federal budgetary disciplines.

A few years ago we were reading about surpluses in many state budgets. We now find that, with a few exceptions of states with large petroleum industries, most states are struggling to balance their own budgets and may feel constrained to do so by restricting support for inner city programs. The hard times now effecting the automobile industry are well known. The University of Michigan has layed off hundreds of employees. Michigan State University has gone further and may be forced to cut tenured faculty and reduce programs to meet the fiscal savings demanded by the state government. The problems in the auto industry are not restricted to Michigan. St. Louis is one of the major centers for assembling automobiles and the state of Missouri is experiencing its own financial pressures. While the states may be considered an appropriate source of support, it grows increasingly unlikely that they will have the option of being of immediate assistance.

The potential cumulative impact for our institutions is very significant. Recently, we heard Senator Schmidt discuss the choices made by the nation in early 1960's. He said, and we paraphrase, that had the United States chosen not to embark on its space program, it would have been equivalent to a decision by the English Government not to become a great naval power in the 17th Century. While we take pride in serving humanity for our biomedical research programs, we also recognize in this troubled world that there are other significant reasons why this nation must
remain number one in certain areas. As national policy we must continue to defend biomedical programs adequately enough to permit this nation to retain preemiment position among the nations.

As you prepare authorizing legislation, may we draw to the Committee's attention a statutory inconsistency between Title IX of the Education Amendments of 1972 and the Public Health Service Act's sex discrimination provisions (Sections 799a and 845) which prevent students attending women's colleges from receiving both program and student assistance funds under the Public Health Service Act. At least 30 women's colleges are disadvantaged by this conflict.

Congress exempted the admissions practices of independent undergraduate institutions from coverage of Title IX of the Education Amendments of 1972 in order to ensure continued educational diversity in independent higher education. The 1971 Amendments to the Public Health Service Act prohibit discrimination on the basis of sex in health training programs and contain no similar independent college exemption. In order to come into compliance with the PHS Act as it now stands, a women's college will either have to give up its educational mission and admit men generally or establish its nursing or other health affected programs as separate schools with a separate co-ed admissions policy, thus removing these programs from the educational benefits attendant to full integration with the total undergraduate Program offered by the college, or forego the receipt of federal financial assistance.

The current result does not appear to have been intended. The Public Health Service Act was amended in 1971 during floor debate on the 1971 Nurse Training and Health Manpower Acts primarily because there was no existing provision of federal law that prohibited discrimination against women in medical training programs. Title IX was signed into law in 1972 and is a later, more comprehensive statement of Congressional intent on discrimination in education programs. We respectfully urge the Committee to amend the Public Health Service Act so as to bring it into conformity with Title IX.

One final observation. As programs are examined with an eye toward cutting, we are told that the Chairman of this committee looks upon a program in terms of three standards: whether it is cost effective, whether it is an appropriate federal function and whether it has high enough priority. With regard to cost effectiveness - we can only ask the question that has been asked before. How much has the nation saved in the past two decades because of the development
of a vaccine against poliomyelitis? The same question can be applied to the current availability of drugs and vaccines to keep our people active and contributing their efforts as well as their taxes rather than looking to the government to keep from dire poverty. Our national expenditure for health services is approximately $240 billion dollars. The total devoted to health research is only 3% of that.

Since health research fundings often lead to preventive care that would obviate the need for experience treatment, we believe that from the point of view of investment alone our nation must continue to provide adequate support for biomedical research.

With regard to the federal role: we believe that health is akin to national defense and agriculture. States may fund a national guard unit and support research and demonstration program effecting the food supply, but ultimately a coordinated effort has to be conducted at the national level. Nothing done in one state is kept within the boundaries of that state. Medical research conducted at any medical center is conducted in behalf of the entire nation and every citizen is a potential beneficiary of that. Like our national defense, our health education training and research programs depend on the federal governments.

As for priority, we do not presume to establish priorities for this committee or for the Congress, but we do not believe that the health of the nation has become a lesser priority to the citizens of this country or the world. We urge this committee and your colleagues in the Senate to evaluate the implication of proposals before you today to insure that both in the short and long term we do not, in the interest of an immediate and gravely significant objective of budgetary control, cut down what we will be compelled to build again at greater cost and with less effectiveness as we will have lost a generation of students, faculty and research scholars.
An Outline of Major Recommendations for the FY'81 and FY'82 Federal Budgets by the Reagan Administration that Affect Institutions of Higher Education

Listed below are those recommendations, generally for cuts, in some cases, supplementals or increases, proposed by the Reagan Administration to the Congress on March 10, 1981. Items listed were chosen because of their impact on research intensive institutions.

I. NATIONAL SCIENCE FOUNDATION (NSF)
   * Eliminates Carter proposals for scientific instrumentation ($75 million) and engineering instrumentation ($25 million).
   * Eliminates funding for science education directorate ($111 million).
   * Cuts funding for social science research by approximately half ($44 million).
   * Rescinds $15 million for FY'81 for soc. science; $20 million for Sci. Tech and International; $82 million total.

II. HEALTH AND HUMAN SERVICES (HHS)
   A. National Institutes of Health (NIH)
      * Rescinds $126 million for FY'81, including $62 million in training funds for institutions, $21 million for research projects.
      * Cuts Carter '82 requests by $86 million, less $59 million in training.
      * National Health Service Corps--Transferred to Human Services Admin. (HSA) -- no new scholarships requested for FY'82.
   B. ADAMHA
      * Transfers service programs of the three institutes to block grants to states for administration. Universities now operating programs and institutes on alcoholism, etc. Will have to compete with all other statements for funds - totaling 25% less than current funding.
      * "Social research" cut in all three institutes, but "regular research" sustained. ($283 million for all research and training.)
      * Training funds - indirect costs and special allowances for institutions eliminated (as in NIH). ($13 million in '82)
C. Health Resources Administration (HRA)
* Rescissions of $110 million for FY'81, $120 million funding for FY'82. ($72 million in capitations FY'81 rescinded as in Carter proposal.)

D. Health Services Administration (HSA)
* Maternal & Child Health research and prevention health research program (cut $4 million) eliminated—and training reduced.

E. Block Grants
* Several dozen categorical programs in PHS, HRA & HSA are placed in four different block grants. Their cumulative appropriations are cut 25% and administration is turned over to state governments.

F. HCPA
* Cap placed on federal contribution to Medicaid, more than one billion dollars saved in FY'82.
* Medicare reductions.

G. Social Security
* Student benefits phased out over four years—no new participants starting in '82. Savings of $1 billion in '82.

H. Other PHS
* Eight Public Health Service Hospitals closed.

III. DEPARTMENT OF EDUCATION
A. Student financial assistance
1. HEOG/Pell Grants
* $661 supplement for '81 - $636 cut from current law for '81—$888 in '82.
* Family contribution increased—taxation rate raised from 14-20% of discretionary income.
* Pell grant awards assume $750 "self-help."
* Artificial limits imposed on off-campus living costs.
* Inflation not considered in determining family contribution.
* State and local taxes offset eliminated in family contribution.
* Institutional administrative cost allowance eliminated.
2. **EDUC**
   * Level funding of $370 million requested.

3. **College Work-Study**
   * Level funding of $550 million.

4. **NDSL**
   * Restores $100 million to FY'82 level (but not to FY'81), back to FY'80 total of $286 million.

5. **Guaranteed Student Loan**
   * Loan amounts restricted to "remaining need."
   * Federal in-school interest subsidy eliminated.
   * New parental loan program interest rate raised from 9% to market rate.
   * Institutional administrative cost allowance eliminated.
   * Reduces funding by $103 million in FY'81, $724 in FY'82.

6. **Student Loan Marketing Association (SLMA)**
   * Access to Federal Financing Bank (FFB) extended to October '82.

B. **Categorical Programs**
   * Rescinds all or part of appropriation for '81 for many categorical programs—Title I, Title VI, Title IX.
   * Cuts FY'82 funding for many categorical programs.

D. **Elementary and Secondary Education**
   * Total cuts for programs—approximately 36%—Impact Aid cut almost in half—most programs consolidated into two block grants to state and local governments with 25% less funding. Includes numerous programs involving higher education institutions and funding currently at about $130 million (e.g., Teacher Corps, Teacher Centers, training of teachers in special education, etc.).

E. **Consistent with other agencies, "social research" cut by approximately 15-20% in NIE.**

IV. **DEPARTMENT OF ENERGY (DOE)**
   * Despite cutbacks in the agency as a whole, general science and research programs appear to be funded at close to the Carter budget levels.
V. DEPARTMENT OF COMMERCE (NOAA)

* Sea-Grant program funding eliminated in FY'82 except for some phase-out dollars. University Center Program in EDA wiped-out.

VI. DEPARTMENT OF INTERIOR

* Water resources research ($7 million for universities) and fish and wildlife research programs ($4.5 million) eliminated for '82. Also, university mineral research program cut in institutes and fellowships.

VII. NASA

* Rescission cuts $48 million in FY'81, $218 million cut from Carter figures for FY'82 Space Science programs.

VIII. NATIONAL ENDOWMENTS FOR THE ARTS AND HUMANITIES

* Both Endowments have their program appropriation levels for FY'82 cut by 50%.

IX. CORPORATION FOR PUBLIC BROADCASTING

* $33 million cut below '81 level—approximately 20%. No funding elsewhere in the government for equipment.

X. AID

* Development assistance program cut by $686 million.

XI. DEPARTMENT OF DEFENSE (DOD)

* Official documents not available for research programs. DARPA program to get 8% real increase over '81.

XII. VETERANS' ADMINISTRATION (VA)

* Cuts in Medical Research (as well as Medical Care). Loss of 308 research investigators in '82.

(Numerous other "ricochets": Cuts in NIOSH reduce funds for public health schools, increases in postal rates affect higher ed. institutions in several classes of mail, etc.)

For additional information please call:
JERRY ROSCHWALS
(202) 293-7120

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(202) 293-4293
TESTIMONY FOR THE RECORD

OF THE

AMERICAN ASSOCIATION OF NURSE ANESTHETISTS

Before The

SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES

On The

HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE AND
NURSE TRAINING AMENDMENTS OF 1981

(S. 799)

April 1981
Mr. Chairman and members of the Committee, the American Association of Nurse Anesthetists is pleased to have the opportunity to present this statement on S. 799, the Health Profession Educational Assistance and Nurse Training Amendments of 1981. In particular, we are vitally interested in Title II, containing amendments to and authorizations for various sections of the existing Nurse Training Act, a portion of the overall Public Health Service Act.

AANA is a professional organization whose membership is comprised of Certified Registered Nurse Anesthetists (CRNAs). There are presently about 15,000 active practicing CRNAs in the United States. Each one of these individuals holds unique qualifications which allow him or her to administer anesthesia. CRNAs must hold a current license as a registered professional nurse, must have graduated from an accredited program of nurse anesthesia, must have passed a rigid qualifying examination, and must be involved in a program of continuing education in anesthesia.

A. NURSE ANESTHETIST TRAINEESHIPS

We are interested in legislation to extend the authority for the nurse anesthetist traineeship grants program (Section 831) initially authorized by the Nurse Training Amendments of 1979. That program was authorized for FY 1980 only at a level of $2 million, but did not receive a supplemental appropriation that year. We favor maintaining a separate authorization for this program and would therefore urge the Committee to fund the program for fiscal 1982 and not approve Section 207 of S. 799 which would repeal outright this traineeships provision.
1. The Education Program and Training of a Nurse Anesthetist

The CRNA is a much needed element within the health care system. A description of the type of intensive education program which the CRNA must complete brings into sharper focus the reasons for having an adequately funded program for the training of nurse anesthetists. Building on the professional nursing base, the student nurse anesthetist must complete a program which includes orientation to anesthesia practice; chemistry and physics of anesthesia; advanced anatomy; physiology and pathophysiology; principles of anesthetic management; pharmacology of anesthetic, adjunctive, and ancillary drugs; and clinical correlative conferences. The number of "contact hours" for each part of this curriculum ranges from 35 to 120.

Also included in the clinical program is a requirement of a minimum of 600 hours of actual anesthesia time in which clinical instruction is provided in situations where students actually administer the anesthesia. Other requirements include a minimum of 450 cases of anesthesia actually administered, with these cases distributed according to types of techniques required and variety of drugs used. With this type of background, there should be no doubt as to the ability of the CRNA to provide the patient with quality anesthesia care.

Training programs are graduate-level programs for registered nurses. Training involves 24 consecutive months of course work and clinical instruction. A certificate of graduation is received when the program is successfully completed. All training programs are accredited by an accreditation body approved by the Department of Education.
2. The Dimensions of Nurse Anesthetist Practice

As previously stated, the CRNA is a vital element within the health care system in the United States. Nationwide, nurse anesthetists are providing safe, reliable and economical anesthesia treatment to approximately one-half of all patients undergoing anesthesia. Included in this statistic is the fact that in rural areas nurse anesthetists account for approximately two-thirds of all anesthesia treatment rendered. Throughout many areas in the country, nurse anesthetists are the only providers of anesthesia treatment. For example, in a 1971 survey of hospitals, forty percent of all of the hospitals surveyed had only nurse anesthetists on the staff. According to figures published in the February, 1978 issue of Anesthesiology, the national mean population ratio for active practicing nurse anesthetists is 7.20 per 100,000. This figure compares with a distribution of 4.64 anesthesiologists per 100,000. A breakdown of these figures on a regional basis shows that the areas with the thinnest distribution of anesthesiologists have the highest distribution patterns for nurse anesthetists.

3. Supply and Need for Nurse Anesthetists

Not only are CRNAs a vital segment of the health care system within the United States, but there is also a definite projected need for more nurse anesthetists now and in the future. According to a 1976 study by the H.E.W. Bureau of Health Manpower on "Supply, Need and Distribution of Anesthesiologists and Nurse Anesthetists in the United States, 1972 and 1980" (HRA: 77-31), there was a projected need of from 22,000 to 25,000 nurse anesthetists for 1980. Obviously, there is currently a
serious shortage in this field in the United States of from 7,000 to 10,000 active, practicing nurse anesthetists. Inclusion of the traineeships for students in schools of nurse anesthesia in the Nurse Training Amendments of 1979 was the important first step on the part of the Federal Government to rectify this shortage. The next step can be taken by authorizing funds for the next fiscal year.

The fact that nurse anesthetists are a significant group in delivery of anesthesia services was pointed out graphically by Dr. Feldstein of the University of Michigan in a study of the 16,500,000 surgical procedures performed in 1974. The largest percentage of anesthetics administered, 48.5%, was rendered by CRNAs; 38.3% was rendered by anesthesiologists, including both those board-certified and non-board-certified; 9.7% by physicians other than anesthesiologists; and 3.5% by registered nurses other than CRNAs. A further breakdown of those procedures indicates that certified, registered anesthetists administered approximately two-thirds of all the anesthesia procedures in hospitals smaller than 100 beds. Anesthesiologists tend to congregate in larger hospitals, over 200 beds, where they administered 47.5% of all anesthesia compared to 42.5% for Certified Registered Nurse Anesthetists.

4. Economics of Nurse Anesthetist Services

The majority of nurse anesthetists are salaried hospital staff, whose services are billed by the hospital as part of hospital operating room costs. According to the U.S. Department of Labor, Bureau of Labor Statistics, "Industry Wage Survey of Hospitals, August, 1975 - January, 1976", the average hourly
wage for nurse anesthetists working in 21 major metropolitan areas was $8.02. Based on a 40-hour work week, the average annual earnings for a nurse anesthetist would have been $16,681.60. This figure compares with full-time equivalency earnings of hospital-based anesthesiologists of $80,000 as determined by a Health Care Financing Administration "Study of the Reimbursement and Practice Arrangements of Provider-Based Physicians, December, 1977" (Contract No. 600-76-1155). An analysis of these two salary figures indicates that where nurse anesthetists are providing anesthesia services, the cost to the patient should be substantially lower than where anesthesiologists are providing the services. Even where a team approach is used, the fact that some of the time utilized is of CRNAs rather than anesthesiologists would indicate efficiency and cost savings.

5. Need for Federal Training Support

Nurse anesthetists are clearly a shortage field in health care. Possibly twice as many nurse anesthetists are needed for the 1980s as are practicing now, according to the HEW study cited above.

One of the largest obstacles to obtaining an adequate supply of nurse anesthetists is the lack of financial support for trainees. Training programs are generally for two years -- a substantial graduate program. The total of tuition and all costs is about $10,000 for hospital-based programs and about $15,000 for most college and university-affiliated programs per year. Tuition costs range considerably with some at $2,000 to $2,500 and others only nominal with the hospital assuming all costs. Hospitals also offer stipends but the
average is about $3,000. With hospitals attempting to limit
costs and inflation unchecked, hospitals are able to devote less
to these programs than in prior years. In fact, the number of
hospitals offering stipends has decreased substantially in
recent years due to higher costs of operation. Few offer them
now. In addition, many hospitals have dropped their programs
entirely. The number has decreased from 225 to 145 in recent
years. Students are generally unable to hold summer or part-
time jobs because the nurse anesthesia programs run for 24
consecutive months. In addition, rotating clinical schedules
prevent part-time work in the evenings and on weekends. The
financial problems mentioned above deter students from enter-
ing this field. Loans are difficult to obtain and entry level
salaries are in the $15,000 range with average salaries after
5 years at $20,000. Such salary levels are not conducive to
borrowing, particularly if an individual has a family to support.

Traineeship support authorized at $3 million, for example,
would provide grants of about $2,000 to each of the 1500 trainees
presently enrolled in training courses.

To the institution, the major financial burden is in
making stipends available to students. With living costs what
they are and with no time for part-time work, stipends are
critical. Institutions put up $3,000 on the average toward
these living and educational costs of at least $10,000. Limited
resources prevent institutions from offering more aid or from
offering aid to more students. Federal support to the institu-
tions for traineeships will allow a greater number of students
to enter programs since some programs are prevented from expend-
ing due to the lack of stipend money. It will also help relieve the burden on low income students to permit their entry into the program. In addition, with a Federal share of some of the traineeship costs, institutions will be able to devote some of their future funding to program expansion in other vital areas.

It should be noted that the number of nurse anesthetists training programs has decreased in recent years by about 80. These are the smaller programs. Federal support may prevent such harmful attrition, and at the same time stimulate the development of new programs.

Mr. Chairman, AANA is hopeful that this Committee and the Congress will adopt a nurse anesthetist traineeships authorization for the next fiscal year. This vital program will greatly enhance the quality of medical care for all Americans in the years and decades to come.

B. ADVANCED NURSE TRAINING

We support continued funding for advanced nurse training programs. This is institutional support and is used to plan, develop, operate, expand, or maintain programs for the advanced training of professional nurses. Under Section 203 of S. 799, public and non-profit private institutions who train professional nurses "to serve in various fields of advanced clinical practice" would be eligible for this assistance. This would include hospitals and colleges which train licensed, registered nurses to be nurse anesthetists. Institutional aid can be put to good use by hospitals and colleges to develop new programs or bolster existing programs for the training of nurse anesthetists. We are presently experiencing a severe shortage of training programs.
-- down from 225 to 145, a drop of 80 programs, in recent years.
Institutional support can help reverse this disadvantageous trend.

C. **NURSE ANESTHETIST TRAINEE LOANS**

AANA also supports the specific inclusion of nurse anesthetist trainees in the nursing student loan program under Sections 835-840 of the Public Health Service Act. By making nurse anesthetist trainees eligible for the same loan program as nursing students, we can further help to insure an adequate supply of qualified CRNAs for all the reasons discussed above with respect to traineeships.

For the consideration of the Committee, we offer draft statutory language. Section 835(b) should be redesignated Section 835(c) with the following inserted as Section 835(b): "The Secretary is authorized to enter into an agreement for the establishment and operation of a student trainee loan fund in accordance with this subpart with any public or private non-profit program meeting such requirements as the Secretary by regulation shall prescribe and accredited by an entity or entities designated by the Secretary of Education for the training of licensed, registered nurses to be nurse anesthetists". Technical and conforming amendments elsewhere in Sections 835-840 might roughly include adding "or trainee(s)" after "student(s)" wherever it appears, and by appropriately adding "or training institution(s)" after "school(s)"; "certificate of graduation from a course of training to be a nurse anesthetist" after degree-diploma-graduate degree in nursing; "program(s) for the training of nurse anesthetists" after "school(s) of nursing"; and "nurse anesthetist" after "nurse".
Mr. Chairman, we would be happy to work further with you and your Committee in drafting appropriate statutory amendments. AANA firmly believes that financially deserving nurse anesthetist trainees should be eligible to receive long-term, low interest loans to help finance their courses of study.

Thank you.
STATEMENT
OF
The Coalition for Allied Health Professions Education
ON
1981 LEGISLATION TO AMEND AND EXTEND
CURRENT HEALTH-MANPOWER TRAINING AUTHORITIES CONTAINED IN
TITLE VII OF THE PUBLIC HEALTH SERVICE ACT (AS AMENDED)

Presented to
The Committee on Labor and Human Resources
of the
United States Senate
The Allied Health Community

Mr. Chairman, the Allied Health professions are heterogeneous in the extreme, differing in the competencies they require, their respective requisite educational preparation, the scientific foundations for their knowledge bases, and the clinical and educational roles which they play in the nation's health-care delivery system.

Required competencies vary from the performance of relatively routine tasks to the highest levels of education and service-delivery administration and the generation of new knowledge through research. Similarly broad is the range of educational preparation the Allied Health professions require -- from limited post-secondary training to postdoctoral study. The time required for such preparation ranges from several months to more than a few years. The scientific foundations of Allied Health profession expertise range from several months to more than a few years. The scientific foundations of Allied Health profession expertise range from the biological and chemical sciences (e.g., clinical laboratory professionals), to the social sciences (e.g., social workers and clinical psychologists), to combinations of the physical and social sciences and the humanities (e.g., speech pathologists, rehabilitation counselor).

Some Allied Health professionals are involved primarily in institutional patient care, others in community health promotion and protection, still others in health-care research,
manpower training, and education and service delivery administration. The range of Allied Health services includes:

- **emergency services** (e.g., emergency medical technicians, physician assistants);
- **reception and screening** (e.g., medical and dental secretaries, medical office assistants);
- **initial evaluation and diagnosis** (e.g., audiologists, physician assistants, dental hygienists, mental health technologists, medical social workers);
- **continued assessment as part of treatment** (e.g., physical therapists, occupational therapists, respiratory therapists, speech pathologists, audiologists, dietitians);
- **testing** (e.g., medical laboratory personnel, radiologic technologists, ultrasound technical specialists, nuclear medicine personnel, cardiology equipment personnel);
- **acute care therapy** (e.g., operating room technicians, obstetrical assistants, surgeons' assistants);
- **long-term care therapy** (e.g., occupational, physical and other therapists; personnel in mental health and social services, counseling, speech pathology, audiology, nutrition);
- **medical instrumentation** (e.g., radiation and respiratory therapists, dialysis technicians, cardiopulmonary technicians, ophthalmic dispensers, dental laboratory technicians);
- **community health promotion and protection** (e.g., nutritionists, dental hygienists, population and family planning specialists, health educators, school health educators, medical librarians, health writers);
- **environmental health promotion and protection** (e.g., sanitarians, environmental health technicians, sanitary aides, environmental engineering assistants);
- **control and elimination of hazards in an institutional or industrial setting** (e.g., audiologists, health physicists, health care facility housekeepers, industrial hygienists);
health systems management (e.g., hospital administrators, health planners, medical records personnel, medical computer specialists);

research and development (e.g., biomedical engineers, biostatisticians, epidemiologists, toxicologists, public health scientists, and researchers in every occupational category).

An essential feature of Allied Health education since the 1960s has been its rapid change and expansion, characterized by the following three major ingredients: First, there has been a tremendous growth in the number of programs, particularly in collegiate settings, which has paralleled the great expansion of two-year colleges and the growing popularity of vocational programs (in 1966, there were an estimated 2,500 collegiate programs; today there are over 8,000); second, the distribution of programs has changed -- hospitals and other health-service settings still play an important role, but the greatest program growth has occurred in such other settings as medical centers and universities, two-year colleges, vocational technical institutes, and private career schools; third, a dramatic expansion of knowledge and skill requirements has led to increased diversification of educational requirements.

In 1976, the latest year for which there is adequate survey information, there were about 14,000 formal postsecondary programs for Allied Health personnel. Of these,

- 52 to 54 percent were in collegiate settings
- 33 to 35 percent were in hospitals
- 10 to 12 percent were postsecondary non-collegiate institutions, and
- one percent were in the armed forces.
Over half of the nation's 3,000 higher education institutions have at least one Allied Health program. Such programs are contained in about 90 percent of the nation's research universities and doctoral-granting institutions, as well as in large proportions of comprehensive colleges and universities, free-standing medical centers, and two-year colleges. Significantly more than half of all Allied Health programs in collegiate institutions award degrees at the baccalaureate or higher level.

It may be important to point out here that these patterns of education for the Allied Health professions have grown out of practice needs, rather than from abstractly determined sets of values. Thus, the history of Allied Health education, brief as it is, is closely related to the history of the occupations themselves. The burgeoning of the Allied Health professions and of Allied Health education is the product of increased and increasing health-service demands and the explosive growth in health science and technology.

Manpower data collection is not what it might be -- what we hope it can and will be -- in the area of Allied Health. Still, we can say with reasonable assurance that, as of 1978, an estimated 3.5 million individuals (nearly 66 percent of the total health-care work force) could be classified, in the broadest sense, as Allied Health practitioners. The core of this population -- the professions in which the federal govern-
ment has invested the bulk of its Allied Health manpower-training funds and which, generally, require collegiate preparation ranging from the associate degree to the doctorate -- has grown from 442,000 in 1966 to approximately 1,026,000 in 1978. This 132-percent rate of growth compares with a 76-percent growth rate for all health professionals.

Yet despite this growth, the Department of Health and Human Services Bureau of Health Manpower (Health Resources Administration)* tells us that there are still clear and significant national Allied Health manpower shortages in such professions as audiology, speech pathology and respiratory therapy. And though the data is not definitive, it also appears to the Bureau that there still may be national shortages of dietitians and dietetic technicians, radiation therapists, physical therapists, occupational therapists, and formally-trained dental assistants.

Federal Support of Allied Health Education

Federal support for Allied Health manpower training was first authorized in 1966 by the Allied Health Professions Personnel Training Act. During the first four years of operation under its authorities, the statute put primary emphasis on increasing the number of training programs and professionals. In the early seventies, however, the statute was amended, its emphasis shifted: Basic improvement grants, which encouraged the establishment of new scholastic programs.

* Report (to Congress) on Allied Health Personnel. DHHS Pub. No. (HRA) 80-28
were abandoned in favor of new focuses and initiatives, relating more to the provision of quality Allied Health education and health service than to the production of increases numbers of Allied Health professionals. The shift clearly was occasioned by public economic policy, and not by evidence that manpower needs had been met -- there were at least as many "significant" national professional-area shortages at the start of the seventies as there are today.

The new funding focuses were on special educational projects for Allied Health training programs (one special project focus addressed the need for the "establishment of new roles and functions for Allied Health" personnel), on faculty development through a mechanism called "advanced traineeships", and on the recruitment to the Allied Health professions and retention of ethnic minorities-group members.

Funding authorizations which followed the shift from the early basic improvement grants to the special target grants and contracts were moderate, to say the most. But this moderate support soon became virtually no support at all. In fiscal year 1973, for example, Congress provided $30.2 million to support Allied Health planning, development and operation of such (sections 796, 797 and 798) projects as the establishment of regional systems for coordinating and managing Allied Health training; of new and improved methods of credentialing Allied Health Personnel; of recruitment, training and retraining programs; of career ladders and
other programs of advancement; of continuing education programs; of faculty training institutes; and of ethnic minority-group member recruitment. Two years ago, following a Carter Administration call for zero funding of Allied Health manpower-training programs and projects, the Allied Health community was able to win congressional support for a $10 million fiscal 1980 appropriation for these Part G (Title VII) initiatives (one-third of that amount subsequently was rescinded). Last year, the Carter Administration again called for a zero funding level. After Congress appropriated $6.7 million for fiscal 1981, President Carter called for a rescission of all of that amount and the new Administration appears similarly inclined.

The rationale of both Administrations for these terminal reductions makes no sense at all. Spokesmen for both Administrations have listed cost effectiveness, the delivery of services to unserved and underserved areas of the country, disease prevention and health promotion, and the involvement of ethnic minority-group members in health-care education and service delivery as major national health-care objectives. Yet, the Carter and Reagan Administrations have urged Congress to refuse any support for that segment of the health manpower population which is best prepared and best able to address these objectives.

Both Administrations also have said that, inasmuch as there are no manpower shortages among the Allied Health professions, "continued federal involvement in basic Allied
Health training support" is unwarranted. The argument both
denies and defies the reality of the Report of the federal
government's own health-manpower agency, which not only
makes a "case for continued Federal activity on behalf of
allied health personnel," but also lists a relatively large
number of key Allied Health professions in which there are
"significant national shortages." But more -- both Administra-
tions have overlooked the fact that federal Allied Health man-
power-training fundings is expressly intended by statute for
special-target projects and not for basic education support.
Indeed, such basic support hasn't been available to the Allied
Health professions for the better part of a decade!

Some might argue that the $283 million invested by the
federal government (since 1967) in Allied Health manpower
training is not only a substantial amount, but an appropriate
amount as well. Substantial it well might be; appropriate it
most assuredly is not. The $283 million figure -- the federal
government's total 14-year commitment to two-thirds of the
nation's health-care workforce -- represents merely four percent
of the total federal investment in health-manpower training
and development. From its beginnings, Allied Health has been
relegated by the federal government to but a cubby hole in
the great mansion of health-care education. Today, there's an
eviction notice on our small door. We hope this Committee
will tear down that notice and, in doing so, give notice of
its own that Allied Health can, must and will be counted on
by the federal government as a major partner in the development of an effective manpower-training and service-delivery effort.

**Bureau of Health Professions Recommendations**

The Coalition believes that the federal government must assume a leadership role in helping fill what HRSA's Bureau of Health Professions terms as "significant national (Allied Health) shortages."

In addition, we see a major federal responsibility in the fulfillment of these of the Bureau’s Allied Health related recommendations:

1. "Information including statistical data on allied health personnel requires continued improvement, by larger investments and coordinated activities ..."

   "Particularly, data are needed with which to determine the nature and extent of 'critical vacancies' and specific skills shortages, and to plan appropriate local, State, regional, or national education."

   "Better data are needed on minority participation in the work force."

2. "Special attention to the allied health personnel problems of small health care institutions is required, to ensure that regulatory and other constraints do not interfere with access to and the quality and continuity of patient care. Additional resources are needed with which to investigate the nature, extent, and impact of these problems, and to devise solutions as may be necessary.

3. "The cost-saving potential of more efficient use of allied health personnel should be thoroughly explored through well-designed and controlled studies carried out in various work settings and not hindered by current legal limitations on the use of personnel."
4. "As personnel standards are changed, training programs must be revised. This requires national coordination and encouragement.

5. "As manpower standards change, personnel working in the field who cannot meet new and more rigorous qualifications must be provided with opportunities to improve their competencies. Support to develop training materials and procedures that will reach the employed work force is necessary.

6. "Methods of testing of individuals to determine competency in the health field require improvement, through additional research, development, and validation, with Federal leadership.

7. "To the extend necessary to ensure adequate numbers of these personnel equitably distributed among and within States, Federal programs must encourage comprehensive State programs to identify and act upon problems of misdistribution and undersupply.

8. "There should be established within the Department (i.e., HEW) the function of review and approval of all Federal policies and actions that lead to or encourage new health occupations or specialties.

9. "There should be established within the Department the function of review and assessment of all Federal policies and regulations that affect the demand for or utilization of health personnel.

10. "Improvement of specific clinical competencies of health personnel is required, through advanced and short-term training and through self-instruction, particularly for the following subjects or functions:

   - long-term care of the elderly and chronically ill,
   - hospice care,
   - disease prevention and health promotion, and
   - application of new technologies.

11. "Improvement in nonclinical, competencies of allied health personnel is required, through advanced and short-term training and through self-instruction, particularly in:
12. "Maintenance and further development of allied health training centers should be encouraged so that they carry out essential interdisciplinary coordinating and planning activities.

13. "Additional allied health training centers in institutions with predominantly minority enrollments should be established.

14. "Activities for the recruitment of and assistance to minority students in allied health training programs should be increased.

15. "The MEDIHC program (Military Experience Directed Into Health Careers) to place veterans and other allied health personnel in critical vacancies, especially in small and rural institutions, should be continued.

16. "Statewide and educational system wide planning for allied health occupations education and training, through grants and cooperative agreements, should be encouraged and supported."

Recommendations for Statutory Change

Following are the elements of change which the Coalition for Health Professions Education asks this Committee to include in its version of extended and amended health manpower-training authorities.

1. The Definition of "Allied Health Personnel" and "training center for allied health personnel" (Section 795 (1) and (2)).

Current statutory language defines "Allied Health personnel" as "individuals with training and responsibilities for (A) supporting, complementing, or supplementing the professional functions of physicians, dentists, and other health profes-
sionals in the delivery of health care to patients, or (B) assisting environmental engineers and other personnel in environmental health control and preventive medicine activities."
The extant statutory portrait of Allied Health professionals is completed in the section 795 (2) definition of "training center for Allied Health professions," which lists as the only examples of those professions "medical technology, optometric technology, and dental hygiene."

The portrait is inappropriate and, as we shall offer later, largely unnecessary. It is inappropriate for three reasons:

a. The definition uses the term "personnel" rather than the term "professional." Physicians and dentists and unidentified others are "professionals;" Allied Health practitioners are "personnel." The distinction is inappropriate and, we think, derogatory.

b. The definition suggests that Allied Health professionals always and everywhere work for or under the supervision of physicians, dentists and environmental engineers. That's simply not true.

c. Finally, the definition puts forward as explicit examples of Allied Health practitioners not the physical or occupational therapist, the audiologist or speech pathologist, the dietitian or clinical psychologist, but rather the individuals who function (medical technologists excepted) as aides and assistants. The examples are not inaccurate -- these professionals are Allied Health practitioners; they are, however, not nearly as representative of the Allied Health fields as other choices would be.

Let us cite just one example of the unfortunate effects of the present definition's inappropriateness: The American Speech-Language-Hearing Association has long suggested to its members that they should not seek federal training assistance
under the Part G Allied Health authorities of Title VII. To do so, the Association has said, would be to admit that speech pathologists and audiologists are something less than "professional." Training program directors who are members of that distinguished Association agreed -- principle was the preeminent importance. It should come as no surprise, then, that speech pathology and audiology are two of the three Allied Health professions in which, according to the Bureau of Health Manpower, there are critical manpower shortages nationwide.

During Congress' last term, the Senate approved legislation which, insofar as its Allied Health related references were concerned, the Allied Health community supported enthusiastically. Among other things, the bill (S.2375) contained a proposed amendment to section 795 of the Public Service Act. Under the amendment,

...subsection (1) would be changed to read:

"The term 'Allied Health personnel' means individuals trained at the associate, baccalaureate, master's, or doctoral degree level in a health care related science, with responsibility for the delivery of health care or health care related services (including services related to the identification, evaluation and prevention of diseases and disorders, dietary and nutrition services, health promotion, rehabilitation, and health systems management), but who, for the purposes of this title, are not graduates of schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, pharmacy, or nursing."
... subsection (2) of section 795 would be changed to read:

'The terms 'School of Allied Health' and 'training center for Allied Health professions' mean a public or non-profit private junior college, college, or university -- (A) which provides, or can provide, programs of education in a discipline of Allied Health leading to a baccalaureate or associate degree (or an equivalent degree of either) or to a more advanced degree; (B) which provides training for not less than a total of twenty persons in such curricula; (C) which includes or is affiliated with a teaching hospital; and (D) which is accredited by a recognized body or bodies approved for such purposes by the Secretary of Education or there is satisfactory assurance afforded by such accrediting agency to the Secretary that reasonable progress is being made toward accreditation.'

The Coalition for Allied Health Professions Education urges the inclusion of this section 795 amendment in the Committee's version of new health manpower training authorizing legislation.

2. Advisory Council Inclusion of Allied Health Representation: The Coalition additionally supports an amendment to existing section 702 (a) language that would accommodate representation on the National Advisory Council on Health Professions Education by a representative of Allied Health schools, and potential representation by a student enrolled in an Allied Health curriculum. The Council has gone too long without a representative of the educational institutions which train the largest segment of the health care workforce. We, therefore, recommend that the Committee adopt an amendment to section 702(a) of the Act that would add representatives of Allied Health schools (and of the student bodies of such institutions) to those health profession school representatives presently listed in section 702 (a) of Title VII as members of the National Advisory Council on Health Professions Education.
3. Data Collection in Allied Health: According to the recent reports of the Bureau of Health Professions and the National Commission on Allied Health Education,* support for data collection in Allied Health should be at the top of the federal government's Allied Health support agenda. Says the Report of the Bureau of Health Manpower:

"There are insufficient data about allied health personnel at the local, State, or national level to permit radical improvements in planning, production, and management. The large number of occupations and functions involved, and their interrelations, makes good planning for allied health personnel difficult. Improved data on production, recruitment, reimbursement, utilization, service cost, and work force quality are needed. Data on improvements in supply, work force quality, educational standards and methods, and opportunities for minorities are difficult and costly to produce and generally less than satisfactory. Where improvements have occurred, Federal support appears to be a decisive factor."

According to the National Commission:

"The federal government should support the systematic and continuous collection and dissemination of data on the numbers and distribution of health manpower in all occupational areas, including information on projected openings. Support also should be made available for the continuation of biennial national inventories of Allied Health programs, expanded to include all settings which offer formal post-secondary education programs."

The Commission's emphasis on data collection from "all occupational areas (and) settings which offer formal post-

secondary education programs" merits special note. At present, the federal government supports Allied Health related data collection which relates only to Allied Health schools defined in existing section 795 (2) -- i.e., schools which award the associate or baccalaureate or higher degree. There is, however, a large number of certificate-awarding Allied Health institutions (and an increasing number of Allied Health aide, assistant, and orderly-type graduates of such schools) regarding which data are not being collected. Clearly, this data need to be gathered and analyzed. Such data should be and, we would urge, can be gathered without altering in any way the statutory definition of the Allied Health schools which are appropriate recipients of federal training support.

There also is a pressing need for feasibility studies on the collection of data relating to ethnic minority-group member involvement in Allied Health training and practice. Data on approaches to career counseling, recruitment, admissions, and retention of minority-group students in training programs are required, so that we can understand (and deal with) the reality of greater student involvement at lower levels of training. We also need definitive studies on the impact of minority institutions on the overall Allied Health manpower pool and on the reasons for unique minority-group member practice patterns and geographic distribution.

In view of the foregoing, the Coalition asks the Committee to --
either amend the existing data-collection language of 708 or add a new section to Part G to accommodate the need for the collection of Allied Health related data from schools of Allied Health (including post-secondary nonprofit and proprietary institutions which grant practice "certificates" in Allied Health disciplines), including data relating to production, recruitment, reimbursement, utilization, service costs, workforce quality, educational standards and methods, and opportunities for minorities.

4. Allied Health Project Support: Existing section 796 authorizes grants and contracts to "eligible entities" for special projects which are detailed in subsection (a)(1) of the section. With one notable exception (i.e., projects to establish "new roles and functions of allied health personnel"), the purposes of section 796 should be retained in the Subcommittee's final legislative proposal. In addition, the following project-support emphases should be added to those already enumerated: projects which focus on Allied Health role delineations and related interdisciplinary curriculum modules; on meeting new health-service needs without creating new specialties; on the development of mechanisms for interdisciplinary articulation; on the use of Allied Health practitioners in containing health-care costs; on the Allied Health related needs of unserved and underserved areas; and on curriculum offerings in health promotion, disease prevention, geriatrics, and health planning. The authorization levels for existing section 796 should be $10 million for fiscal 1982, $17 million for fiscal 1983, $14 million for fiscal 1984, and $16 million for fiscal 1985.

5. Training Institutes in Allied Health: Existing section 797 authorizes grants for the conduct of short-term "institutes" generally designed to accommodate the "advanced" learning needs of Allied Health practitioners who, principally as a
result of the rapid expansion of the Allied Health fields and increases in the numbers and varieties of Allied Health opportunities and initiatives, find themselves in new educational, supervisory or administrative settings. The Society believes that this emphasis should be continued and, therefore, recommends that the final Committee proposal should --

include existing section 797 through fiscal year 1985 at an annual authorization level that is no less than $1.5 million.

6. Ethnic Minority-Group Allied Health Education: As the National Commission on Allied Health Education points out, the Allied Health professions, because they are among the few professions in the economy for which the employment outlook is almost uniformly favorable, "represent an excellent avenue for social mobility" on the part of ethnic minority-group members. Moreover, notes the Commission, "minorities are substantially underrepresented in educational programs for the relatively high-level Allied Health occupations (i.e., baccalaureate and advanced degree levels)." Minority Allied Health training programs also are underrepresented among programs receiving Allied Health training assistance from the federal government. In the last year for which data are available (1975), the 563 Allied Health discipline programs situated in minority institutions represented 10 percent of the total Allied Health program offerings. Yet minority institutions received only six percent of Allied Health training
assistance made available through the Bureau of Health Professions. The Society asks that the Committee include in its final legislative proposal authorizations designed to --

provide student support for disadvantaged ethnic minority-group members enrolled in Allied Health education programs (especially in baccalaureate and graduate programs), and special program support for Allied Health education programs in traditionally and predominantly minority institutions. In addition, the special recruitment and related emphases of existing section 798 should be continued at an annual authorization level of no less than $1 million.

Mr. Chairman, we are grateful for this opportunity to present these our views to you and your colleague Committee members.
A Joint Statement

of the:

American Association of Colleges of Osteopathic Medicine
American Association of Colleges of Pharmacy
American Association of Colleges of Podiatric Medicine
American Association of Dental Schools
Association of American Veterinary Medical Colleges
American Society of Allied Health Professionals
Association of Schools and Colleges of Optometry
Association of Schools of Public Health
Association of University Programs in Health Administration

on S. 799

Senator Hatch and Members of the Committee:

My colleagues and I represent a substantial proportion of the schools which train health professionals. The professions represented in this statement play a vital role in providing health and medical care, but they receive relatively little attention in public policy development because of the popular concern primarily with physicians and nurses.

S. 799 would impose traumatic effects on education for our fields; it is a radical change from any previous bill. The committee hearing did not provide an adequate opportunity for us to contribute to the committee's thinking. We have always worked with this committee in a constructive partnership to accomplish
Joint Statement on S. 799

...public objectives; and we are asking for the same relationship to continue. We do not wish to be propelled into a position of opposition because of an erroneous assumption that the committee knows what our needs are and therefore assumes our reaction to the bill; or, because a policy aimed at a surplus of physicians is mistakenly applied to everyone else.

We support the Administration's economic objectives and are ready to do our part to realize them. We understand that federal support for health professions education must be reduced. We are not asking for "business as usual" or for the maintenance of last year's authorization levels.

S. 799 abruptly undermines the effective use of the large existing federal investment in our schools. It is the abruptness of the change which makes rational management, so strongly promoted by this Administration, impossible.

These health schools are literally feeling an intolerable financial squeeze from every direction.

The states are cutting support. Among other reasons, the block grants will cost the states money, which they are not paying out now, to manage the block grants. Many of these professions have few schools, so that each one is a national or regional resource which no one state can be expected to support.

The clinical facilities on which we depend are being pressed to stop passing on teaching costs to Medicare, Medicaid, and to other patients. Competition will force hospitals and clinics to further reduce costs and to avoid all teaching costs - thereby forcing the schools to bear this expense. In addition, cut backs in research funding are further reducing faculty and indirect support mechanisms.

...
The general student aid cutback also has a direct impact on our schools. If interest rates are raised, and family income limits are raised, Congress will have radically altered the characteristics of students who arrive at our doors. They will be white, upper middle class, urban, and in debt.

The objectives which we - the government and the schools - have shared in the past will disintegrate. Enrollment will be generally reduced in many of these fields, which are already in short supply, forcing a further reduction in supply and driving up the price of their services. Minorities, rural students, and women will apply in decreasing numbers because of the cultural inability to tolerate large debts. Those who are admitted to our schools will face incredibly steep tuition hikes.

Health schools are being severely impaired by the impact of laws and policies which are not aimed at them directly, such as cost containment, block grants, competition, reduced student loan costs, etc. We look to this Committee for a policy which directly reflects the public interest and stake in health professions education.

If this committee doesn't address the negative effects of these and other policy changes, there is no way that we can maintain the educational structure and the quality which the nation needs in three, five, or ten years. The schools are cutting every corner - that means neglect of facilities, on which the public is paying public debt, and leaving a legacy of high cost for the future.

We have carefully considered, together, how S. 799 can be remodeled to preserve the most essential core of education for these fields, at the lowest
reasonable cost. And, without detracting from the strengths of the bill for medicine and nursing.

The most generic need is for student aid. We need an aid package which will give students in all health professions schools equal access to expensive educations. It will allow us to continue to attract students who represent underserved minority and rural populations. It will allow us to compete for the promising student with fields such as engineering and business, which enjoy corporate support which we do not have.

Our specific recommendation is that S. 799 include capitalization of a loan fund for all health students, including students enrolled in schools of public health, allied health, and graduate programs in health administration. Fifteen million dollars each year, carefully dispensed, could make a significant contribution to meeting your objectives and ours, and not compound the negative effects of other public policy changes.

S. 799 authorizes the continuation of the existing student loan fund which provided support through many schools. No funds are provided, making the fund entirely dependent upon recycling earlier loans. As a result:

1. Only schools which have participated in the fund for many years have any significant amount of money recycling.

2. Schools opened in the last five years have a very small fund base and no alumni out long enough to have paid back much money.

3. New schools will have nothing to work with.
Joint Statement on S. 799

4. Three fields - public health, health services administration, and allied health - have not participated at all in the loan fund, but have significant support reduced or terminated under S. 799.

We recommend that $15 million be added to the loan funds in each year of the new bill. These funds should be allocated to:

a. Previously excluded professions.
b. New schools with no previous funds.
c. Newer schools with limited funds.

This allocation will redress existing inequities among and within fields, and substantially reduce the negative effects of the change in federal support.

The reduction in health manpower support suggested by S. 799 is over 60 percent. We contend that 60 percent is directly damaging to the public interest.

Let me close with a very dramatic example of the lack of coordination of public policy. The Defense Department has just announced a major change in military medical strategy. The new strategy is to move every possible casualty back to the States as fast as possible. DOD is asking the civilian sector to provide the backup - in facilities and in manpower. As it stands, S. 799 tells us that these military personnel need only physicians and nurses and that we are released from our responsibility to meet that need.
Testimony of the

AMERICAN ASSOCIATION OF COLLEGES OF OSTEOPATHIC MEDICINE

before the

SENATE COMMITTEE ON LABOR AND HUMAN RESOURCES

relative to

S. 799, "HEALTH PROFESSIONS EDUCATIONAL ASSISTANCE AND NURSE TRAINING AMENDMENTS OF 1981"

April 3, 1981
INTRODUCTION

Throughout its history the osteopathic profession, represented by more than 17,000 practitioners in the United States, has worked to provide quality primary medical care. Approximately 90 percent of all osteopathic physicians are currently engaged in the delivery of primary care services, striking evidence of the significant contribution the osteopathic profession has made to meeting the national goal of making medical care available to all Americans.

In a similar manner osteopathic physicians have been instrumental in assuring access to care for persons living in geographical areas experiencing chronic health manpower shortages. The traditional emphasis of osteopathic medicine on family/general practice in the medically underserved regions of this nation is perhaps the only systematic effort in the private sector toward this goal ever undertaken. The osteopathic profession currently deploys 67 percent of its manpower in the nation's largest and smallest communities, the areas of greatest need: 50.5 percent in communities of 50,000 or less and 16.9 percent in communities of 500,000 or more.

Another area of national concern — the rising cost of health services — has likewise been a matter of importance to osteopathic physicians in terms of their practice patterns and hospital utilization. The profession's continuing emphasis on community-based ambulatory care as the preferred locus of treatment has over the years perpetuated a model of efficiency and cost-effectiveness.

In short, osteopathic medicine has demonstrated a record of responsiveness to national health care needs and goals long before they were articulated in federal policy, and over the years has developed considerable expertise in assuring all Americans access to timely, pertinent, quality primary health care.

Many of our successes can be directly attributed to the impact of P.L. 94-484. Lacking the impetus of federal assistance, it is doubtful our colleges could have embarked upon the dramatic development and expansion efforts necessary to address the acute geographical and specialty maldistribution problems which still characterize health care in this country. We have watched with growing frustration repeated attempts to erode or eradicate precisely that federal support which has made possible many of the most significant and effective responses by the health professions educational community to national health priorities.

It would be disingenuous of us to ignore the straitened nature of the federal budget now under consideration, or to minimize the importance of exercising selective fiscal restraint in setting federal expenditures for health professions education, as for all other aspects of the economy. However, opponents of such support are equally disingenuous in supposing that by taking the proverbial meat-ax to those programs currently funded under P.L. 94-484 significant and in some cases irreversible damage will not be done to the scope and quality of training programs. The false economy of an indiscriminate approach to fixing programs and authorizations is all too readily apparent. Not only will the functional capabilities of the health professions schools be seriously impaired, but as tuitions are forced upward to compensate for lost federal funding, students will be driven even more deeply into debts which they will have to meet through higher patient charges. Thus, while the short-term impact of a massive
retrenchment in federal assistance will disadvantage educational programs and facilities, the long-range consequences are more far-reaching, potentially affecting every health care consumer by pushing the cost of services well beyond current limits.

The following remarks highlight those programmatic and conceptual areas of particular importance to the osteopathic educational community: student financial assistance, institutional support, minority education, faculty development, and primary care training at both predoctoral and postdoctoral levels.
Federally-supported student assistance programs have been highly successful mechanisms for assuring the availability of an adequate practitioner supply while permitting students to enter the health manpower work force regardless of economic status. During the academic year 1979-80 nearly one-third of all osteopathic students participated in federal scholarship programs, and more than 90 percent were recipients of federally guaranteed or subsidized loans. Without such support student debt loans — and with them, health care costs — will skyrocket, and economics rather than talent will determine the composition of the student pool, to the detriment of both quality and equality of opportunity.

We advocate a pluralistic mix of scholarship, subsidized loan, and conventional loan programs which will enable students to elect the method of financing their education most compatible with their individual economic circumstances. We are particularly supportive of the following initiatives.

A. National Health Service Corps; NHSC Scholarship Program

The National Health Service Corps and its scholarship program have been extremely effective in channeling students into geographical and specialty shortage areas while minimizing economic discrimination. Consistent with osteopathic medicine's traditional emphasis on community-based practice, a disproportionately large number of osteopathic students are currently recipients of NHSC scholarships or practicing members of the Corps; and the NHSC scholarship program has proved a student support mechanism singularly appropriate to the practice pattern of the majority of osteopathic physicians. We are therefore considerably distressed at the proposed phasedown of the NHSC scholarship component underlying its transfer to Title III, for a significant reduction in Corps field strength to save dollars in the short term will more than likely result in severe practitioner shortages in underserved areas for many years to come. Moreover, given the proposed elimination of the scholarship program for exceptionally financially needy students, the Corps represents the only other funding alternative available to many individuals in this category. Any reduction in the scholarship program will inevitably affect this most needy population first and most severely.

A second problem in transferring Sections 751-757 intact involves perpetuation of the three-year limitation on deferrals for graduate medical students under Section 752 (b) (5) (A) of current law, a requirement which discriminates against osteopathic medical education. All osteopathic students are required to undertake a one-year rotating internship in addition to any residency program they may elect to pursue, thus effectively extending their graduate training to four years rather than the three common to allopathic education. The need to accommodate this unique feature of the osteopathic educational model was recently addressed through the addition of language providing for Secretarial discretion in granting deferrals exceeding three years under "The Nurse Training Amendments of 1979," P.L. 96-76, Section 202, and more recently in Section 205(d)(1)(B) of H.R. 2004, which extends to four years the deferral option under the HEAL program. We trust that this problem can be resolved in the language of the new law rather than through post facto amendment.
B. Health Professions Student Loan Program

We are highly supportive of the retention of the Health Professions Student Loan Program, the most demonstrably successful health-oriented federal loan program now in operation. This program, the most popular of the student assistance options under current law, has just begun to recapitalize on the basis of loan repayments, and early indications point to an unusually low default rate (less than 2 percent). However, the absence of a new authorization will create an insurmountable hardship for recently-established schools which, due to the lack of a payback reserve, do not have adequate funds to rollover into new loans. We recommend two solutions: (1) provide a seed authorization for formula distribution to new schools only, or (2) recall all federal HPSL funds and reappropriate them on a formula basis to all schools. The extension of a proven loan program such as this to every health professions educational institution on an equitable basis must be viewed as a priority if freedom of career choice regardless of economic status is to be assured.

C. Health Education Assistance Loan Program

Continuation of the HEAL program at borrowing ceilings consistent with actual educational cost is welcome, and we predict greatly expanded utilization of this program by health professions students in the coming years. Regrettably, however, the reauthorization proposal as articulated in S. 799 fails to address the three-year deferral limitation for graduate study under P.L. 94-484 (Section 731(a)(3)(C)(i)). As in the case of the NHSC scholarship program, a three-year deferral fails to accommodate the rotating internship required of all osteopathic students. An extension of the deferral period to four years would remedy the discriminatory focus of current law and by allowing the majority of osteopathic students to complete their residency training before entering upon a loan repayment program.

II. INSTITUTIONAL SUPPORT

In the past Congress has provided support to institutions educating health professionals to encourage the production of additional manpower to meet national needs. These flexible, nonprogrammatic funds have been used to insure the continuity, quality, and responsiveness of health professions education to federal goals, and have been instrumental in holding tuition costs to the lowest possible level consistent with the maintenance of institutional viability. This last point is particularly important, for higher tuition will inevitably lead to higher patient care costs when students enter practice and begin to repay their educational debts. Moreover, significant tuition increases will effectively preclude disadvantaged students from entering careers in the health professions, thereby imposing discriminatory economic constraints on the composition of the practitioner pool.

With respect to osteopathic medical education there are other problems as well. Several new osteopathic colleges have arisen in response to the discrete demand for distinctively
osteopathic care and the general demand for additional primary care physicians. Many of these new schools depend on institutional support to offset some portion of the unusually heavy expenses incurred during the developmental phase of an institution's life. The established osteopathic colleges are also uniquely in need of this form of assistance, for unlike most health professions schools, the majority of them are not attached to large educational complexes whose shared resources help hold operational costs to a minimum. Likewise, because our schools concentrate on preparing primary care physicians to enter practice at the earliest opportunity, their research component — and its attendant benefits relative to the acquisition of permanent facilities, faculty, and overhead offsets — is necessarily limited. These colleges rely heavily on the flexible nature of institutional support to assist them in initiating creative programs in nutrition education, patient education, remote-site training, and similar educational activities consistent with federal goals.

Our schools have been actively seeking alternative sources of income to counterbalance the expected reorientation of federal priorities away from this type of support. However, this process has been slow and, given the critical state of the American economy, too often without tangible issue. Additional time and a continued, if reduced, federal commitment to institutional funding are needed if the health professions schools are to free themselves of federal dependency in this area. We believe institutional core support should be continued, but we also realize that Congress may wish to effect significant changes in both the direction and scope of such support. We therefore recommend that if current funding is to cease, withdrawal of the federal presence should be accomplished in a phased manner so as to minimize the disruption which termination of these funds will inevitably cause. In this regard it would be both useful and relevant to undertake an impact study under Section 107(c)(3) of this bill to determine the effect of eliminating such support upon institutional stability, curricular scope, content and quality, faculty recruitment and retention, and student charges and services. Health professions educational institutions are national resources deserving of national support, preferably through a program which recognizes colleges having a proven record of producing primary care practitioners, and which encourages schools not having such a record to revise their curricula accordingly. We stand ready to work with this Subcommittee to develop a mechanism which will assure needed core support while simultaneously reinforcing the goal of educating more primary care practitioners to serve the needs of the American people.

III. SPECIAL PROJECTS

A. Family Medicine

We are delighted to find included in S. 799 a provision extending grants to departments of family medicine, and to note therein language authorizing projects to improve administrative academic units already in place. To insure that existing depts receive an adequate share of funds under this program, we recommend that report language be drafted so as to emphasize the Congressional intent to distribute these funds equitably for the improvement of current programs as well as the creation of new ones.
B. Training Grants in Family Medicine, General Internal Medicine, and General Pediatrics

While we are pleased that S. 799 recognizes the need to augment the production of primary care practitioners to offset current and projected manpower shortages, we are dismayed to observe an overwhelming bias in favor of graduate education. As has already been noted, osteopathic physicians, over 90% of whom are primary care practitioners, are trained under a didactic model which delivers the bulk of its academic and clinical education in general practice at the predoctoral level. In combining predoctoral primary care training and faculty development under a single authorization, the two components geared specifically toward undergraduate medical education are effectively pitted against each other in a zero-sum game from which neither can benefit except at the expense of the other. Internship and residency programs are not similarly handicapped, an inequity made more trenchant by the considerable disparity between the $26 million authorized for graduate training and the $6 million allocated to both predoctoral and faculty development programs. The importance of adequate support for both these activities is self-evident; what should be emphasized here is that funds authorized for these purposes will ultimately benefit all medical students, not merely the few who choose to undertake residencies in primary care specialties. We urge the Committee to create separate authorizations for predoctoral and faculty development programs (Subsections (3) and (4) respectively), and to adjust the disproportionately large authorizations for postgraduate programs to reflect a more equitable distribution of funds for undergraduate as well as graduate medical education.

With respect to Subsection (3) in particular, we are fearful that the "plan, develop, and operate" language implies that new programs alone are eligible for funding, and that projects designed to maintain or improve existing programs may be considered ineligible because the planning and development phases of their operation have already been implemented. We recommend that the language of this section be revised to read, "plan, develop, operate," a distinction which would clarify the application of this provision considerably. Relative to this same section, we suggest expansion of the "medical students" language to include both "medical and osteopathic students," a clarification without which osteopathic institutions may be precluded from applying for program funds.

C. Disadvantaged Assistance

We wholeheartedly endorse reauthorization of the disadvantaged assistance program. Although the colleges of osteopathic medicine have been consistently supportive of special efforts directed toward disadvantaged students, the limited funding made available under this authority in the past has been insufficient to create the desired effect. This stricture is especially severe in the case of programs targeted at the attraction and retention of minority students. Particularly in the case of small schools lacking affiliation with a large university system, the availability of faculty to provide the necessary counseling, remedial, and socialization support cannot be guaranteed without increased access to the requisite funding. In the absence of one or more full-time staff members committed solely to overseeing the various aspects of the proposed program, responsibility for operating it will devolve upon staff members already overworked, with predictably dissatisfying results.
Despite chronic underfunding, programs such as the Health Careers Opportunities Program (HCOP) have managed to produce impressive results. Through a HCOP grant the American Association of Colleges of Osteopathic Medicine has established an Office of Special Opportunities (OSO) to increase the representation of ethnic disadvantaged students in colleges of osteopathic medicine. Administered in cooperation with a consortium composed of the fifteen colleges of osteopathic medicine, the program provides a variety of services to individual schools to stimulate local initiatives such as undergraduate recruitment, summer preceptorships, pre- and post-admission academic reinforcement and peer counseling. Through the OSO a national osteopathic career information service has been made available to students, counselors, and advisors at both secondary and predoctoral levels. A recent review of applicant and enrollment statistics for our schools indicates a significant positive demographic shift, attributable in large measure to HCOP's role in assisting osteopathic institutions to recruit and retain minority students. The percentage of minority applicants to colleges of osteopathic medicine has risen from 4.5% in 1975 to more than 9% in 1981. First-year enrollments of minorities have likewise increased, from 5.7% in 1975 to 6.8% in 1980.

The HCOP approach clearly works; but if minority recruitment and retention activities are to register more than token gains, federal participation must be augmented. The $18 million authorization proposed in S. 799 is insufficient even to meet current commitments, much less provide for increased activity. As it is estimated that increases over the current $19.5 appropriation of $4 million and $6 million respectively will be required to maintain the current level of effort during FY 1983 and FY 1984, we recommend raising the proposed authorization levels to $20 million, $23.5 million, and $25.5 million for the next three fiscal years.

D. **Remote-Site Training**

We are deeply disappointed that S. 799 fails to include meaningful support for predoctoral clinical training in areas remote from the main campus, particularly those located in medically underserved areas. One factor responsible for the marked success of osteopathic medicine in attracting and retaining practitioners in underserved communities has been the exposure of students early and repeatedly during their clinical training to practice in remote-site ambulatory settings; yet to date little federal support has been forthcoming for this training modality. While we are appreciative of the attempt embodied in Section 782 to provide for placement of students with preceptors in the field, the thrust of this section is clearly toward the provision of support services and not toward the creation of clinical experiences congruent with the fundamentally educational goals and objectives of this legislative proposal. Moreover, many of the support services covered by this provision are already available to members of the National Health Service Corps and individuals who have elected the NHSC private practice option under Title III of the Public Health Service Act. This potential duplication of services seems unaccountably wasteful, particularly when the predoctoral clinical (i.e., educational) component of the proposal has been granted only the most token recognition.

During the 96th Congress, both S. 2144 and later S.2375 as finally approved by the Committee on Labor and Human Resources contained a provision (Section 784 of S. 2375) which spoke effectively to the need to provide remote-site training as well as support services in underserved areas. (Appendix A) As it appears in S. 799, only the latter half of that original proposal — the subsection dealing with support services — has been adopted. We urge you to reintegrate the missing component of that earlier provision, directed specifically toward remote-site training support, into S. 799.
Such a provision is clearly educational in nature, and thus appropriately within the scope of health professions education reauthorizing legislation. Remote-site training support will enhance the production of primary care physicians, particularly for practice in underserved areas, assist schools in their transition away from dependence upon capitation funding, and encourage increased use of community-based facilities for training and service delivery. The proposal has an established and approved legislative history, and a rationale amply provided in report language accompanying S. 2375 (Appendix B). Finally, the proposal is reasonable, given the thrust of S. 799 toward alleviating primary care maldistribution problems, and is easily implemented and administered. While remote-site training is unquestionably a cost-effective activity both in terms of providing direct services in shortage areas and developing practitioners interested in making a long-term career commitment to this type of practice, it will require federal assistance if it is to continue to grow.

E. Area Health Education Centers

As a condition of eligibility for AHEC status under current law (Section 781(d)(2)(A)), each qualifying center must enroll at least six individuals in a family medicine or general internal medicine residency program. This provision fails to recognize the unique primary care training emphasis of the predoctoral osteopathic curriculum. Because the necessity of completing a residency in family medicine or general internal medicine is largely obviated by the heavy emphasis on primary care education in the undergraduate program and during the required rotating internship, relatively few osteopathic physicians undertake further postdoctoral training in these areas unless they are interested in an academic career. The osteopathic family medicine residency program is a recent innovation, still in its developmental phase and consequently enrolling only a small number of participants at this time. To require of osteopathically affiliated programs the same level of quantitative compliance as allopathic programs clearly discriminates against an alternate but equally valid training model. We propose that in order to rectify the fundamental inequity of the law as currently constituted, the numerical requirement relative to primary care residencies be waived in the case of an AHEC affiliated with an osteopathic college.

F. Curriculum Development

Curriculum development activities supported under Section 788(d) have proved perhaps the single most cost-beneficial program under P.L. 94-484, assuring the continued flexibility and relevance of medical education for a relatively small federal investment while helping the health professions schools expand their academic capabilities in areas relevant to national needs. Since its inception the program has generated many innovative advances in medical education and practice, despite minimal appropriations. The failure to reauthorize this invaluable program within the context of S. 199 is thus particularly disappointing, as there continues to exist a demonstrable need to encourage curriculum expansion in nutrition, geriatrics, humanistic medicine, the ethical implications of biomedical research, and a variety of other issues of national concern. We are most supportive of continuing the 788(d) program, and hope to find such a provision incorporated in S. 799 in its final form.
In summary, we wish to solicit the Committee’s consideration of the following textual and programmatic revisions:

<table>
<thead>
<tr>
<th>PROGRAM TITLE</th>
<th>SECTION S. 799</th>
<th>RECOMMENDATIONS</th>
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<tbody>
<tr>
<td>Health Professions Data</td>
<td>704(g)(3)(B)(5)</td>
<td>Authorize study to determine impact of capitation withdrawal on health professions educational institutions.</td>
</tr>
<tr>
<td>NHSC Scholarships</td>
<td>751 - 757</td>
<td>Continue at present levels; extend deferral for graduate study to four years.</td>
</tr>
<tr>
<td>HIPSL</td>
<td>741 ff.</td>
<td>Provide seed authorization for new schools, or recall and redistribute available loan funds.</td>
</tr>
<tr>
<td>HEAL</td>
<td>731(a)(2)(B)</td>
<td>Extend deferral for graduate study to four years.</td>
</tr>
<tr>
<td>Capitation</td>
<td>770</td>
<td>Reauthorize with three-year phasedown.</td>
</tr>
<tr>
<td>Family Medicine Departments</td>
<td>780</td>
<td>Include report language emphasizing need to insure improvement in quality of existing programs as well as creation of new programs.</td>
</tr>
<tr>
<td>Family Medicine/General Internal Medicine/General Pediatrics Training</td>
<td>784</td>
<td>Separate authorizations for predoctoral programs and faculty development; revise language of Subsection (3) to read: “plan, develop, or operate teaching programs for medical and osteopathic students,” etc.</td>
</tr>
<tr>
<td>Disadvantaged Assistance</td>
<td>787</td>
<td>Increase authorization to $120/23.5/25.5 million for FY1982 - 1984 respectively.</td>
</tr>
<tr>
<td>Remote-Site Training</td>
<td>782</td>
<td>Authorize remote-site predoctoral training programs.</td>
</tr>
<tr>
<td>Curriculum Development</td>
<td>784(d)</td>
<td>Reauthorize, ideally as separate line item.</td>
</tr>
<tr>
<td>AMECs</td>
<td>781(d)(2)(A)</td>
<td>Delete family medicine/general internal medicine residency requirement for AMECs affiliated with osteopathic colleges.</td>
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Like our colleagues in the health professions education community, the colleges of osteopathic medicine have been disheartened by the inexplicably punitive attitude on the part of some members of Congress and the Administration toward federal participation in health manpower training programs. In acknowledging the validity of a continuing federal role in health professions education, S. 799 embodies a welcome restatement of the governmental-academic partnership through which health professionals have been trained to levels of quality and output heretofore unknown. However, the indiscriminate erasure of many programs, and the crippling by token funding of others as proposed here, will without question be detrimental to the educational process. We urge the Committee to revise S. 799 in such a way as to preserve a comprehensive federal commitment to training the individuals who will deliver health care to the American people for many years to come.
Section 784 is amended to read as follows:

"REMOTE SITE TRAINING AND SUPPORT SERVICES IN UNDERSERVED AREAS"

"SEC. 784. (a)(1) The Secretary may make grants to and enter into contracts with schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, or pharmacy, or other appropriate public or nonprofit private entities, to assist such schools or entities in meeting the costs of projects to provide clinical training to students of such schools in areas that are geographically remote from the main site of the teaching facilities of the school and that are in areas in which medically underserved populations reside.

"(2) No grants or contracts under this section shall be made to carry out a project in an area health education center that is receiving funding under section 781. In carrying out this subsection, the Secretary shall give special consideration to projects at schools which have not received support under section 781.

"(b)(1) The Secretary may make grants to and enter into contracts with schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, pharmacy, or other appropriate entities to assist in meeting the costs of planning, establishing, and operating projects to provide support services to health professionals practicing in health manpower shortage areas (designated under section 332). Such support services may include continuing education, relief services, specialist referral services, and placement of students in a preceptorial relationship with the practitioner."
"(2) No grant may be made to or contract entered into with an entity under paragraph (1)—

"(A) unless the entity agrees to provide support services to any physician, dentist, veterinarian, optometrist, podiatrist, or pharmacist (as appropriate to the category of health professionals proposed to be served by the grant or contract) who requests such services within the health manpower shortage area proposed to be served, including any member of the National Health Service Corps or any member of a service program of health professionals who received a scholarship from funds appropriated under section 758B(c); or

"(B) to carry out activities required to be carried out under section 781.

"(3) Not more than 20 percent of the funds available to carry out this subsection may be used by the Secretary to fund eligible recipients to carry out research relating to the support needs of practitioners in health manpower shortage areas, nor shall more than 40 percent of such funds be used to provide continuing education.

"(c) There are authorized to be appropriated to carry out the provisions of this section $4,000,000 for the fiscal year ending September 30, 1982, $4,600,000 for the fiscal year ending September 30, 1983, and $4,900,000 for the fiscal year ending September 30, 1984.".
Remote Site Training and Support Services in Underserved Areas—The Committee is anxious to stimulate further growth in training programs for health professionals conducted in underserved areas. The Committee believes that these decentralized educational programs, if properly implemented, can provide health professions students with important knowledge and attitudes so that they will provide community responsive health care. Hopefully, students who have received a portion of their training in such settings can become acclimated to providing health care less dependent on the tertiary resources available in academic health science centers. This acclimation, may, in turn, encourage students to consider careers of service to the underserved. An additional benefit to the provision of clinical education in geographically remote sites where underserved populations reside is an increase in the availability of practitioners just by virtue of the conduct of these educational programs. Faculty, associated health professionals, and staff will more likely be located in such areas in order to conduct the contemplated educational programs. This migration has been witnessed in the initiation of a number of area health education centers. Although the faculty is available for teaching students, they are also, in the clinical setting, treating patients. Once the critical mass of health professionals is located in a previously underserved area, they may well attract other professionals, as several studies have demonstrated.

As important as attracting health professionals to underserved areas is keeping them there. Professional isolation has been cited as one of the reasons why health professionals will not remain in communities in which there are few colleagues. Consultation and referral services, students educational programs, locum tenens and continuing education programs may all assist in creating a professional environment attractive to health providers.

Therefore, the Committee has provided new authority for the support of clinical training programs in areas that are geographically remote from the main teaching facilities of the schools and that are medically underserved. The Committee bill also authorizes funding for the provision of support services to health professionals who are practicing in health manpower shortage areas. Because area health education centers supported under Section 781 are to carry out such activities in order to receive support under that authority, the Committee has precluded such centers from receiving support under Section 784 concurrently. The Committee expects the Secretary to give priority to those projects which will conduct clinical education programs, and provide support services to professionals, in underserved areas unlikely to be served by an area health education center in the foreseeable future. The new authority under section 784 constitutes a recognition that two important functions served by AHEC; that is, remote site training and support services to practitioners, are worthy of encouragement in their own right, even apart from the comprehensive accomplishments achieved by AHECs.
1. A certified nurse-midwife is an individual educated in the two disciplines of nursing and midwifery, who possesses evidence of certification according to the requirements of the American College of Nurse-Midwives.

2. All certified nurse-midwives are nurses who have completed an accredited program of education in midwifery, at least 15 of which are funded by the Nurse Training Act, from both Nurse Practitioner and Advanced Nurse Training funds.

3. Nurse-midwives have been in the U.S. since 1925 and have increased rapidly in the last twenty years because the federal government and childbearing families support nurse-midwifery care.

4. The federal government has a long history of support for nurse-midwifery education and practice and nurse-midwives are an integral part of many health care projects for the medically indigent.

5. Nurse-midwives have a demonstrated ability to reduce infant morbidity and mortality and improve pregnancy outcome.

6. Nurse-midwifery care has been shown to be cost effective for a variety of reasons.

7. Nurse-midwifery education programs are planning to become financially self-sufficient but will need further federal help; considerable physician resistance to expansion of nurse-midwifery services hinders these plans.

8. The American College of Nurse-Midwives suggests that funding nurse-midwifery education is a wise investment for the U.S. Congress and offers several recommendations for continuing federal support for nurse-midwifery education.

April 15, 1980
Committee on Labor and Human Resources
U.S. Senate
The American College of Nurse-Midwives (ACNM) is the professional organization of Certified Nurse-Midwives (CNMs) in the United States, representing 85% of all CNMs. The ACNM is autonomous from all other professional organizations and speaks for its membership on all issues affecting the practice, education, recognition, legislation and economics of nurse-midwifery. The ACNM collaborates with other professional groups which share its primary concern of quality maternal and infant health care for women and babies, and is recognized as an advocate for maternal and child health care issues.

According to the official ACNM definition, "A certified nurse-midwife is an individual educated in the two disciplines of nursing and midwifery, who possesses evidence of certification according to the requirements of the American College of Nurse-Midwives. Nurse-midwifery practice is the independent management of care of essentially normal newborns and women, antepartally, intrapartally, postpartally and/or gynecologically. This occurs within a health care system which provides for medical consultation, collaborative management, and referral and is in accord with the 'Functions, Standards and Qualifications for Nurse-Midwifery Practice' as defined by the ACNM."

There are approximately 2,200 nurse-midwives in the United States, and approximately 220 more graduate each year. Most nurse-midwives practice in association with institutions such as hospitals, clinics, and birthing centers. A small number offer home birth services. In 1976-1977, nurse-midwives did approximately one percent of all births in the U.S.

To become a professional nurse-midwife in the United States, one must first study nursing, and then usually practice nursing for one year in the field of maternal and infant health. The future nurse-midwife then applies to a nurse-midwifery educational program. Although all of these programs are associated with major universities, some are part of a Master's Degree program, and others grant a certificate rather than a degree. Both kinds of programs offer nurse-midwifery education which prepares the student nurse-midwife for clinical practice. Students in Master's programs also receive further education in public health or nursing. Students who successfully complete their educational programs are eligible to take the American College of Nurse-Midwives' certification examination. Those who pass the examination are certified as nurse-midwives - CNMs. All nurse-midwifery programs are accredited by the Division of Accreditation of the ACNM.
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Until the last decades of the 19th century, childbirth was in the hands of women. Midwives practiced an art and science passed from woman to woman. Mothers gave birth at home, surrounded by female friends and relatives, attended by a midwife who usually was also a friend or relative. A number of factors, including the rise of the medical profession, the growth of the public health movement, a trend toward limiting family size, the political vulnerability of midwives and their clients, the high infant and maternal mortality rates, and the severe decrease of immigration during and after World War I, combined to virtually eliminate traditional birth attendants and to move birth from the home to the hospital by the early 1900s. Maternal and child health became a national political issue when, during World War I, one third of all men were found physically unfit for military service and one half of those were thought to have suffered from poor maternal and child care. This experience during World War I and the political strength of newly enfranchised women brought about the passage of the Sheppard-Towner Act in 1921, creating the first infusion of federal dollars into maternal and child health care. In 1925, Mary Breckinridge, an American nurse educated in midwifery in England, established the Kentucky Committee for Mothers and Babies. A native Kentuckian, Mary Breckinridge became the country's first nurse-midwife and the committee became the Frontier Nursing Service, providing care for mothers and babies in mountaneous, isolated Eastern Kentucky. Like the earlier midwives, nurse-midwives support the natural processes of health birth with watchful expectancy and emotional support. Unlike the midwife of past centuries, the certified nurse-midwife comes to her work after rigorous education offered by prestigious universities, bringing a scientific basis to her practice and an ability to identify and respond to deviations from the normal course of childbearing.

The number of nurse-midwives increased slowly between 1931, when the Maternity Center Association in New York opened the first nurse-midwifery education program, and 1970. By 1970, approximately 600 people had graduated from U.S. schools of nurse-midwifery. In the last 10 years the number of schools has doubled to more than 20 and an additional 1,600 nurse-midwives have graduated. Families' commitment to prepared childbirth, the assertion of consumers' rights and the resurgence of feminism have spurred a tremendous interest in nurse-midwifery care among consumers in the last decade. Consumers are demanding care which offers them decision-making power and reasonable options in childbearing. Meticulous screening throughout pregnancy and birth, combined with freely shared information and continuity of care, are the hallmarks of nurse-midwifery care. In addition, because of the uniquely female nature of childbirth, some
Women seek nurse-midwifery care in order to receive care from women. In the last 20 years, women have acquired the education and strength to make changes in the health care system and nurse-midwifery has grown enough to be able to respond significantly to the demands women and their families make of health care providers. Consumers have been most vocal and ardent in their support of nurse-midwifery.

Only since the 1970's have professional midwifery services, which have long been available to women of all classes in other countries, been available to economically affluent women in the United States. Nurse-midwives are responding to increasing demands for nurse-midwifery care from affluent women by participating in a variety of private sector settings.

The federal government has a long history of support for nurse-midwifery. Several federal agencies rely heavily on nurse-midwives to provide care in their programs -- the Indian Health Service, Rural Health Clinics, the Maternal and Infant Care Projects, the National Health Service Corps, Improved Pregnancy Outcome projects, Adolescent Pregnancy Projects, and the Army, Air Force and Navy. Nurse-midwives receive direct reimbursement for services to military families under the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) and, thanks to diligent work on the part of the members of the House Interstate and Foreign Commerce Committee and to Senator Daniel Inouye, nurse-midwives will soon begin to be reimbursed for services to Medicaid clients.

Several recent federal government reports support nurse-midwifery practice. The Graduate Medical Education Advisory Committee's report recommended that nurse-midwives be doing 5 percent of all normal deliveries in the United States by 1990 and that federal support for nurse-midwifery education remain at its current level. The current output of educational programs is not sufficient, however, to meet that goal. The report on necessary maternal and infant health services prepared for the Select Panel for the Promotion of Child Health focuses on nurse-midwifery services.

The General Accounting Office's report, "Better Management and More Resources Needed to Strengthen Federal Efforts to Improve Pregnancy Outcome" describes nurse-midwives' effectiveness in delivering care to low income families. The report observes that "although HEW has endorsed use of nurse-midwives, the Health Services Administration has not aggressively promoted use of nurse-midwives in its programs." The GAO recommended that "...HEW encourage a greater use of nurse-midwife obstetrician teams, help eliminate barriers which preclude nurse-midwives from practicing in hospitals, and provide additional training funds for nurse-midwives, by giving such training higher priority for use of existing funds and/or seeking additional funds from Congress." HEW agreed that better training and practice opportunities are needed for nurse-midwives and promised to convene a working group of HEW...
operating agencies to develop by March 1980 a plan to promote greater use of nurse-midwives. This plan has not yet been developed, however, the working group has held one meeting and two consultations with nurse-midwives.

The safety of nurse-midwifery care has been well established. At a hearing held December 18, 1980, by the Subcommittee on Oversight and Investigation of the Interstate and Foreign Commerce Committee, noted epidemiologist, C. Arden Miller said, "All of the studies I know confirm that the health benefits of care as rendered by nurse-midwives stand up to scientific scrutiny exceedingly well." He added that many of the interventions routinely used in obstetrics today have been subjected to scientific scrutiny which "...is in many respects less rigorous than the scrutiny to which the midwife's services are subjected." A considerable body of research documents the safety of nurse-midwifery care. All studies have shown that the risk to women attended by nurse-midwives is equal to or lower than the risk to comparable groups of women attended by physicians. In fact, the literature reports instances of striking reductions in infant mortality rates after introduction of nurse-midwifery care.

Since its beginning in eastern Kentucky, nurse-midwifery care has been introduced to other medically underserved areas characterized by poverty, geographical isolation and other social factors associated with poor obstetrical outcomes. Nurse-midwives screen carefully for indications of medical problems and collaborate closely with physicians when complications arise, thus identifying clients who are essentially medically normal from among the population characterized by social risk factors. Nurse-midwifery care has been shown to increase utilization of prenatal care, lower infant mortality and morbidity and to increase maternal well-being among these populations.

At the Frontier Nursing Service "...the maternal mortality rates averaged 9.1 per 10,000 births from 1925-1951; among white women nationwide the maternal mortality rate was 34 per 10,000. Since 1951, the FNS has not lost a single mother to birth related causes. FNS neonatal mortality rates in the years 1952-1954 were 17.3 per 1,000 -- less than the rest of Kentucky and the United States. Since 1971 the FNS perinatal mortality rates have averaged only 6 per 1,000 which is less than half the average of the rest of the country, even in its best year (14.5 in 1977), and better than the best country in the world, Sweden. The Metropolitan Life Insurance Company of New York estimated in a report in 1932 that if services like the FNS were adopted nationwide, the perinatal mortalities of the time would be reduced by 60,000 per year.6

Nurse-midwifery services in other rural areas, especially in the South and Southwest, have produced similar improvements in pregnancy outcome. The Medical Mission Sisters founded the Catholic Maternity Institute in 1943 to serve the impoverished mothers of Santa Fe County, New Mexico. The Sisters offered prenatal care and births at their Childbearing Center. Many births also took place in adobe homes with no electricity or running
water. Prior to the program, in 1939, perinatal death rate of Santa Fe County were 87.6 per 1,000. By 1967 it had been reduced to 15.1, a level of achievement not to be attained by the country at large until over 10 years later. At that time, in 1967, the perinatal mortality rates of the United States were 22.1 per 1,000, while in New Mexico it was even higher at 24.8..."

In the early 1960's a CNM practice was established as a pilot project in Madera County, California. Special legislation made nurse-midwifery legal for the duration of the project. Certified nurse-midwives were introduced as the only new variable in the medically understaffed county's health care system. The mothers served by the project were primarily agricultural workers.

During the first 18 months of the project, the Madera County prematurity rate dropped from its previous level of eleven percent to 6.6 percent and the neonatal mortality rate dropped from 23.9 deaths per 1,000 live births to 10.3 deaths per 1,000 live births. There was a significant increase in attendance at prenatal clinics during the pilot project. Mothers who had had no prenatal care and who were cared for during labor and delivery by nurse-midwives experienced a neonatal death rate of 26.8 per 1,000 live births. The neonatal death rate for mothers who had no prenatal care was 50.6 per 1,000 live births after the project ended and nurse-midwifery care during labor was no longer available.

Despite these good results, the California Medical Society opposed legalization of nurse-midwifery and the nurse-midwives had to leave at the end of the project. After they left, the prematurity rate increased by almost 50 percent and the neonatal death rate tripled. 8

In Holmes County, Mississippi, in 1971 the infant mortality rates had dropped from approximately 39 per 1,000 live births to 20 per 1,000 live births, two years after certified nurse-midwives began providing primary care to pregnant women as part of a community-wide focus on the health problems of mothers and babies. 9

A study by the University of Mississippi Medical Center between October 1, 1972, and April 30, 1973, showed that nurse-midwifery clients kept 94 percent of scheduled appointments, compared with 80 percent of visits kept by clients of the house staff physicians. It should be noted that clients of both physicians and nurse-midwives did not see the same care providers at successive visits.

Among the nurse-midwifery clients 82.6 per cent had normal spontaneous vaginal deliveries; 62.1 percent of the house staff clients had normal spontaneous deliveries, with most of the difference found in the rate of low forcep deliveries by the house staff. 10

At Su Clinica Familiar, a nurse-midwifery childbirth center in southern Texas, all maternity care for normal mothers is provided by certified nurse-midwives. The prematurity rate in 1974, two years after nurse-midwifery began, was 3.5 percent. In the same year in Texas...
the prematurity rate was 7.6 percent and for the nation it was 7.4 percent. The nurse-midwifery service has been operating since 1972. The clients are Mexican-American and Mexican women who are primarily migrant workers. 11

"In 1976 a nurse-midwifery program was begun in Mississippi County in northeast Arkansas. In 1973, 80 percent of births had occurred under general anesthesia in that county. In 1979 general anesthesia rates had fallen to 12 percent, while perinatal mortality also dropped dramatically. 12

"In 1941 the Tuskegee School of Nurse-Midwifery opened in Alabama offering services to the area. During the five years of its existence, neonatal mortality rates went from 46 per 1,000 live births to 14—more than a three-fold improvement."13

Nurse-midwifery services have also resulted in lowered infant mortality and morbidity rates among inner-city mothers.

In 1931, the Maternity Center Association (MCA) opened the Lobenstine Midwifery Clinic to care for immigrant families in upper Manhattan tenements. Between 1931 and 1951, 5,765 mothers registered with the clinic, of which 87 percent gave birth at home attended by (nurse-)midwives. Their maternal mortalities were less than one-third the national rates of the time. Their average neonatal death rates were only 15 per 1,000 while that of New York City as a whole ranged from 28.0 in 1931 to 18.4 in 1951." Kings County Hospital, New York City, opened a nurse-midwifery service in 1976. In the first 884 births, they had a neonatal mortality rate of 7.9 per 1,000, reflecting the deaths of 7 premature babies.14

At the North Central Bronx Hospital, whose clients come from one of New York’s most distressed areas, where every patient receives nursing care or nurse-midwifery management from nurse-midwives in labor, from January 1 to December 31, 1979, 88 percent of the mothers experienced normal spontaneous vaginal deliveries. Less than 30 percent of all mothers needed analgesia or anesthesia in labor. The neonatal death rate among infants 1,000 grams or over was 4.2 per 1,000.15

Since 1970, nurse-midwifery practice in the United States has expanded to include two additional special populations, adolescents and economically affluent women. Adolescent childbearing carries social and medical risks which can often lead to poor obstetrical outcomes. Nurse-midwifery care, along with physician collaboration has been effective, and has been shown to improve the outcomes of teenage pregnancy.

Between 1976 and 1977 at a clinic for teenagers in Lincoln Hospital in New York City, nurse-midwifery care brought considerable improvement in outcome measures such as maternal weight gain and hematocrit. The rate of low birth-weight babies dropped from 18.1 percent to 6.3 percent.16 The Office of Adolescent Pregnancy at the Department of Health and Human Services has stressed inclusion of nurse-midwifery services in the projects it funds.
The available data suggest that nurse-midwifery care is generally less expensive than traditional obstetrical care. The cost effectiveness and high quality of nurse-midwifery care are useful tools for Congress to use in its efforts to provide economic health care for mothers and babies who need to rely on public sector services.

A study conducted in rural Georgia showed significant improvement in infant outcomes and a decrease in health care expenditures after introduction of nurse-midwifery care. 1)

Nurse-midwifery care often opens the door to lowered costs through the use of non-hospital facilities, such as a birth center or the client's home, for normal births. The Blue Cross/Blue Shield of Greater New York audited the Childbearing Center started by the Maternity Center Association in New York City in 1976-1977. They found that care at the Childbearing Center cost 37.6 percent of in-hospital care, barring complications. The report also stated that the cost to Blue Cross/Blue Shield of Greater New York for families delivering at the Center was 66.1 percent of the cost to the plan had the family gone to the hospital, barring complications.

The cost to the health care system of full care at the Center has decreased each year, from a high in 1976 of $2,016.46 to $1,046.17 in 1979, as utilization increased. The Childbearing Center staff expect the Center to be self-supporting with 600 families in the program annually. In late 1980 the Center had over 500 families enrolled and expected to meet their goal very shortly.

Medicaid is currently paying from $1,649.53 to $2,230.04 for normal care with a three-day hospital stay in various New York hospitals. The Childbearing Center currently charges $1,000 for its whole package of prenatal, intrapartum and postpartum care; the Center receives $885 for total care from Medicaid and the Center is appealing that rate.

The care at the Center is economical because clients have the opportunity for prolonged contact with professionals, including the nurse-midwife who stays with them in labor and delivery. A client's stay at the Center is much shorter than the typical three-day stay and she receives intensive, personalized care during that time.

The Center is also economical because non-hospital facilities, the Center and the client's homes are used as settings for provision of care. The Center's all inclusive fee of $1,000 compares favorably with the $3,000 for hospital and obstetric fees which private care in New York City can cost.18

Another mechanism often associated with cost savings and midwifery care is the shortened hospital stay for a healthy mother and baby. Midwifery care during pregnancy and availability by phone or home visit during the early postpartum period set the stage for the well-prepared family to go home within 12 to 24 hours after a normal labor and birth.
In Washington, D.C. the current cost of prenatal, delivery and postpartum care with a nurse-midwifery service is $300 for clients planning to deliver in the hospital. This includes prenatal care, labor management and delivery, postpartum care, a two week, six week, six months and one year checkup and three postpartum classes. Physician's fees vary from $800 to $1,200 and include prenatal care, labor and delivery management, postpartum care, and a six week check-up. Hospital costs for nurse-midwifery clients who spend 6 hours or less in the hospital after delivering, are around $600. Clients who stay the traditional three days will pay close to $1,000 in hospital costs.

Most nurse-midwives are employees who have no control over prices charged to clients. As more nurse-midwives go into practice with physicians and establish private nurse-midwifery practices, we will begin to be able to assess the financial impact of private nurse-midwifery practice. CHAMPUS began reimbursing nurse-midwives within the past year and is conducting a study of the impact of nurse-midwifery reimbursement on their maternity care costs.

While the data are limited, several characteristics of nurse-midwifery practice suggest that nurse-midwives deliver cost-effective care. The average salary of a nurse-midwife in clinical practice in 1976 was $16,200. Contract this figure, which has certainly improved somewhat since 1976, with the median income of any obstetrician-gynecologist, which was $89,310 in 1979. Nurse-midwives' services have to cost employing institutions less than obstetricians'.

Nurse-midwives have a proven record in reducing infant morbidity and mortality. The reduction in premature and low birth weight rates in the many places nurse-midwives have worked certainly must also have meant a reduction in dollars spent by states and private companies on intensive care nurseries. An official of the University of Mississippi, Peter H. Meyers, has compared the taxpayers' cost for nurse-midwifery education with the savings reaped through improved pregnancy outcomes. Looking at 76 graduates over a three-year period, I found their median age to be 31. Assuming that on the average 75% of them work until age 65, delivering 15 babies per month and referring 5 others, I can anticipate that they will provide primary care for 583,680 mothers, delivering 437,760 babies. Using a very conservative cost for lifetime institutionalization of $500,000 we can say that if only 4 out of 583,680 babies have radically different outcome (family support rather than lifetime institutionalization) the taxpayer breaks even. The break-even point is reached if fewer than 1/1000 of 1% (.0000068) of "our" babies avoid lifetime institutionalization. I would, more realistically I believe, predict a savings to taxpayers of many hundreds of times the program's cost.
Cost effectiveness includes other costs such as the cost of delivering care, and the cost of nursing school; but these costs are often borne in large measure or entirely by private parties.

None of this deals with maternal or infant mortality or maternal morbidity. What are the social costs when a mother dies? How often do her children become temporary or permanent wards of the state? What does that cost the taxpayer? I can't even guess.19

Nurse-midwives are educated to use technology only when it is indicated by a client's condition. Such limited, rather than routine, use of machines and laboratory tests should result in savings for individual customers. Nurse-midwifery clients often use less analgesia or anesthesia in labor.

A Cesarean birth can add as much as $1,000 to a physician's fee and as much as $2,000 to hospital fees. Nurse-midwifery services have Cesarean birth rates which are significantly lower than the U.S. rate which is approaching 30 percent in many facilities. The Cesarean birth rate at the nurse-midwifery service at the North Central Bronx was approximately 13 percent in 1979, for example.

A nurse-midwifery service would be less expensive for the federal government to establish than a physician's practice because nurse-midwives need less complicated equipment. They need only to have access to high technology through their collaborating physician.

In addition to potential cost savings, nurse-midwives bring to each birth a concern for the psychological and cultural factors which affect the birth experience of the mother, family and infant. Ample research has shown that the nature of the birth and immediate post-birth experiences have a strong impact on later infant-parent relationships. The evidence suggests that positive birth experiences correlate with lower incidences of child neglect and abuse. Nurse-midwives strive to help parents create positive birth experiences and this must make an indirect contribution to lowered financial and emotional costs to society as a whole.

The information available and the logical conclusions drawn from examination of nurse-midwifery practice prove that nurse-midwifery care is a cost-effective means to providing safe, satisfying maternal and child health care.

An investment in nurse-midwifery education is then, one which brings good returns to Congress and to American families.
At least 15 of the 25 nurse-midwifery education programs receive major parts of their funding through the Nurse Training Act. It costs between $20,000 and $30,000 to educate a nurse-midwife; tuition for a master's degree program can be almost $5,000 a year and the longest programs are two full years, including the summer semester.

Several programs have estimated that if federal funding were withdrawn, tuition would have to rise to between $22,000 to $30,000 to compensate. Banks would hesitate to give loans for such high tuition because nurse-midwives' salaries do not make them attractive loan candidates. Other student aid resources are not sufficient to cover student needs for current tuition costs; it seems unlikely student aid funds would increase in proportion to tuition increases.

If federal funds are removed and not replaced by the states, the nation's total yearly output of nurse-midwives will be severely reduced, services created by educational programs will be reduced or closed, care to indigent populations will be less available and costs will surely rise.

Nurse-midwives are valuable enough to the nation that a federal priority to continue educating nurse-midwives and to increase their utilization should be established.

All of us in nurse-midwifery education are aware of the need for dependable funding sources. Directors and faculties of nurse-midwifery education programs are devising strategies for shifting their funding base from soft money to hard money. All faculties would like to be fully supported on hard money by their universities, as are the programs at St. Louis University and University of Kentucky. Since most university budgets will not permit that kind of full support, nurse-midwifery educational programs are turning to developing self-supporting nurse-midwifery services as a means of finding financial support and clinical experiences for students.

Nurse-midwifery education lends itself easily to this model because nurse-midwifery is largely taught in the clinic and at the bedside. Faculty must practice in order to teach nurse-midwifery; these same faculty, with accompanying students, could be reimbursed either through Medicaid or through private insurance plans. A faculty which had a practice large enough to offer students the necessary clinical experiences would be supplying a substantial part of its own salary. The university would then fund the non-clinical teaching activities, such as conducting seminars, curriculum revising, student counseling and program administration.

Financing nurse-midwifery education through private faculty practice is a concept which many programs are exploring. There is, however, a tension between the need to shift the funding base and the political reality of opposition to nurse-midwifery practice.
Among the six obstacles to greater federal utilization of certified nurse-midwives which the GAO report identifies, limited supply, few training programs, reluctance of some nurse-midwives to practice in less desirable areas, restrictive state licensing or third party reimbursement, non-availability of obstetricians with whom to work, physician resistance is the most difficult problem. This problem was recently the subject of an investigatory hearing held by the Subcommittee on Oversight and Investigation of the House of Representatives' Energy and Commerce Committee.

The resistance occurs despite the demand for nurse-midwives by consumers, state governments and federal agencies, despite the record of improved health for mothers and babies, despite cost effectiveness and despite the widespread employment of nurse-midwives through the country. Resistance to nurse-midwifery practice is strong and seems to be gathering strength.

While this resistance is described in some detail, it is important to keep in mind the co-existing reality that in many communities nurse-midwives, physicians and hospitals have formed mutually satisfying professional relationships. The ACNM and the American College of Obstetricians and Gynecologists (ACOG) often work together on issues of importance to mothers and babies. Nurse-midwifery practice was officially endorsed by the American College of Obstetricians and Gynecologists (ACOG) and the Nurses Association of the American College of Obstetricians and Gynecologists in a statement issued jointly with the ACNM in 1971 and in a supplemental statement in 1975. The ACNM has benefited from and appreciated ACOG's official support.

The incidence of resistance is widespread and has been found in recent months in Massachusetts, New York, New Jersey, Pennsylvania, Washington, D.C., Maryland, Delaware, South Carolina, Tennessee, Illinois, and South Dakota. Resistance comes from many sources: individual physicians, professional organizations such as medical societies, hospital department of obstetrics, public bodies such as state boards of health and state medical practice boards, insurance companies, and occasionally nursing.

The form which the resistance takes varies as well. It includes refusal to provide medical collaboration, refusal of permission or privileges for use of hospital facilities, placement of unjustifiable restrictions on nurse-midwifery practice or settings, refusal of third party payors to reimburse nurse-midwives, harassment of physicians who support nurse-midwifery practice, request for unreasonable payments for liability insurance and misrepresentation of the nature of nurse-midwifery practice to the public.

In Washington, D.C. Georgetown University Medical Center has consistently refused to allow nurse-midwives to practice in labor and delivery, even though the school of nursing has had a nurse-midwifery education program for several years.
In New Jersey the Board of Medical Examiners has issued regulations which restrict nurse-midwifery practice and which prohibit nurse-midwives from caring for women under 16 and over 35 years of age. These regulations have a severe impact on nurse-midwives and their clients, especially adolescents, in New Jersey.

In Nashville, Tennessee the two nurse-midwife members of an obstetrician-nurse-midwife team were denied privileges at three hospitals in which their physician practiced. Their physician experienced such strong harassment from his colleagues, including cancellation of his insurance by the physician owned malpractice insurance company, that he has left Tennessee. No other physician in Nashville is willing to collaborate with nurse-midwives in private practice. The nurse-midwives have been forced to close their business and undertake expensive legal action. They will be filing suit in a few weeks.

When Maternity Center Association in New York City opened its Childbearing Center, an out of hospital birth center, they did so despite the opposition of a wide array of state agencies, state physicians' organizations and national physicians' organizations.

In Englewood, N.J., the Childbirth Center has struggled to survive in the face of opposition from local physicians, the Board of Medical Examiners and a major insurance company.

In Washington, D.C., a private group practice of three nurse-midwives who do home births embarked a year ago on a pilot experiment doing hospital births at the Washington Hospital Center. In order to obtain privileges the nurse-midwives became technically the employees of their collaborating physicians who already had privileges. Although the first year went well, the hospital's Department of Obstetrics and Gynecology voted to end the nurse-midwives' privileges because they are also doing home births. The decision has not been carried through by the hospital's board of directors because of large public outcry against the decision. The Department of Obstetrics has formed a committee to review the nurse-midwives' charts. There are no nurse-midwives or pediatricians on the committee.
While scores of rationales for these obstacles exist, and each incident is flavored with its own particular legal, administrative and interpersonal characteristics, two themes emerge from the arguments against nurse-midwifery practice. The first of these is the issue of quality of care and of patient safety. The rare, and often preventable occurrence of a complication of pregnancy or birth is often cited as the reason for preventing nurse-midwives from practicing or for limiting the scope of their practice to less than that for which they have been educated. Two assumptions underlie that rationale. The first is the idea that while nurse-midwives are better than no prenatal or intrapartum care at all, the physician is always more desirable because of his or her education in dealing with complications. The statistics refute that claim. The record of nurse-midwifery care in the United States in reducing infant mortality and morbidity shows that nurse-midwives are safe. Countries with lower infant mortality rates than the United States rely heavily on professional midwives.

The second underlying assumption is that the speed with which complications arise is great enough to justify physician presence throughout labor and delivery managed by nurse-midwives. It is important to remember that pregnancy and childbirth are normal physiological practices. Normal, healthy pregnancy and delivery are the predominant realities of childbearing. Complications are the exceptions, not the rule. Nurse-midwives, unlike most physicians, are able to be in constant attention throughout labor. Thus, nurse-midwives detect problems at the earliest moment and often avert them. Extremely serious complications which develop rapidly are extremely rare. Many common complications of labor and delivery result from the routine interventions of traditional medical care which do not characterize routine nurse-midwifery care. Nurse-midwives are educated to recognize the symptoms of complications, to begin the appropriate interventions and to call for assistance immediately when complications arise.

The second theme which emerges in the resistance of nurse-midwifery practices is that of “independent practice.” Licensure, direct third party reimbursement, home birth services and out-of-hospital birth centers all raise the question of whether nurse-midwives are, or should be, “independent practitioners.” “Independent practice” appears to mean a nurse-midwife hanging up her shingle in a solo practice patterned after the independent business of the solo physician in private practice. The implication of this model is that the nurse-midwife would be practicing without back-up physician, without the system for consultation with physician, referral of clients to physicians and without the collaborative management of client care by both a nurse-midwife and a physician which are an integral part of the definition of nurse-midwifery practice. The record needs to be very clear on this matter. Nurse-midwives do not practice midwifery in the “independent practice” model of the private solo practice which characterizes much physician practice. The “Functions, Standards and Qualifications for Nurse-Midwifery Practice” states that nurse-midwifery practice “occurs independently within a health care delivery system. Occurs within a formal written alliance with an obstetrician; or another
physician, or a group of physicians, who has/have a formal consultative arrangement with an obstetrician-gynecologist; exists within a framework of medically approved protocols.”

The dictates of the “Functions, Standards and Qualifications for Nurse-Midwifery Practice” are clearly explained by Helen Varney, the current president of the American College of Nurse-Midwives in her recently released textbook of nurse-midwifery. “Independent management” refers to the fact that the patient may never see a physician if her course essentially is normal and she is managed by a nurse-midwife. Thus, the practice of nurse-midwifery within the protocols for practice, which define the practice and provide for medical consultation and referral is independent. Independent practice means without medical protocols of formalized physician back-up. A certified nurse-midwife always functions within a health care system in a team relationship with a physician and is never independent of physician back-up for consultation, collaborative management, or referral.”

A nurse-midwife always functions in collaboration with physicians; that relationship will not change. What has begun to change, however, is the employment relationship between the nurse-midwife and her collaborating physician. Nurse-midwives are now not always employees of physicians or hospitals. In some cases the nurse-midwife has joined the practice of her physician partners. In other cases, nurse-midwives are employing physicians to provide them with consultation and referral services. Nurse-midwives are increasingly eligible for direct third-party reimbursement. Many private insurance companies including Connecticut General, Travelers, Aetna, and all union insurance programs, will reimburse nurse-midwives in all states. New Mexico, Utah and Maryland have adjusted their insurance codes to include direct reimbursement to nurse-midwives. CHAMPUS and Medicaid now reimburse nurse-midwives. All of these changes mean there is substantially more competition in the obstetrical marketplace. All of these changes mean that a nurse-midwife may become economically independent of her physician or hospital back-up services. Her professional interdependence with physicians and hospitals remains and always will.

Until nurse-midwives are able to establish self-supporting faculty practice arrangements which put education programs on dependable, renewable financial bases, nurse-midwifery education programs will need federal aid.

Until this country no longer has citizens who lack access to maternal and child health care and to safe options in maternity care, the federal government will need nurse-midwives.

Nurse-midwifery services provide the federal government with a safety net upon which to depend in a time of budget cuts. Certified nurse-midwives are in part an antidote to the high cost of federal maternal and infant health care. Funds invested in nurse-midwifery education are money prudently invested and many times returned.
The following are specific recommendations for your consideration during discussion of the Nurse Training Act.

1. Increase funding for the Nurse Training Act, including for Advanced Nurse Training programs, Nurse Practitioner programs and Special Projects.

   **Rationale:** The increasing economic stress of our time will create an increasing need for nurse-midwives to serve disadvantaged populations. An increased number of nurse-midwives will be needed to meet the needs of these populations and to meet the CHNAC projections.

2. Increase funding for National Health Service scholarships and jobs; change the eligibility requirements to include certificate program as well as masters degree program students.

   **Rationale:** The NHSC is a cost-effective means of providing care to medically underserved areas. Nurse-midwives are appropriate members of the Corps because of their ability as health educators as well as providers, and their suitability for areas which cannot attract an obstetrician or for areas which can support an obstetrician and a nurse-midwife but not two obstetricians.

3. Increase funding for scholarships and student loans.

   **Rationale:** The $2,500 a year available through loans to eligible students and the $2,000 available through scholarships are not enough aid to help most disadvantaged students enough to enable them to enroll.

4. Encourage states to develop mechanisms for sharing the costs of nurse-midwifery education among state, federal and private organizations.

   **Rationale:** Pooling of resources and sharing of costs can reduce the cost per student to each participating institution. Mechanisms such as regional funding and regional allocation of clinical resources could lead to increases in the number of nurse-midwives graduating each year, without leading to substantial increases in education costs.
References


13. Ibid., p. 111.


15. Doris Haire, "Improving the Outcome of Pregnancy Through the Increased Utilization of Midwives During Labor and Delivery," Testimony to the Mayor's Blue Ribbon Commission on Infant Mortality, February 14, 1980, Washington, D.C.


19. Peter H. Meyers, University of Mississippi Medical Center, personal correspondence.


The National Area Health Education Centers Program

"AHEC"

March 9, 1981

Authority: Public Law 94-484: "The Health Professions Educational Assistance Act of 1976" (Sections 781 and 802)

Program Description

The AHEC Program was created by The Congress as one method for improving the geographic distribution of physicians and other health personnel in rural areas and inner city areas. As of January, 1981 there were 21 projects of which 10 were originally funded in 1972 under authority of Public Law 92-157: "The Comprehensive Health Manpower Training Act of 1971." The remaining 11 projects were funded in various years beginning in 1977.

Several studies have given a clear indication of the success of the National AHEC Program in helping to overcome problems of geographic and specialty maldistribution of physicians.

These studies include:


By the Comptroller General, Report to the Congress of the United States, Progress and Problems in Improving the Availability of Primary Care Providers in Under-served Areas, HRD-77-135, August 22, 1978.


A Report to the Committee on Appropriations in the U.S. House of Representatives on Area Health Education Centers Programs addressed by the Department of Health, Education and Welfare by the Survey and Investigations Staff, February 24, 1978.
3. **1976 and 1979 Reports of the Carnegie Council**


4. **1980 Report to The Congress by the Secretary of the Department of Health, Education, and Welfare**

   An Assessment of the National Area Health Education Centers Program, November 9, 1979, DHEW Publication No. (HRA) 80-33.

5. **1980 Report of the Graduate Medical Education Advisory Committee (GMENAC)**

   --although this Report concludes that there will be an aggregate surplus in the number of physicians by the year 1990 or 2000, it also concludes that geographic maldistribution of physicians continued to be a serious problem and indicates that the AHEC Program is one of the initiatives designed to help overcome this problem.

The National AHEC Program is funded out of the Division of Medicine of the Bureau of Health Professions of the Health Resources Administration of the Department of Health and Human Services. Since October, 1972 The Congress has appropriated $144.2 million for the national program.

The National AHEC Program is characterized in the following manner:

1. It is a program of education and training of physicians and other health manpower based in the academic medical
center. Twenty (20) medical schools participate in the program as prime contractors. Subsequent subcontracts serve to involve fully one-third of the nation's medical schools in the National AHEC Program.

2. It is designed to bring the education and training of health manpower to underserved communities via the development of new regional training centers (usually community hospitals or community health centers) that assume responsibility for helping to meet the health manpower development needs of a defined number of rural counties or inner city neighborhoods. Today the 21 AHEC projects account for 76 regional centers called AHECs.

3. It has had a measurable and significant impact on the geographic and specialty maldistribution of physicians and other health manpower in underserved areas.

In addition, the National AHEC Program demonstrates the following important characteristics:

1. It is based on incentives and voluntarism.

2. It reflects an approach whereby federal funds are provided to states and regions to develop manpower programs that meet local and regional needs in the context of national goals.

3. It demonstrates that most projects have been able to use federal AHEC funds to catalyze state, local and other funds which have assured that most of the AHEC projects funded in part by the federal government in
1972 will survive—in whole or in part—following the cessation of federal funds.

As noted, since 1972 The Congress has appropriated $144.2 million for the National AHEC Program. In that period of time over $291.5 million of state, local and other funds have also been catalyzed by this federal investment.

4. It demonstrates the fact that the federal government can catalyze regional activities which meet unique local circumstances through the flexible statutory requirements and minimal rules and regulations. This federal approach has been critical to the success of the Program, especially for the projects originally funded in 1972.

The projects support funding of the National AHEC Program for FY 1982 at the level of authorization listed in HR 7203 as passed by the U.S. House of Representatives in 1980. This level is $28 million. Further, the projects believe this authorization should be followed by authorizations of $30 million for FY 1983 and $32 million for FY 1984.

It is important to recognize that the foregoing levels of funding include funds for the start-up of new AHEC projects. Should The Congress be interested only in assuring the development of those projects to which it already has a contractual obligation then an authorization level of only $23 million is needed for fiscal year 1982, $25 million for fiscal year 1983, and $27 million for fiscal year 1984.
Program Accomplishments

As noted, the National AHEC Program has had a measurable and significant impact on the distribution of physicians and health manpower. This is particularly true of the eleven projects originally funded in 1972. The remaining projects funded subsequent to 1977 are too young to have had an impact on manpower distribution. For this reason, the accomplishments of the National AHEC Program will be listed in two categories according to date of initial federal funding of the projects.

I. AHEC Projects Originally Funded in 1972
   Pages 6 - 12.

II. AHEC Projects Funded Subsequent to 1972
    Pages 13 - 19.
CALIFORNIA

California began a Statewide AHEC Program under new authorizing legislation in 1979, but one of the original eleven projects also took place in California starting in 1972. The principal target area was the Central San Joaquin Valley. The Health Science Centers were the University of California at San Francisco (UCSF) and the University of California at Los Angeles (UCLA). The major objectives of the Central Valley program have been accomplished, and as federal funding draws to a close dramatic results can be counted. For example:

--Before the project began there were virtually no medical student rotations to the AHEC area. Now there are 180 student rotations per year, many of which are core clerkships in the UCSF Medical School curriculum. Faculty appointments for practicing physicians in the target area have increased.

--Physician resident training in primary care specialties has risen during this period from 12 to 129.

--A series of consortia of small hospitals was organized to conduct continuing education for physicians and other health professionals throughout this area which is nearly as large as the state of South Carolina; this service continues without federal funding, paid for by fees and subscriptions.

--The impact of these physician education programs is shown by a survey of physician population done in the sixth year which showed an increase of about 20 percent over pre-AHEC data.

--Other major achievements included development of a new dental residency program fed by a steady stream of dental students; an extensive network of nurse career ladder programs from nurse aide to associate degree programs, Bachelor of Arts Degree programs, and Master’s-level programs, as well as two nurse practitioner programs; a wide range of allied health training activities; and a strong, enduring community organization.

Much of this program has been transferred to other funding and other elements have been closed as the need was met. No federal support is expected after this year.

The California Area Health Education Center System, begun in 1979 under authorization of Section 781 of PL 94-484, builds upon the demonstrated success of the local project begun in 1972.
It compares areas which had significant AHEC educational activity with similar areas which did not have AHEC assistance. Positive changes in the AHEC-impacted areas were substantial, compared to a decline of physicians in the non-AHEC areas. The AHEC areas showed a net gain of 152 physicians, an increase of more than twenty percent.

**ILLINOIS**
- 401 clinical training of all medical students now in community hospitals.
- 112 family practice residents serving 42 counties.
- Retention of family practice residents - 70%.
- Over past nine years, $70 million in State funds went into regionalization.

**MINNESOTA**
- AHEC has provided training for approximately 1,900 students in ten different health fields. AHEC has:
  - Provided rural preceptorships for 470 medical students and rural clinical rotations for 170 residents.
  - Provided over 500 registered nurses with off-campus courses and nurse practitioner training, both at the undergraduate and graduate levels.
  - Provided rural preceptorships for nearly 150 dental students.
- Assisted the Medical School to develop seven different clinical preceptorships to improve the supply of physicians in underserved areas.
- Assisted in the creation of the position of Assistant Vice President for Health Sciences Outreach.

**MISSOURI**
- Has encompassed all disciplines of allied health (including dieticians and radiology technicians) into an organized network of C.E. programming, particularly in west central and northwest areas.
- Has produced and distributed an audio-visual catalogue of over 800 programs available at no charge, for use by area health care professionals and hospital libraries as well as students in the field.
--Established an In-WATS line for learning resource requests of both reproduction and on-line search. In addition, most A/V programs are requested this way from area professionals and institutions. All facilities at our health science library are available to participants.

--Has conducted a very successful minority recruitment effort called Summer Scholars 1980 for area high school juniors and seniors. Another program is planned for 1981 in Kansas City, and also for the St. Joseph area. Other talent identification program efforts have been extremely successful in identifying students at this level.

--Participation in three study tours to acquaint health science students with career possibilities in the state of Missouri, (medical, pharmacy, dental and nursing) as well as a very active externship/preceptorship program in the areas of medicine, pharmacy, dentistry, and nursing. Over two-thirds of the medicine rotations are in primary care/family practice settings.

--A strong nurse practitioner program in southwest Missouri, providing externship experiences and C.E.

--Established a viable working liaison with the health science schools of UMKC and UMC, particularly in nursing and allied health.

NEW MEXICO

--Developed an organization of Indian health program administrators and planners.

--Developed and sustained health professional training programs for nurses, emergency medical technicians, physician assistants, medical technologists and community health representatives on the Navajo.

--Supported over 300 Indian students in various health training programs. Of those who have completed their training, over 85% are working with Indian people.

NORTH CAROLINA

--Medical student education is now occurring on a regular basis in over half of North Carolina's 100 counties. The proportion of North Carolina medical school graduates who are choosing to practice in North Carolina has increased dramatically since the start of the AHEC Program. In the 1960's only 30% of the State's medical school graduates were eventually locating in North Carolina. That number has risen to over 40% of graduates since 1972 and the student body has doubled in size.
Primary care residency training now takes place in all nine AHEC regions of North Carolina. Historically, the State has retained slightly over one-third of the residents trained here. In 1980, two-thirds of AHEC-trained primary care residents remained in North Carolina to practice.

From 1973 to 1978, the improvement in North Carolina's population/physician ratio was 20% compared to 15% for the rest of the U.S. North Carolina's rural counties have improved their physician/population ratios significantly greater than other rural U.S. counties.

A process is in place to direct major program initiatives toward improving the recruitment and retention of nurses in the State's hospitals and other health agencies. As an initial step, a major statewide nurse manpower survey was conducted by AHEC which documented 1,500 budgeted vacancies for RNs in North Carolina in 1980, and showed the annual turnover rate of RNs to be 23% in the State's health care agencies.

NORTH DAKOTA

By means of the AHEC contract, North Dakota developed its degree-granting medical school, a statewide program in which community physicians are the faculty and community hospitals are the campus. Since the inception of AHEC, North Dakota's medical school has graduated five classes, a total of 200 new physicians.

Also due to the AHEC contract, North Dakota now offers six primary care residency programs throughout the State—four programs in family medicine and one program each in internal medicine and obstetrics-gynecology. These six programs train 62 residents per year.

In 1972, the year of the AHEC contract award, North Dakota's ratio of physicians to 100,000 population was 85.1. In 1977, five years into the AHEC Program, North Dakota had climbed to a ratio of 108.9. Although this ratio does not yet approach the national average, it represents a significant advance in physician manpower for North Dakota.

SOUTH CAROLINA

Increased extramural residency positions from 69 in 1972 to 317 in 1980; three-fourths of these are primary care.

Senior medical student rotations to rural areas have increased from 27 weeks in 1972 to 995.5 weeks per year in 1980-81.
--Minority physician recruitment programs have led to an increase from 39 minority physicians in 1976 to 84 minority physicians in 1980.

--Seven AHECs now form a statewide network for health education for clinical training of undergraduate, graduate and continuing education for practicing health professionals.

--Statewide learning resource network supplies rural hospitals with modern V materials, biomedical communications linkages, and library resources.

--AHEC has retained 60% of all residents trained over the past three years; 56% of all residents over its history have been retained and are now practicing in South Carolina.

--100% of all senior dental students are involved in AHEC's extramural dentistry rotations.

--80% of dental students taking part in the dental rural practice site survey have chosen a practice site in the same or similar rural underserved area.

TUFTS

--Undergraduate Medical Education

a. Development of third and fourth year clinical clerkships in two medical centers, and fourth year preceptorships in six rural sites to support an average of sixteen third year complete clinical third year rotations in each of the eight years and a total of 11.1% of all undergraduate clinical education at Tufts in AMC sites.

b. Development of a tracking evaluation method which shows that students who participated in these programs have a significantly higher inclination towards locating their practices in non-urban locations, particularly in Maine where the AHEC has been located.

--Postgraduate Medical Education

a. Development and/or expansion of four Family Practice Residencies in Maine where there were none prior to AHEC having a total of 20 first year positions and 62 residents in training at the end of the 08 year of AHEC funding. 78% of the graduates of these programs located their practice in Maine and 76% of those are in communities of 10,000 population or less.

Expansion of the only other residency training program in Maine at the onset of AHEC from 34 to 89 positions.
Continuing Medical Education

a. Provision of 692 visiting professor clinical sessions in twelve sites, eight of which are rural.

b. Provision of 85 weeks of guest residency visits to nine rural hospitals.

Dental Education

a. Provision of dental externships in six rural Maine communities with 147 students participating. Approximately 40% of these students eventually located practices in Maine.

Nursing Education

a. Assistance to the Family Nurse Associate Program of the School of Nursing at the University of Southern Maine. 71 graduates, all in practice in Maine, 42% in rural areas.

b. Assistance towards expanding nursing education to two rural campuses of the University of Maine system and support for nursing continuing education via two-way telephone system.

Allied Health

a. Assistance to Southern Maine Vocational Technical Institute towards training of 48 respiratory therapy technicians.

b. Assistance to SMVTI towards training of 285 emergency medical technicians either at basic or advanced EMT level.

Assistance in the development and implementation of a new Consortium for Health Education in Maine as an ongoing mechanism to promote AHEC principles and objectives.

West Virginia

Increased primary care residency positions from 14 to 102 in three hospitals with significant retention in regions served by AHEC.

Due to university relations through AHEC, there has been a decrease in the number of residents who are foreign medical graduates.
--Outreach program in Pharmacy utilizing some 63 remote sites is fully in place.

--A nine-chair dentistry clinic has been established as part of the AHEC center for use in the training of dental students and general practice dental residents.

--Continuing education programs are currently being taken to seven outreach sites throughout the AHEC area with programs specifically designed to meet regional needs.

--Continuation of the program beyond federal funding has been offered by State and other sources.
AHEC Projects Funded Subsequent to 1972

CALIFORNIA

The California Statewide AHEC program has been in operation for one and one-half years. It has organized all eight fully-developed medical schools into cooperative relationship with the major state health agencies and with a developing network of local AHECs. Twelve local centers are now in planning or development phases and four more are expected to be added in fiscal year 1983. Of these, nine will have an urban focus, while six will serve the needs of rural areas. Much of the successful experience in the Central Valley will be useful in the new endeavor, but new approaches to the university-community partnership also are being developed in urban areas where the barriers to health care are significantly different from those in rural areas. Although some parts of the state are "over-doctored", the Division of Health Professions Analysis, DHHS estimates that 2.7 million people reside in primary care health shortage areas in California and that 871 additional primary care physicians are needed in these areas. This is a classical case of maldistribution which has resisted solution for decades. The AHEC program has proven to be an effective remedy to this problem. The California AHEC project is a potent alliance of the educational resources and local and state agencies needed to overcome the problem of maldistribution of health professionals. These efforts are carefully targeted to areas and populations of need and are supported by the California Medical Association and other important professional groups. In fact, there are fourteen active professional, student and community committees which are designing and evaluating educational components. In selected areas of severe manpower shortage, we will increase training opportunities (over 100 new primary care physician residency positions are planned to be added), but in other cases we will rely on other mechanisms to induce distribution, including recruiting and retention programs, and enhancement of the professional environment.

COLORADO

--Medical student core clerkships exist now in four AHEC communities where none previously existed. In 1980-81, 100 students will study medicine, pediatrics, surgery, obstetrics-gynecology, and/or psychiatry in community hospitals away from Denver.

--Preceptorships for medical students have been greatly expanded since 1977 when only 5-10 students per year participated. In 1980-81, over 40 students will work with rural Colorado physicians through the AHEC Program.
--Nursing baccalaureate students are using rural Colorado hospitals and health departments for part of their clinical education. For the first time these rural facilities have an opportunity to recruit baccalaureate nurses for their community and graduates are returning to the sites of their rural experiences to work.

--The AHECs offer continuing education to practicing health professionals in rural areas. During 1980-81 an estimated 4,000 rural professionals will receive continuing education close to home.

CONNECTICUT

--AHEC has provided key support in establishing a required primary care clerkship which will involve 70 fourth year medical students each year in urban health experiences in underserved inner cities.

--Supported the expansion of a family medicine residency program to include a significant focus on urban and community health issues and needs.

--Developed contracts with seven health professions schools including: medicine, dentistry, allied health, public health, nutrition sciences, nursing, and social work to place students in discipline-specific and inter-disciplinary experiences in AHEC-developed and sponsored sites.

--Supported the development and implementation of a school nurse practitioner program to upgrade the clinical skills of school nurses. This has increased their ability to function in a multi-disciplinary environment and has expanded their understanding and utilization of community health resources.

--Developed a university-wide approach to minority recruitment and development, including linkages to public schools, other educational and training programs in the target area and branch campuses of the university.

--Has utilized the resources of key agencies within the Black and Hispanic communities to plan, develop and implement educational programs for students, health practitioners and community residents.

KANSAS

--While only in the middle of its second year of existence, the Western Kansas Rural AHEC Program has already planned, developed, and/or conducted over 30 community-based programs in continuing education for nurses and allied health professionals. The programs conducted to date have attracted over 500 individuals in nearly 15 different communities.
In addition, community-based continuing education programs for rural physicians have been initiated through the AHEC Program and have been conducted by medical school faculty in cooperation with medical specialists in Northwest Kansas. Over 150 rural physicians in six different communities have attended programs ranging in content from: medical ethics to toxic shock syndrome. Dozens more programs have been requested throughout the regions for the upcoming year.

MARYLAND
--Consists of three active AHECs (two urban and one rural) with plans being implemented for an additional rural center.

--One of the urban centers is unique in the Nation because it is designed to address problems of ready access to and maldistribution of health care providers for a specific geriatric population.

--The numbers of students, both graduate and undergraduate, and residents that have rotated through the three centers for the past 1 1/2 years are as follows: Medicine: Undergraduates - 67, Graduates - 26; Dental: 11; Nursing: 86; Pharmacy: 48; Allied Health: 27, for a total of 265.

--To date, three physicians, four dentists, four social workers, four nurses, six nurse practitioners, and three pharmacists have located in a designated underserved area in the State following their experience in the Cumberland AHEC Program.

MASSACHUSETTS
--The Massachusetts Statewide Area Health Education Center Program is a partnership effort among three medical schools (University of Massachusetts Medical School/Worcester, Boston University School of Medicine, and Tufts University School of Medicine), ten other health professions schools and programs of these universities, and community-based institutions which have planned or will plan local Area Health Education Centers (AHECs). The Program is federally supported and was initiated in October, 1978.

--Established four regional AHECs, and is planning two additional centers.

--Assisted in the establishment of a primary care preceptorship program at the University of Massachusetts Medical Center, required of all students.
--Assisted in the implementation of residency training in inner city Boston health centers and public schools, and in rural sites in Western Massachusetts effecting a total of 33 primary care residents.

--Increased nursing graduates in Western Massachusetts by 12 graduates per year, developed new training affiliations in hospital and home health care settings for nursing students, fostered career ladder opportunities for ADN nurses by facilitating transfer to BSN programs, and funded the development of a family care nurse practitioner program.

--Assisted in the establishment of a preceptorship program for dental students in Boston neighborhood health centers.

NEW JERSEY

--The New Jersey AHEC has put its first Area Health Education Center (the Greater Camden AHEC) into operation on October 1, 1980, and is scheduled to put its second AHEC into operation (the Central Camden AHEC) on October 1, 1981. Both of these Area Health Education Centers are dealing with the complicated health care delivery and manpower problems of the urban inner city of Camden.

--Programs involving all AHECs:

a. Consumer Health Education Program for degree students
b. Health Care Management Program
c. Continuing Education Program
d. Learning Resources Program
e. Social Work Program

Almost all of these are either new programs or significant extensions of these programs into urban areas.

--Numbers of Students - In our first operations year of our first AHEC, which is the present year 1981, we have had the following student rotations:

a. Undergraduate Osteopathic Medical Students - 29 students into the urban area.
b. Undergraduate Dental Students - 83 students rotated through the area.
c. Allied Health - 6 physician assistants rotated through the area.
d. Bachelors of Science in Consumer Health Education - 10.
e. Health Careers Exposure at the High School level - 620.
f. Medical Social Services - 1.
g. Nutrition & Dietetic Students - 109,

for a total estimated number of students interacted with and rotated through this urban area in 1981 of 858.
--Continuing Education - We have had an estimated 32.3 days of
Continuing Education spanning most health fields.

OHIO

--Ohio's program is addressing through regional education
activities those problems associated with a rural Ohio popu-
lation which has shown an 8% increase while the physician-to-
population ratio has remained constant during the same time
period. Problems associated with underserved urban areas are
being addressed by programs being developed in Cleveland,
Youngstown, and Cincinnati.

--Organizationally, the University of Cincinnati College of
Medicine serves as the prime contractor, and then subcontracts
with the other six medical schools in Ohio for the planning,
development, and operation of regional AHEC programs. Regional
programs at the University of Cincinnati College of Medicine,
Northeastern Ohio Universities College of Medicine, and Case
Western Reserve University are in the third year of the program
and are operating centers in Georgetown, Youngstown, Akron,
and Cleveland. The Wright State University School of Medicine
will begin its third year on April 1, 1981 with an operation
of a Center in Dayton. The Medical College of Ohio, The Ohio
State University College of Medicine, and Ohio University
College of Osteopathic Medicine are now conducting developmental
activities and have established Centers in Sandusky, Lima,
Columbus, and Athens.

--In addition to the medical schools, 24 schools or programs
of the other health professions are participating actively in
the Statewide Program. These include dentistry, nursing,
pharmacy, and allied health. Students from these disciplines
as well as medicine are being trained throughout Ohio.

PENNSYLVANIA

--Medical interviewing was completed by 52 students and 86
students completed the Introduction to Patient Care Course.

--Seven students elected clerkships at St. Margaret's and
Shadyside Family Practice Residencies as part of the Primary
Care Senior Elective.

--Coordination and liaison with family practice residencies by
six specialty coordinators (i.e., community medicine,
psychiatry/behavioral science, pediatrics, otolaryngology,
medicine, obstetrics-gynecology) have included
(1) otolaryngology rotations for St. Margaret's and McKeese's
residents (2) a dermatology clinic for Shadyside residents
(3) first use of patient simulators at St. Margaret's
(4) psychiatric teaching, precepting and curriculum development
at Washington, Shadyside and St. Margaret's residency program
and (5) a one-day otolaryngology workshop for residents of
six Family Practice Residency Programs.
--20 fourth year dental students participated in a rural clinical practice at Westmoreland Hospital Association and the Curry Memorial Home one day per week for 16 weeks (2 sessions).

--Fifteen third year dental students participated in an urban externship at Mathilda Theiss Health Center one day a week for 10 weeks.

--Four students who have agreed to seek employment in underserved areas have been enrolled in the Class of 1980 to be trained as family nurse practitioners. A unit on family and pediatric care has developed.

--Primary care management was addressed by a problem identification conference held in December, 1979 for 49 participants. This was followed by a May-June, 1980 seven-part seminar series addressing "Contemporary Concepts in Management for Health Services Professional."

--Coordination with rural health centers was affected by attendance at monthly meetings of administrative personnel.

--Community field placement sites for undergraduate and graduate clinical dietetics students have been secured (i.e., Alma Illery Health Center, Allegheny County Adult Services/Area Agency on Aging, Magee Women's Hospital, Mercy Hospital Ambulatory Care Center).

SOUTH DAKOTA

--Program was initiated in 1979, so is relatively new.

--Has already had an impact upon the recruitment and retention of physicians in rural areas of the State.

--Is conducting continuing education programs for physicians, nurses, and other health providers.

--Has helped to establish a statewide library/learning resource system for health providers in the State.

--Is cooperating with State agencies in conducting health manpower assessments for the purposes of documenting health manpower needs in the State and for determining State needs for health education.

--Designated by the South Dakota Board of Regents of Higher Education as the official planning body in the State for State-supported health education.
EASTERN VIRGINIA

--The Program is a combined rural-urban program involving four AHEC centers (2 urban and 2 rural) encompassing six counties, eight cities, and a predominant portion of HSA V (population 1.3 million) in Eastern Virginia.

--After only six months of operation, the Western Tidewater AHEC (Chesapeake, Franklin, Suffolk, Southampton, and the Isle of Wight) already includes the following components:

--Ten formalized student training courses (in Medicine, Dentistry, Nursing, Pharmacy, and Allied Health) involving 160 students in over 7,500 hours of clinical training and exposure in rural AHEC settings; with several more expected to begin in the coming months.

--Thirty-five (35) identified continuing education program needs which have been identified and have either already taken place or are currently being developed.

--Three health careers awareness programs which have involved representatives from all of the AHEC affiliated health science training programs and have involved over 2,500 rural high school students (estimated 50% minority enrollment).

--A functioning learning resources system.

--The AHEC Program is already encompassing medical student preceptorships, clerkships, electives, and individual medical student projects; including a recent 10 week medical student preceptorship rotation for 62 students into AHEC service areas.

--The AHEC Program has developed a strong Minority Affairs focus.

--AHEC has already developed collaborative relationships with HSA V in developing comprehensive health manpower assessments in the area in Medicine, Dentistry, Nursing, and Pharmacy and demographic assessments of the medically underserved and critical health manpower shortage areas.
The California Department of Health Services wishes to submit the following testimony on health professions bills to be considered by the United States Congress:

It is the policy of the California Department of Health Services to shift the allocation of health care resources toward the positive promotion of health rather than the treatment of late-stage disease processes. The cost-effectiveness of disease prevention is believed to exceed that of curative treatment of disease. It is further believed that the productivity and quality of human life can be enhanced through health promotion activities such as physical fitness, stress management, nutritional awareness, environmental sensitivity, and increased self-responsibility.

To the extent that health promotion activities require the direction by trained health professionals, the implementation of the state policy is constrained by the availability of such professionals. The Federal Government has a variety of programs affecting the mix of skills obtained by health professionals throughout the educational system. The State of California urges the Congress to direct more of our nation's health training resources toward the development of preventive health and health promotion skills.

The persons receiving training in preventive health (including environmental and occupational health) and health promotion should not be limited to physicians. Emerging mid-level health practitioners provide a means of expanding services in a more cost-effective manner than can be achieved through a reliance on physicians alone. An increased number of mid-level practitioners have the potential to improve the availability of primary care services in a less costly fashion. The use of mid-level practitioners can also facilitate a shift from an illness-oriented health system to a system oriented toward health and well-being.

The following points relate to specific issues of manpower legislation:

1. General Duties of the Secretary of Health and Human Services:
   The Secretary should be required to support activities designed to empower individuals to maintain and improve personal health status through accessibility to nutrition information, physical fitness resources, stress management techniques, and other health promotion resources.

2. Capitation:
   Capitation grants should be weighted toward those health professionals that provide primary care, preventive health services, and health promotion services.

3. Incentive grants:
   Incentive grants should be designed to increase the numbers of primary care providers as a percentage of the total number of health professionals; incentives for the education of physician extenders (physician
assistants, nurse practitioners, nurse midwives) should be created.

4. Start-up grants:

Grants for the initiation of programs to train non-physician primary care providers such as physician assistants, nurse practitioners, and nurse midwives; apprenticeship programs and on-the-job training for nurses should be supported; programs at nursery schools that train non-physician primary care providers should be supported.

5. HEAL Loans and Health Professions Student Loans:

Student loans should be weighted toward those programs that train primary care providers and health promotion specialists. Loans should be extended to programs training chiropractors and other alternative health providers deemed capable of improving primary health care services.

6. Loan repayment:

The Secretary should be authorized to repay student loans for health professionals providing primary care to underserved areas.

7. NHSC Scholarships:

The NHSC scholarships should be expanded to include the training of non-physician primary care providers including physicians assistants, nurse practitioners, nurse midwives, and nutrition counselors.

8. Family Medicine Departments:

Grants to medical and osteopathy schools to train family medicine practitioners should be required to train non-physician providers and to train physicians to practice family medicine in cooperation with the non-physician providers in a primary care team approach.

9. Public Health and Health Administration:

Special emphasis should be given to the development and expansion of programs in disease prevention and health promotion, including women's health, geriatrics, environmental health, occupational health, and nutrition.

To the extent that funds are limited, public health programs should train non-physician personnel that will increase the availability of preventive health and health promotion activities at a lower cost per individual practitioner.
10. Allied Health Professions:

Funds should be allocated to the training of more mid-level health practitioners capable of providing preventive health and health promotion services at a lower cost than physicians.

11. Special Projects:

Section 788(d) of PHS Act should require the Secretary to continue the availability of the 5th Pathway Program to United States citizens participating in the Becas Para Azatlan Program sponsored by the Mexican Government. Under the Becas Para Azatlan Program, Chicano students from the United States are provided scholarships to attend undergraduate and graduate school in Mexico. Upon graduation from medical school in Mexico, the students require additional training in the U.S. before becoming fully qualified to practice medicine. At present, the 5th Pathway Program is available for that purpose, but it may not continue to be available due to the increased supply of physicians graduating from United States' medical schools. While discontinuation of the 5th Pathway Program may (or may not) be appropriate, a specialized version of the program should be continued to meet the needs of Chicano students participating in the Becas Para Azatlan Program. Those students agree to serve Chicano areas in the United States as a condition of their receiving scholarships from the Mexican Government. Since the Chicano communities are generally medically underserved, the Becas Para Azatlan Program represents a means of raising the health status of Chicano populations in the United States.
April 10, 1981

The Honorable Orrin Hatch
Chairman
Labor and Human Resources Committee
U.S. Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On behalf of all the Deans of the U.S. Schools of Public Health, I respectfully submit our comments on S. 799, the "Health Professions Educational Assistance and Nurse Training Act of 1981". We also want to express our appreciation for your continuing support of the Schools of Public Health. Your introduction of S. 799 indicates your recognition of the importance of Federal support for health professions training including public health.

Sincerely,

Michael K. Gemmell

MKG/ic

cc: Members of the Senate Committee on Labor and Human Resources

The Association of Schools of Public Health (ASPH)*, which represents all of the twenty-one U.S. Schools of Public Health, appreciates this opportunity to present its views on S. 799, the "Health Professions Educational Assistance and Nurse Training Act of 1981".

The purpose of this statement is two-fold: one is to make the Congress and this Committee aware of the major training and financial problems facing Schools of Public Health today; and two is to clearly spell out the ASPH position on the Federal role in public health professions educational assistance programs.

Public health deals with the protection and improvement of community health by organized community effort. Public health activities are essentially a public or government responsibility. The services of public health agencies are not reimbursable on a fee-for-service basis as are personal health services. Rather than treating the symptoms of disease in one person, public health is concerned with discovering how a disease occurs, in halting its spread and in organizing programs for those who have been or may be affected by it in a community, state or nation. The goal in theory and in practice is to discover the source of ill health and to reduce or eliminate it at the earliest point. As a public responsibility such preventive activities have been largely supported by public funds.

*ASPH is the only national organization representing the Deans, faculty and students of the twenty-one Schools of Public Health. The Schools represent the primary education system that trains personnel needed to operate our Nation's public health, disease prevention and health promotion programs. ASPH's principal purpose is to promote and improve the education and training of professional public health personnel.
Public health measures have been successful in controlling communicable diseases as a major cause of death in the United States. While these measures should continue to prevent a resurgence, today the major public health problems in this country involve the causes and control of chronic diseases such as cancer and heart disease; the control or elimination of environmental health hazards; and the provision of equal access to quality health care at reasonable costs.

In recent years Congress has addressed these problems through significant legislation dealing with environmental health, disease prevention and planning, evaluation and management of the health care delivery system. Such legislation has created growing manpower needs in public health. The demand is expected to continue and increase as new programs to improve the quality of life and reduce health care costs are enacted, yet Federal support has actually declined since the mid-1960's. (See Table I and Attachment A and D).

Few studies have been conducted on the impact of the new legislative initiatives on the demand for public health manpower. A study conducted in 1973, prior to the enactment of the health planning law and the current emphasis on cost containment, showed a short fall in every category of professional public health manpower:

U.S. ESTIMATED SUPPLY OF AND REQUIREMENTS FOR SELECTED CATEGORIES OF PROFESSIONAL AND PUBLIC HEALTH MANPOWER

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>Base Year</td>
<td>Constant Possible</td>
</tr>
<tr>
<td>Environmental Health</td>
<td>2,200</td>
<td>4,300 5,000</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>1,000</td>
<td>1,800 2,000</td>
</tr>
<tr>
<td>Health Education</td>
<td>2,000</td>
<td>3,600 6,000</td>
</tr>
<tr>
<td>Health Services Administration</td>
<td>8,500</td>
<td>18,200 25,200</td>
</tr>
<tr>
<td>Health Statistics</td>
<td>1,100</td>
<td>1,700 2,500</td>
</tr>
<tr>
<td>Maternal Health, Family Planning &amp; Child Health</td>
<td>800</td>
<td>1,800 2,000</td>
</tr>
<tr>
<td>Mental Health</td>
<td>200</td>
<td>400 1,100</td>
</tr>
<tr>
<td>Public Health Dentistry</td>
<td>300</td>
<td>550 550</td>
</tr>
<tr>
<td>Public Health Nursing</td>
<td>2,457</td>
<td>5,200 5,700</td>
</tr>
<tr>
<td>Public Health Nutrition</td>
<td>1,000</td>
<td>1,800 2,600</td>
</tr>
<tr>
<td>Public Health Veterinary Medicine</td>
<td>200</td>
<td>350 550</td>
</tr>
</tbody>
</table>


The Schools of Public Health are the major manpower training resources available to meet the increasing demand for highly trained and competent personnel in the public health field.
Federal health professional manpower policy has focused almost exclusively on physicians and has based policy decisions affecting other health professions on conclusions relating to physicians. For example, studies have shown that there may be a substantial oversupply of physicians around 1990. Based on this, the budget request assumes an oversupply of all health professionals and consequently targets its request for health professions education programs at minimizing the future oversupply of health professionals. As suggested by the chart, the available evidence indicates an undersupply of public health personnel. Also the recent Surgeon General's report (Healthy People) found that there is a need for prevention manpower especially in the fields of epidemiology, biostatistics, health administration, environmental health, occupational safety and health, nutrition, among others. Further, a December 1979 HHS report to Congress on community and public health personnel also called for increased Federal support to programs training professionals in these priority public health areas.

The Schools of Public Health* have been educating professionals in the techniques of public health practice, health preservation, health promotion and disease prevention and control since the first decades of the twentieth century. Some Schools of Public Health had their beginnings in university schools of medicine; others were conceived from the outset as autonomous units within their parent institutions. Today there are twenty-one fully accredited Schools of Public Health in the United States, 7 at private and 14 at public universities.

Schools of Public Health are distinct from other health professions schools in a number of ways. They are oriented to the community and prevention rather than to the individual and cure. They train people in a value system that is equalitarian and public service oriented. They train persons to be need oriented rather than demand oriented. They teach techniques of need response and how to view the "community as a patient". Students are prepared for community teamwork and administration rather than private practice. To solve community health problems, the typical graduate works on a team in organized community action, deals with administrative problems and must understand group behavior as well as health care techniques.

Located in 17 states and Puerto Rico, the 21 accredited Schools of Public Health train students from every state in the nation. The Schools have a combined enrollment of over 7,000 students and a faculty in excess of 1,700.** Graduate education in the 21 Schools is organized around a number of major specialties.

*University of Alabama in Birmingham, University of California-Berkeley, University of California-Los Angeles, Columbia University, Harvard University, University of Hawaii, University of Illinois, The Johns Hopkins University, University of Loma Linda, University of Massachusetts, University of Michigan, University of Minnesota, University of North Carolina, University of Oklahoma, University of Pittsburgh, University of Puerto Rico, University of South Carolina, University of Texas at Houston, Tulane University, University of Washington and Yale University. Boston University and San Diego State University will be seeking accreditation in the Fall of 1981 and 1982, respectively.

**When Federal support for Schools of Public Health began in the late 1950s, 11 Schools were training 2,000 students. Federal support has remained constant since the early 1970s. In constant dollars, Federal support has declined drastically (See Table I and Attachment A and D).
Some of the fields of concentration offered by the Schools are:

- Behavioral and Social Sciences
- Biostatistics
- Environmental Health Sciences
- Epidemiology
- Health Services Administration
- Policy & Management
- Health Education
- International Health
- Maternal & Child Health
- Nutrition
- Occupational Health & Safety
- Population Studies
- Public Health Practice & Program Management (e.g., public health nursing)

Graduates of the Schools of Public Health work primarily in the public sector in the areas of health promotion and disease prevention. They represent the basic resource pool from which Federal, state and local health and environmental agencies draw their manpower needs. Graduates also work and teach in university settings. Industry relies heavily on the Schools to train their employees involved in industrial hygiene, occupational safety and health, environmental toxicology, among others. The breakdown is as follows: 50 percent of graduates in a single given year go into Federal, state or local government service, 34 percent work for either non-profit community health agencies or universities and 4 percent work for industry.

ASPH data shows that the Schools no longer primarily train professionals for state and local government agencies. In response to a demand for new types of health workers and a broader concept of public health, the Schools have made major efforts to train students in health services administration and epidemiology, now the two most frequently chosen areas of specialization. Health services administration attracted 1,923 students in 1979-80, or 26.1 percent of the total. With health planning and policy studies counted in, that total would be even higher. Epidemiology narrowly displaced environmental health/ sciences as the second most frequently chosen specialty. Environmental health/sciences ranked third with 900 students in 1979-80 (12.2 percent), while "other" areas of specialization was fourth with 827 students (11.2 percent) and public health practice and program management ranked fifth with 651 students (8.8 percent).

Students who attend the Schools are often mid-career professionals with a prior commitment to public service. The average age is slightly over 30. A large percentage are part-time students already working in the public sector while upgrading their skills. It should be noted that a public health degree does not increase the income potential of the graduate as much as other health professions degrees. Schools of Public Health are in the business of training men and women for public service.

The 21 accredited Schools are two-thirds state owned and one-third privately.

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owned. None of the private institutions, except the University of Pittsburgh, received state support. Private schools by and large depend on the traditional means of private sector support such as endowments, tuition, gifts, etc., yet they are in the business of training workers for the public sector.

FEDERAL ASSISTANCE TO SCHOOLS OF PUBLIC HEALTH

I. Institutional Support

Federal assistance to encourage development of experienced public health professionals began with traineeship support in 1956, thus making Federal aid to Schools of Public Health one of the oldest health manpower training programs. Federal institutional support was authorized in 1958 and the special project grants program began in 1960. Since the Federal assistance program began, the number of accredited Schools has almost doubled from 11 to 21 and the enrollment has increased fivefold, yet Federal support has remained constant since 1975. In current dollars, institutional support has declined more than 40 percent since 1970. (See Table II and attached charts).

The basic intention of Federal institutional support to public health schools is to increase the supply of health manpower in fields where the demand is high and/or where a shortage exists. The July 1979 Surgeon General's Report said that although there is a lack of public health manpower data,* there are definite shortages of certain specialized disciplines such as epidemiologists, biostatisticians, occupational and environmental health workers and health service administrators. The overwhelming majority of these professionals are trained in Schools of Public Health.

Institutional support to both public and private non-profit Schools has provided a general subsidy which may be used for any educational program of the Schools including teaching and community service. Such grants supplement other sources of income and permit a degree of flexibility in program development. For the newer and smaller Schools the institutional subsidy has stimulated growth and provides a measure of financial stability.

Providing basic institutional support is a means whereby the Federal government can share the costs** with states and private institutions for the training of public health personnel to manage and operate governmental health programs.

The Schools still need flexible but accountable funds which they can use to support parts of their overall program which have been weakened by insufficient Federal, state and local and private financing.

Adequate training and research funds are available in certain fields such as toxicology, nutrition, occupational safety and health to partially support students and to purchase supplies and equipment. However, there are no categorical funds available, except the old formula grants and the present capitation grants, that provide adequate support for curriculum development and program support.

ASPH believes that S. 799 should provide the basic generic support for improving the quality of the curriculum and teach techniques and enhance the capacity of the Schools to provide health promotion and disease prevention activities in the community.

*Reasons for the lack of data are several, such as lack of uniform and fixed definitions and requirements for employment, methodological problems and high costs of gathering information.

**Teaching costs per student per year approximate those of medical schools. ASPH estimates that it costs $15,000 to train one public health student each year.
An alternative to capitation is needed because of the general disfavor of the program. While it has been effective in increasing enrollment, it has not been effective as a means of addressing the problems of specialty and geographic mal-distribution. Dealing with these problems requires targeted programs of assistance. Basic institutional support would assure the health care system an adequate supply of public health professionals in defined national priority areas. HR 2004 targets financial support to categorical programs that are responsive to national health requirements and programs. The quid pro quo implied in Federal support is based on results in terms of increased minority enrollments, public service commitment of students and graduates attracted to specialty and geographic areas in need. Federal support, in terms of institutional, student, and curriculum assistance, challenges Schools to place emphasis on Federally defined priority areas. It ensures the training of professionals (such as health administrators, biostatisticians, public health nurses, preventive medicine specialists, environmental and occupational health specialists, nutritionists, maternal and child health workers, among others) who would provide services in disease control, protection against health hazards, health services management, reduction of cost, health promotion as well as disease prevention.

The Administration has proposed the termination of capitation funds for all health professions schools in FY 1982 based on the assumption that capitation grants are incentive payments to Schools to increase their enrollment and are no longer needed since there is or will be an adequate supply of licensed health professionals in the 1980s and 1990s. Yet ASPH studies and two prepared by HHS point out that the demand for the types of health manpower trained by Schools of Public Health will increase as a result of current and future legislative and Administration initiatives in the fields of disease prevention and health promotion (not to mention improved management of health services delivery). These initiatives are looked upon as means to improve the quality of life and to reduce skyrocketing health care costs.

In view of the growing demand for health manpower stimulated by recent passage of Federal programs such as health planning, clean air, clean water, toxic substances, health maintenance organizations, older Americans act, nutrition programs, PSROs, and other Federal initiatives such as home health care, child immunizations, mental health, child health, health promotion, rural and urban health initiatives, among others, the ASPH believes that continued institutional support is justified by the nature of public health as a governmental enterprise aimed at the improvement of the public's health. Furthermore, the Schools of Public Health presently represent the major source of supply of trained personnel to implement and manage the Federal health programs and initiatives. Institutional support is simply a partial reimbursement of costs incurred by the Schools in providing comprehensive training of personnel for Federal, state and local governments, industry and voluntary health agencies charged with the responsibility of carrying out Federal programs and meeting Federal health requirements.

* A December 1979 report to Congress on Community and Public Health Personnel and the Surgeon General's Report, Healthy People. Also the Institute of Medicine and NIH have repeatedly stated that a short supply of epidemiologists and biostatisticians exists.
The federal funds received by Schools of Public Health have been considered to be the federal government's share of preparing public health personnel to meet the needs of the public today and for the future. The amounts, while small in comparison to overall expenditures, have and will continue to contribute to the preparation of this vital health resource. The percentage of Federal funds as authorized under P.L. 94-484 to each school is approximately 10 percent of their total budgets.

The capacity of the Schools to respond to emerging needs, to offer a balanced curriculum and to provide graduate training in critical areas which are unsupported by other funding sources would be severely reduced by the absence of institutional support. To delete institutional support now or in the near future will diminish the ability of the Schools to serve the Nation's health in the manner intended by those national leaders who first conceived the notion of financial support to Schools of Public Health.

ASPH urges the Committee to amend S. 799 to provide stable support to the Schools of Public Health. This financial assistance would enable these public health graduate institutions to provide categorical educational programs and community services that are complementary to national public health shortage areas outlined in Healthy People. The quid pro quo implied in Federal assistance would be based on results:

- Increased supply of professionals working in nationally defined specialty shortage areas such as health administration and management, biostatistics, epidemiology, nutrition, gerontology, environmental and occupational health (including toxicology), health promotion, maintenance and disease prevention, among others.

- Increased supply of manpower needed to implement national public health and health care service programs.

The justification for continuing institutional support to students and Schools of Public Health is generally the same as it was 20 years ago when the program first began. Public health schools train personnel for public service. The Federal government has a direct interest in assuring that an adequate supply of public health personnel is trained in quality institutions to manage and operate the health delivery system in the national interest.

II. Student Assistance (Traineeships)

ASPH strongly urges enactment of a traineeship section in S. 799 to provide needed support to students entering or continuing their professional careers in public health. The traineeship program is intended to attract high caliber students and to offer the economically disadvantaged, especially minorities, an entry point into the system. The rising cost of tuition and other expenses will make it even more difficult for low-income students, particular minorities.
to afford graduate education in public health schools. Furthermore, many undertake graduate study in public health at mid-career and have important family obligations. Others have already accrued heavy debts from their previous education. Over 75 percent of students received some form of financial help in 1979-80.

The graduates, unlike many of the other health professions, do not enjoy lucrative incomes. Over 90 percent of the graduates are employed by governmental and community agencies and universities. Their modest salary levels are reflected in a recent survey which showed an average of only $30,000 after 15 years of experience. Of the 1979 graduates, 57 percent earn less than $19,000 per year, 17 percent $19,000 to $22,000, and 20 percent $25,000.

Calculated in constant dollars, traineeship support has declined by 48.6 percent since 1970 with enrollments growing in that same period (52 percent). This has meant less money to be spread among more students. (See Table III).

It should be noted that the limitation on the amount of an individual traineeship award puts the Schools of Public Health at a competitive disadvantage in recruiting physician students in residency programs.

Traineeship support to students in Schools of Public Health is justified on the grounds that a majority of our students enter (or re-enter) public service. A recent ASPH survey of 1979 graduates shows that 50 percent worked in tax supported agencies of the Federal, state, regional and local governments and 26 percent worked for voluntary and non-profit, private health organizations. Over 32 percent of the 1979 graduates are providing public service administrative, planning or evaluation services, 15 percent education or other training services in public health, 5 percent public health community organization services and 38 percent are providing technical services such as clinical, laboratory, social and environmental services.

ASPH urges the Committee to amend S. 799 to include support for traineeships. Again, Schools of Public Health train men and women primarily for service in the public sector in the areas of health promotion, disease prevention and in the organization and administration of health services. Traineeships support these individuals in their public service career paths.

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*Survey and analysis by Thomas Hall, M.D., of the School of Public Health at the University of North Carolina. (See Attachment B).

**In 1979-80, 53.6 percent of public health students were women.
III. Special Projects

ASPH supports the special project grant section of S. 799 (Section 790). This provision, however, does not replace losses to the Schools brought on by inflation. As inflation has gone up, Federal assistance in special project grants has gone down. In FY 1973, the Congress appropriated $6 million for special projects; in FY 1981 it approved $5 million which represents $3.0 million in 1972 dollars. Yet School enrollment increased 40 percent since 1973. (See Table IV).

These grants are used for projects that are designed to place emphasis on curriculum in the areas of national public health manpower needs (epidemiology, biostatistics, health administration, nutrition, gerontology, environmental and occupational health, maternal and child health, among others). These grants are used to complement Federal initiatives that are stimulating a growing demand for public health personnel.

The special project grants program began in 1960 and was intended to aid accredited Schools of Public Health to develop new programs and expand existing programs in biostatistics and epidemiology, health administration, health planning, health policy analysis and planning, environmental and occupational health and dietetics and nutrition. An amendment by the 95th Congress opened this authority to any educational entity offering programs in the above areas without increasing the authorization level.

Project grants provide support for the development of training opportunities in public health to meet emerging national priorities for public health manpower competencies. These include the training of leadership for management and specialized responsibilities in new and projected health agencies and agencies to control environmental health hazards, plus private industry.

Project grant appropriations have been decreasing since 1973. Inflationary pressures have accelerated that decline. Calculated in constant dollars in the FY 1980 appropriation of $5 million is 40 percent less than the amount appropriated in FY 1973. (See Table IV).

Further, Schools of Public Health do not receive all of the money appropriated. As a competitive program, Schools of Public Health must now compete with all programs in health administration, environmental health, nutrition and other educational entities offering training in the specified fields. However, we support Federal assistance to these programs since they greatly contribute to the needed public health manpower pool.

ASPH supports the increased authorization levels in S. 799 for special project grants to Schools of Public Health. Here is the justification. Training and research funds are available in certain fields such as toxicology, nutrition, occupational safety and health to partially support students and to purchase supplies and equipment.
However, there are no categorical funds available, except the old formula grants and the present capitation grants, that provide support for curriculum development and program support. ASPH believes that increases for special project grants would provide the basic generic support for improving the quality of the curriculum and teaching techniques and enhance the capacity of the Schools and health administration programs to provide health promotion and disease prevention as well as health services management activities in the community, state and nation.

IV. Preventive Medicine, Dentistry and Public Health Residencies

ASPH urges the Committee to report out a provision to S. 799 that provides support for residencies in public health and preventive medicine. Healthy People underlined the need to increase the supply of professionals in these special practice areas. Also a recent Institute of Medicine report, "A Manpower Policy for Primary Health Care," made a number of recommendations including one to increase the number of residency positions in preventive medicine. The recent GMENAC report also pointed out the need for physicians in this specialty area. (See Attachment C).

ASPH concurs with its sister organizations, the American College of Preventive Medicine and the American Teachers of Preventive Medicine, in their efforts to have Congress recognize the special needs of programs in preventive medicine. They maintain that if a change is to be effected in the health care system to bring about a greater emphasis on prevention, a change must be made in the attitudes and behavior of the medical profession. Medical students, and hence physicians, are not trained to understand the potential of prevention. To promote an awareness of prevention within the medical profession, it is necessary to foster integration of prevention principles within federal policy regarding health manpower training. S. 799 should provide incentives to medical schools to integrate prevention within their curriculum and by providing direct support for departments of preventive medicine and residency training to students in preventive medicine in Schools of Public Health.

V. Continuing Education and Health Policy and Management Training

ASPH urges the Committee to report out a section in S. 799 that would target funds for continuing education programs designed to train on-the-job professionals in the latest developments of health policy, management, finance and administration. Recent enactment of Federal health and environmental laws, plus expanding expectations for health, increased public participation in personal and national health affairs, greater demand for competition models and improved health services management, all have created a demand for the upgrading of skills for professionals working in health promotion and disease prevention and health administration fields. According to recent reports, of the approximately 150,000 people from the public health work force, only 25 percent are graduates of Schools of Public Health or other health professional training programs. One-half of the total requires short-term re-training in order to help them keep up with the growing complexities of health programs and the ever increasing base of knowledge and technology.

*1980 Report to HHS by the Graduate Medical Education National Advisory Committee (GMENAC). See Attachment C.
There is an urgent need for trained policy planners and managers throughout the health system, including many in public and private non-profit agencies and institutions that are not directly engaged in the provision of hands-on care for the ill, but do impact on the availability, quality and cost of medical care, and on health services generally, including disease prevention, health promotion, and protection of the public from hazards to health (radiation, toxic substances, air and water pollution, etc.).

ASPH urges the Members to support programs that effect constructive change by widening the perspectives and increasing the management capabilities of senior and mid-level executives and leaders who are responsible for directing health agencies such as HMOs, HSOs, community health centers, hospitals, state and local health departments, environmental agencies, among others, including industry managers.

VI. Facilities Maintenance

ASPH urges the Committee to approve provisions in the health manpower act that provide assistance to Schools of Public Health for construction, renovation and/or refurbishment of facilities to provide appropriate teaching and research environments for students and faculty. S. 799 would support the Schools in expanding their programs in vital public health disciplines to incorporate the necessary elements which ASPH maintains are so desperately needed. However, the bill does not provide funds for additional space requirements that would be needed if S. 799 is enacted.

Present plans to terminate grants for construction and extremely limited funds for renovation of teaching facilities, ignore the implications of Federal laws, initiatives and the Surgeon General's report which will stimulate the growing demand for public health manpower. If assumptions regarding growing demands are true, the Schools of Public Health will need the construction grants in order to expand their facilities to accommodate the necessary increase in enrollments. Many of the 21 Schools of Public Health are operating at their capacity level. Expansion of enrollment to meet the growing demand will mean overcrowded and inappropriate teaching conditions.

VII. Health Personnel Data and Manpower Projections

ASPH requests extension of Section 793 of P.L. 94-484 that asks the Secretary to collect, compile and analyze data on all sectors involved in the health services delivery system. With the demands being placed on the Schools of Public Health to provide data to the executive and legislative branches of the Federal government, it becomes imperative that a centralized system of data collection be continued. At the present time such a system is operating and can provide information on applicants, students, graduates, faculty research projects and expenditures in Schools of Public Health. Because of the need for authentic data produced in a timely fashion, Federal funding is necessary to maintain surveillance on public health manpower production in the Schools of Public Health. Also, this type of data collection and surveillance needs to be extended to other schools and programs that produce specialized health manpower personnel.
Further in an effort to monitor the ability of the production system to fill manpower requirements of the work force, studies must be undertaken to assess public health manpower requirements in all sector of the health delivery system, especially in the public sector. Contrary to the other health professions (physicians, nurses, dentists, pharmacists, veterinarians, optometrists, etc.) no federal studies have been undertaken on the need for the present or future supply of public health workers.

ASPH urges the Committee to provide assistance to not only conduct studies to determine the demand for public health personnel, but to determine the cost of educating and training community and public health workers, as well as identifying functional and geographic areas in which there are shortages in national priority needs.

VIII. The Administration's Proposal

We understand that the Administration's bill will propose to end capitation but it will continue to provide limited support and curriculum development monies to Schools of Public Health. Recent NHS report to Congress state that a short supply of public health personnel exists in our Nation. It is surprising and confusing, therefore, for the Administration to propose drastic reductions in Federal support to Schools of Public Health. Given the present state of the economy, certain reductions in Federal spending is justified. However, to recommend cuts in programs that contribute to keeping individuals out of the medical care system does not make sense. Cost savings in the health care system can be achieved through greater emphasis (not reductions) on programs that keep people and communities healthy.

IX. Summary

ASPH urges the Committee to include references to public health in the preamble of the bill that would amend P.L. 94-484. ASPH suggests that the revised act be complementary to the Surgeon General's report Healthy People:

It is the thesis of this report that further improvements in the health of the American people can and will be achieved -- not alone through increased medical care and greater health expenditures -- but through a renewed national commitment to efforts designed to prevent disease and to promote health.

Further, the preamble should note another finding in Healthy People:

In the field of public health, in contrast to personal health, manpower shortages are believed to exist in some key fields, including occupational health, epidemiology, biostatistics, and health services administration.
In summary, the ASPH believes that continued Federal assistance is actually an investment at the front end of the health care system. The Schools (i.e., through their students, graduates, researchers, faculty and community service programs) will not only help prevent illness but will also help slow down the rapidly escalating costs of medical care. Providing basic institutional and student support is a means whereby the Federal government can share the costs with state and private institutions for the training of public health personnel to manage and operate governmental health programs. Public health is a public responsibility. Schools of Public Health train personnel for public service. The Federal government has a direct interest in assuring that an adequate supply of public health personnel is trained in quality institutions to manage and operate the health delivery system in the national interest.

ASPH thanks the Committee on Labor and Human Resources for the opportunity to present its views on S. 799, the "Health Professions and Education Assistance and Nurse Training Act of 1981." ASPH urges favorable consideration of S. 799 with suggestions outlined in this statement.
Appropriations History
Current and Constant Dollars
1964 - 1980

Key
--- Current Dollars
---- Constant Dollars

Association of Schools of Public Health
Attachment B

ASSOCIATION OF SCHOOLS OF PUBLIC HEALTH

Some Highlights of the Preliminary Data on 1978 and 1979 Graduates

1979 1978

Employment
78.4% 82.3% of the graduates are employed
12.0% 11.8% of the graduates have continued their education
9.6% 4.8% of the graduates are unemployed

Type of Employing Organization
54.4% 52.0% of employed graduates work for tax supported organizations such as Federal, State, Regional or Local Government
21.0% 22.2% of employed graduates work for Voluntary Health Agencies
12.3% 12.2% of employed graduates work for Proprietary Organizations

Types of Services Which Graduates are Providing
18.1% 19.1% of graduates are providing Administrative, Planning or Evaluation Services
15.4% 14.8% of graduates are providing Education and Training to others in Public Health
5.1% 5.1% of graduates are providing Consultation Services
5.1% 3.3% of graduates are providing Public Health Community Organisational Services
30.3% 35.5% of graduates are providing Technical Services such as Clinical, Laboratory, Social and Environmental Services

Earning Levels of Employed Graduates
96.0% 90.0% of almost one-half of employed graduates earn less than $19,000 per year
16.4% 26.0% of employed graduates earn between $19,000 to $22,000
6.2% 11.0% of employed graduates earn between $22,000 to $25,000
10.4% 21.0% of employed graduates earn more than $25,000

Earning Level of Graduates Prior to Public Health Training
77.4% 82.0% of graduates earned less than $19,000
6.0% 5.0% of graduates prior to entering SPH earned between $19,000 and $22,000
4.4% 3.0% of graduates prior to entering SPH earned between $22,000 and $25,000
12.2% 7.2% of graduates prior to entering SPH earned more than $25,000

Financial Assistance During Training
77.3% 76.0% of the graduates had some financial assistance during their education
29.3% 32.0% of the graduates had more than 2/3 of their education paid by traineeship, grants or employers

Job Availability for Graduates with Public Health Degrees and Experience
53.9% 52.7% of graduates with work experience found jobs readily available

These graduates without prior experience found it more difficult to obtain satisfactory jobs.
ATTACHMENT C
1990 REQUIREMENTS FOR PUBLIC HEALTH AND PREVENTIVE MEDICINE

Manpower estimated by GMENAC

On September 23, 1990, the HHS Graduate Medical Education National Advisory Committee (GMENAC) met in Washington and adopted final recommendations (shown below) regarding the needed number of public health physicians for each specialty for 1990.

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Aerospace Medicine</th>
<th>Occupational Medicine</th>
<th>Public Health and General Preventive Medicine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board-certified(1)</td>
<td>783</td>
<td>794</td>
<td>2,217</td>
<td>3,394</td>
</tr>
<tr>
<td>Self-identified(2)</td>
<td>113</td>
<td>251</td>
<td>1,543</td>
<td>2,901</td>
</tr>
<tr>
<td>Administration</td>
<td>108</td>
<td>441</td>
<td>1,331</td>
<td>1,880</td>
</tr>
<tr>
<td>Research</td>
<td>37</td>
<td>37</td>
<td>301</td>
<td>375</td>
</tr>
<tr>
<td>Teaching</td>
<td>7</td>
<td>9</td>
<td>115</td>
<td>131</td>
</tr>
<tr>
<td>Patient Care</td>
<td>304</td>
<td>(1,608)*</td>
<td>(2,948)*</td>
<td>308</td>
</tr>
<tr>
<td>Other</td>
<td>112</td>
<td>75</td>
<td>7,147</td>
<td>7,965</td>
</tr>
</tbody>
</table>

IPF Requirements for Board-Certified Full Time Equivalents (3)

| Program Activities | 250 | 1,000 | 2,250 | 9,750 |
| Research           | 150 | 200   | 400   | 750   |
| Teaching           | 100 | 500   | 650   | 910   |
| Clinical Services  | 500 | 400** | 900** | 1,300 |
| Other              | 112 | 748*  | 1,250 | 2,190 |

The estimate of total requirements as calculated above is 6,800-7,500.

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Number</th>
<th>1,644</th>
<th>1,802</th>
<th>3,446</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Activities</td>
<td>376</td>
<td>1,644</td>
<td>1,802</td>
<td>3,446</td>
</tr>
<tr>
<td>Research</td>
<td>64</td>
<td>231</td>
<td>73</td>
<td>160</td>
</tr>
</tbody>
</table>

*These are felt to be physicians providing regular clinical services though in a preventive medicine setting. The 3,700 physicians have not been included in the final figures because in the GMENAC methodology these physicians have been included in the enumeration of generalist physicians.

**These are in addition to other physician specialists working in a preventive medicine setting but who are providing regular clinical services.
### TABLE 1

**Budget History**

**Public Health Training Appropriations**

(Constant Dollars)  
1964 - 1980

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Schools</th>
<th>GNP Deflator</th>
<th>Total</th>
<th>Project</th>
<th>Formula (^1) (Institutional Traineeships)</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>14</td>
<td>63.3</td>
<td>$12,788,300</td>
<td>$3,159,550</td>
<td>$3,001,570</td>
<td>$6,627,170</td>
</tr>
<tr>
<td>1965</td>
<td>14</td>
<td>65.1</td>
<td>$14,982,900</td>
<td>3,840,240</td>
<td>3,840,240</td>
<td>6,912,440</td>
</tr>
<tr>
<td>1966</td>
<td>15</td>
<td>68.4</td>
<td>$21,158,000</td>
<td>5,867,950</td>
<td>5,116,950</td>
<td>10,233,910</td>
</tr>
<tr>
<td>1967</td>
<td>15</td>
<td>72.5</td>
<td>$23,103,400</td>
<td>6,896,550</td>
<td>5,172,410</td>
<td>11,034,480</td>
</tr>
<tr>
<td>1968</td>
<td>15</td>
<td>76.9</td>
<td>$21,456,400</td>
<td>5,861,750</td>
<td>5,201,560</td>
<td>10,403,120</td>
</tr>
<tr>
<td>1969</td>
<td>16</td>
<td>81.9</td>
<td>$21,332,700</td>
<td>6,003,660</td>
<td>5,560,430</td>
<td>9,768,000</td>
</tr>
<tr>
<td>1970</td>
<td>16</td>
<td>85.3</td>
<td>$20,465,400</td>
<td>5,568,516</td>
<td>5,636,910</td>
<td>9,060,020</td>
</tr>
<tr>
<td>1971</td>
<td>17</td>
<td>94.5</td>
<td>$19,016,900</td>
<td>4,779,890</td>
<td>5,348,140</td>
<td>8,866,880</td>
</tr>
<tr>
<td>1972</td>
<td>17</td>
<td>100.0</td>
<td>$18,471,000</td>
<td>4,517,000</td>
<td>5,564,000</td>
<td>8,400,000</td>
</tr>
<tr>
<td>1973</td>
<td>18</td>
<td>107.5</td>
<td>$20,093,000</td>
<td>5,581,390</td>
<td>5,581,390</td>
<td>8,930,230</td>
</tr>
<tr>
<td>1974</td>
<td>18</td>
<td>118.9</td>
<td>$17,258,200</td>
<td>4,793,940</td>
<td>4,793,940</td>
<td>7,670,310</td>
</tr>
<tr>
<td>1975</td>
<td>19</td>
<td>127.3</td>
<td>$16,119,400</td>
<td>4,320,500</td>
<td>4,634,720</td>
<td>7,164,180</td>
</tr>
<tr>
<td>1976</td>
<td>19</td>
<td>137.7</td>
<td>$14,901,900</td>
<td>3,994,190</td>
<td>4,284,670</td>
<td>6,623,090</td>
</tr>
<tr>
<td>1977</td>
<td>19</td>
<td>146.2</td>
<td>$14,036,500</td>
<td>3,761,970</td>
<td>4,036,560</td>
<td>6,238,030</td>
</tr>
<tr>
<td>1978</td>
<td>21</td>
<td>150.3</td>
<td>$11,909,500</td>
<td>3,326,680</td>
<td>3,925,480</td>
<td>4,657,350</td>
</tr>
<tr>
<td>1979</td>
<td>21</td>
<td>162.7</td>
<td>$10,847,113</td>
<td>3,071,819</td>
<td>3,624,747</td>
<td>4,300,547</td>
</tr>
<tr>
<td>1980</td>
<td>21</td>
<td>177.3</td>
<td>$10,437,350</td>
<td>2,819,284</td>
<td>3,665,069</td>
<td>3,946,997</td>
</tr>
</tbody>
</table>

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2. Rounded  
3. Second Quarter 1977  
4. Estimated
<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>No. Schools</th>
<th>Appropriation (in constant dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>14</td>
<td>$1,900,000 63.3 $3,001,570</td>
</tr>
<tr>
<td>1965</td>
<td>14</td>
<td>2,500,000 65.1 3,840,240</td>
</tr>
<tr>
<td>1966</td>
<td>15</td>
<td>3,500,000 68.4 5,116,950</td>
</tr>
<tr>
<td>1967</td>
<td>15</td>
<td>3,750,000 72.5 5,172,410</td>
</tr>
<tr>
<td>1968</td>
<td>15</td>
<td>4,000,000 76.9 5,201,560</td>
</tr>
<tr>
<td>1969</td>
<td>16</td>
<td>4,554,000 81.9 5,560,430</td>
</tr>
<tr>
<td>1970</td>
<td>16</td>
<td>5,154,000 88.3 5,836,970</td>
</tr>
<tr>
<td>1971</td>
<td>17</td>
<td>5,054,000 94.5 5,348,140</td>
</tr>
<tr>
<td>1972</td>
<td>17</td>
<td>5,554,000 100.0 5,554,000</td>
</tr>
<tr>
<td>1973</td>
<td>18</td>
<td>6,000,000 107.5 5,581,390</td>
</tr>
<tr>
<td>1974</td>
<td>18</td>
<td>5,700,000 118.9 4,793,940</td>
</tr>
<tr>
<td>1975</td>
<td>19</td>
<td>5,900,000 127.3 4,634,720</td>
</tr>
<tr>
<td>1976</td>
<td>19</td>
<td>5,900,000 137.7 4,284,670</td>
</tr>
<tr>
<td>1977</td>
<td>19</td>
<td>5,900,000 146.2 4,035,560</td>
</tr>
<tr>
<td>1978   5</td>
<td>21</td>
<td>5,900,000 150.3 3,925,480</td>
</tr>
<tr>
<td>1979</td>
<td>21</td>
<td>5,900,000 162.7 3,624,747</td>
</tr>
<tr>
<td>1980</td>
<td>21</td>
<td>6,500,000 177.3 3,665,069</td>
</tr>
</tbody>
</table>

1 Implicit price deflator for GNP, 1972 = 100. Economic Report of the President, January 1976
2 Rounded
3 Second quarter 1977
4 Estimated
5 First year for Capitation grant allocation
TABLE III
Budget History
Public Health Traineeship Appropriations
(In Current and Constant Dollars)
1964 - 1980

<table>
<thead>
<tr>
<th>Year</th>
<th>No. Schools</th>
<th>(Current $) Traineeships</th>
<th>GNP Deflator</th>
<th>(Constant $) Traineeships</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>14</td>
<td>$4,195,000</td>
<td>63.3</td>
<td>$6,627,170</td>
</tr>
<tr>
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<td>14</td>
<td>$4,500,000</td>
<td>65.1</td>
<td>$6,912,440</td>
</tr>
<tr>
<td>1966</td>
<td>15</td>
<td>$7,000,000</td>
<td>68.4</td>
<td>$10,233,910</td>
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<tr>
<td>1967</td>
<td>15</td>
<td>$8,000,000</td>
<td>72.5</td>
<td>$11,034,480</td>
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<tr>
<td>1968</td>
<td>15</td>
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<td>76.9</td>
<td>$10,403,120</td>
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<tr>
<td>1969</td>
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<td>$8,000,000</td>
<td>81.9</td>
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</tr>
<tr>
<td>1970</td>
<td>16</td>
<td>$8,000,000</td>
<td>88.3</td>
<td>$9,060,020</td>
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<td>1971</td>
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<td>1972</td>
<td>17</td>
<td>$8,400,000</td>
<td>100.0</td>
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<tr>
<td>1973</td>
<td>18</td>
<td>$9,600,000</td>
<td>107.5</td>
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<tr>
<td>1974</td>
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<td>$9,120,000</td>
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<tr>
<td>1975</td>
<td>19</td>
<td>$9,120,000</td>
<td>127.3</td>
<td>$7,164,180</td>
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<td>1976</td>
<td>19</td>
<td>$9,120,000</td>
<td>137.7</td>
<td>$6,623,090</td>
</tr>
<tr>
<td>1977</td>
<td>19</td>
<td>$9,120,000</td>
<td>146.2</td>
<td>$6,238,030</td>
</tr>
<tr>
<td>1978</td>
<td>21</td>
<td>$7,000,000</td>
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</tr>
<tr>
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<td>21</td>
<td>$7,000,000</td>
<td>162.7</td>
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</tr>
<tr>
<td>1980</td>
<td>21</td>
<td>$7,000,000</td>
<td>177.3</td>
<td>$3,946,997</td>
</tr>
</tbody>
</table>

1 Implicit price deflator for GNP, 1972 = 100. *Economic Report of the President, January 1976*
2 Rounded
3 Second quarter 1977
4 Estimated
TABLE IV
Budget History
Special Projects in Public Health
(Current and Constant Dollars1)
1964 - 1980

<table>
<thead>
<tr>
<th>Year</th>
<th>Current $ Project</th>
<th>GNP Deflator</th>
<th>Constant $ Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>1964</td>
<td>2,000,000</td>
<td>63.3</td>
<td>$3,159,550</td>
</tr>
<tr>
<td>1965</td>
<td>2,500,000</td>
<td>63.1</td>
<td>3,840,240</td>
</tr>
<tr>
<td>1966</td>
<td>4,000,000</td>
<td>68.4</td>
<td>5,247,950</td>
</tr>
<tr>
<td>1967</td>
<td>5,000,000</td>
<td>72.5</td>
<td>6,896,550</td>
</tr>
<tr>
<td>1968</td>
<td>4,500,000</td>
<td>76.9</td>
<td>5,051,750</td>
</tr>
<tr>
<td>1969</td>
<td>4,917,000</td>
<td>81.0</td>
<td>6,003,660</td>
</tr>
<tr>
<td>1970</td>
<td>4,917,000</td>
<td>88.3</td>
<td>5,868,516</td>
</tr>
<tr>
<td>1971</td>
<td>4,517,000</td>
<td>94.5</td>
<td>4,779,890</td>
</tr>
<tr>
<td>1972</td>
<td>4,517,000</td>
<td>100.0</td>
<td>4,517,000</td>
</tr>
<tr>
<td>1973</td>
<td>6,000,000</td>
<td>107.5</td>
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<td>1979</td>
<td>5,000,000</td>
<td>162.7</td>
<td>3,071,619</td>
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<tr>
<td>1980</td>
<td>5,000,000</td>
<td>177.3</td>
<td>3,065,069</td>
</tr>
</tbody>
</table>

1 Implicit price deflator for GNP, 1972 = 100. Economic Report of the President, January 1976
2 Rounded
3 Second quarter 1977
4 Estimated
5 Number of Schools of Public Health: 21
STATEMENT
OF THE
ASSOCIATION OF CHIROPRACTIC COLLEGE PRESIDENTS
INTERNATIONAL CHIROPRACTORS ASSOCIATION
AMERICAN CHIROPRACTIC ASSOCIATION

Hearings on S.799
Committee on Labor and Human Resources
United States Senate

April 8, 1981
INTRODUCTION

The Association of Chiropractic College Presidents, the International Chiropractors Association and the American Chiropractic Association are pleased to submit this statement for the hearing record on S.799 and the reauthorization of health manpower programs. We are grateful for this opportunity to share with the Committee the concerns of the chiropractic profession about the federal programs in the health professions area.

We recognize that with federal budgetary constraints, difficult choices must be made by this Committee as it establishes priorities and funding levels for health manpower programs. During this review, it must be noted that while much progress has been made in solving the problems these programs were designed to address, much remains to be done. The progress made in ensuring a well-trained supply of health care practitioners adequate to meet the needs of all Americans has largely been a result of federal health manpower programs. The tremendous gains made by medicine and the other health disciplines in increasing the quality of their academic, research and training programs have been due in no small part to the federal assistance these programs provided.

Sharply escalating costs in health professional education, research and training, however, threaten both to eradicate the gains that have been made and to prevent further advances. Continuing federal assistance will be required if health professional schools are to continue to provide high-quality education at levels affordable to all capable students. The problems of geographic maldistri-

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bution and lack of minority and female representation will also continue to require federal assistance.

As this Committee is aware, chiropractic, alone among the major health disciplines, is not eligible for equal participation in the various federal health manpower programs. Without benefit of the federal assistance medical and other health professional schools have received over the years, our chiropractic colleges have nevertheless managed to provide high-quality education to an increasing number of chiropractic students. The exclusion of our schools and students from these assistance programs, however, seriously threatens our continuing capability to do so, and has prevented the chiropractic profession from sharing in the gains made by those health professions receiving assistance under health manpower programs.

The chiropractic profession faces the same problems as those health disciplines included in 5.799. The 15 Schools of Chiropractic with status with the Council on Chiropractic Education are suffering from the same financial pressures and developmental problems as are the other health professional schools; the 8,902 students currently enrolled in schools of chiropractic must likewise bear the brunt of rising tuition costs and limited financial aid resources; and the chiropractic profession has not been able to share in the progress made by other health professional groups in meeting the problems of geographic maldistribution and inadequate female and minority representation within the profession.

Exclusion of chiropractic from these programs has been inconsistent with the federal government's recognition of chiropractic
services under a number of federal health programs, including Medicare and Medicaid. In addition to this federal support, chiropractic has been accorded recognition by both state and local governments and the private sector, and enjoys widespread acceptance among members of the public. Demand for chiropractic services is growing, and there is evidence to suggest that demand for such services may well outstrip supply. Clearly, the federal government has a role to play in ensuring top quality chiropractic education.

As this Committee is aware, the Senate voted last year to include chiropractic in its legislation reauthorizing health professions programs. We again urge this Committee to act favorably on the inclusion of chiropractic in the health manpower legislation it ultimately adopts. This year will no doubt see reductions in federal outlays for health manpower. Existing inequities, however, must not be allowed to continue under the rubric of "budgetary constraints." The exclusion of chiropractic, although perhaps a testament to the American Medical Association's lobbying intensity, has not been in the best interests of our health care economy. Equal participation by all health professionals for the federal monies that will remain available is, we think, the surest way to lower health care costs through a truly competitive market for health professional services.

Therefore, we respectfully suggest that all involved will profit substantially by Federal support of chiropractic education: The Public, by being able to serve its increasing demand for chiropractic health care; The Economy, by returning impaired workers back to the job more quickly thereby increasing productivity and profit, and
The Federal Government, by expending less funds, on a cost-benefit analysis, for chiropractic as a less expensive health care alternative.

THE ECONOMICS OF CHIROPRACTIC CARE

Based on size and on the number of practitioners and patient visits, chiropractic is the second largest health care service in the United States. The 23,000 practicing Doctors of Chiropractic had approximately 122.5 million patient visits in 1979, generating over $1.3 billion in practice revenues. Chiropractors are a licensed and officially recognized health profession in all fifty states plus the District of Columbia. All fifty states authorize chiropractic services as part of their workman's compensation program. In the private sector, virtually all major commercial health and accident insurance policies provide for chiropractic services. Substantial numbers of major international, national and local unions include chiropractic services in their health and welfare plans and many industries such as General Motors, Firestone, etc. pay for chiropractic care for their employees.

The federal government has likewise recognized and authorized chiropractic services under Medicare, Medicaid, vocational rehabilitation programs, Longshoremen and Harbour Workers' Compensation Act, Internal Revenue Code (as a medical deduction). For federal employees, chiropractic services are covered under federal employees health benefits programs and in federal employees workers' compensation. Federal funding of chiropractic has also been provided under appropriation measures sent to the Department of Health and Human
Services and for a statistical survey of the chiropractic profession under the Health Manpower Act. The U.S. Department of Education officially recognized the Council on Chiropractic Education as an accrediting agency for chiropractic educational institutions.

Fueled by both government and private sector support, the demand for chiropractic services continues to grow. Evidence exists to suggest that the demand for chiropractic services far exceeds the supply. For example, in 1978 the ratio of Doctors of Chiropractic to population was approximately 10.3 per 100,000 population. The 1980 F.A.C.T.S. study, conducted and financed by the federal government, estimated that a ratio of 14.1 per 100,000 population was needed in order to satisfy existing demand for chiropractic services. Assuming the 14.1 ratio to be an appropriate standard, one Doctor of Chiropractic would be required per 7092, as opposed to the current supply of one chiropractor per 9709.

A recent study in the state of Iowa revealed that while the ratio of Doctors of Chiropractic was already 23.2 per 100,000 population in 1979, the demand for chiropractic services remained high. This suggests that the 14.1 ratio may indeed be a conservative estimate. Further indication that demand has not been satisfied comes from an annual survey by the American Chiropractic Association. In 1972, when there were approximately 15,000 chiropractors, the average number of patient visits per week was 107.1. In 1980, with a substantial growth in the number of active chiropractors, the number of patient visits per week was exactly the same (107.1), indicating an ever growing demand for chiropractic services.
The supply and demand problem is further compounded by the serious geographic maldistribution of chiropractors across the country. Ineligible for the National Health Service Corps and other health manpower programs designed to correct distribution of health practitioners, maldistribution among chiropractors is perhaps the most severe of all major health disciplines. For example, while there are 23.2 chiropractors per 100,000 population in Iowa there are .9 chiropractors per 100,000 population in the District of Columbia. The maldistribution problem is regional also. The New England States have 6.8 per cent of the nation's chiropractors while the western states compose 15.2% of the practitioners.

Chiropractors function as primary care health providers in many instances and as such play a significant role in servicing rural underserved areas of this country. Fifty-two percent of chiropractors practice in communities of less than 50,000 population. Perhaps a more telling statistic is that thirty-two percent of all chiropractors practice in areas of 24,000 or less population. It is the smaller communities that have traditionally been neglected by other health care providers. The chiropractic profession has been attempting to respond to this need.

Assessing the role of chiropractic continues to be difficult because of the lack of data on chiropractic in our health care economy. Research does suggest that chiropractic care, as compared with alternative treatment modes, can be a less costly way to treat substantially identical health problems. For example, in a study of official data from State Workman's Compensation claims, it was found
that chiropractic care was 1/3 less costly than medical care for similar ailments. A 1972 California study by C. Richard Wolf, M.D. also found that chiropractic care returned the impaired worker back to the job more rapidly than medical treatment, thus reducing business costs and increasing worker productivity.

The lack of data on chiropractic can be linked in some degree to chiropractic’s exclusion from health manpower and other research and training programs. For example, the chiropractic profession has thusfar been excluded from the Department of Health and Human Services ongoing data collection activities. Yet the information such data provide is crucial not only to the future development of chiropractic, but to an assessment of its’ contribution in serving the health care needs of our nation. We are pleased to see S.799’s recognition of the importance of these activities in Section 107’s authorization of HHS’s data collection activity in the health personnel area. We request that chiropractic be included in these activities.

The National Advisory Council on Health Personnel also has an important role to play in assessing and developing the future role of health personnel in our health care economy. Again, despite the enormous role chiropractic has played and will continue to play in that economy, the profession has thusfar not been represented on the Council. The Council cannot in any realistic way perform its function by continuing to ignore the existence of one of the largest health disciplines. We therefore support S.799’s expansion of the Council, and urge that chiropractic be included among its members.
In sum, great strides in professional improvement have been made. We acknowledge our advancements but with very real concern express our failure to achieve some of the goals this legislation addresses. The chiropractic profession is dedicated to servicing America's health needs. We agree with the American Medical Association on the partnership role that the health professions and the federal government share towards a goal of providing high quality health care. We applaud the statement made by a representative of the A.M.A. in testimony before the U.S. House Energy and Commerce Subcommittee on Health and the Environment on March 12, 1981: "The A.M.A. is committed to seeing that financial resources are available to qualified aspiring health professionals."

STUDENT ASSISTANCE

The over 8,000 students enrolled in the 15 Schools of Chiropractic recognized by the Council on Chiropractic Education must successfully complete a rigorous educational program in order to earn a Doctor of Chiropractic degree. After a minimum of two years pre-professional training (the two year requirement of professional training is similar to dental school) incorporating the prescribed content of science courses, chiropractic colleges require a minimum of four academic years of professional resident study. In addition to passing the licensing board examination in all states, the Doctor of Chiropractic must pass the Basic Science Board examination: (including anatomy, physiology, pathology, bacteriology, chemistry, and public health) in four states and the District of Columbia. This is the equivalent examination given to M.D.s and D.D.s.
While the tuition and fee levels at chiropractic colleges are relatively inexpensive in comparison with other doctorate-level health professional schools, the rising costs of chiropractic education are an onerous burden which even many of our higher-income students are finding increasingly difficult to bear. Rising costs and ineligibility for health professions scholarships and loan programs have greatly skewed our student body. Despite recruitment efforts, women comprise only 17 percent of the students at chiropractic colleges, with minority groups comprising less than 1 percent. Foreign students represent approximately 4.5 percent of the student population. The disproportionate representation of the affluent in our chiropractic colleges has, of course, affected the chiropractic profession generally, which has traditionally been largely white and male.

The recent gains made by the health professions included in S. 799 in increasing female and minority participation is directly linked to the federal student assistance programs that have been made available to health professional students. Only through federal assistance have students in other health disciplines been able to meet the enormous costs of health educations; only through federal assistance have health professional schools been able to recruit women and minorities in increasing numbers. That the wealthy and the white remain disproportionately represented in chiropractic colleges is a testament to chiropractic's exclusion over the years from health manpower scholarship and loan programs. While our chiropractic colleges have on their own made enormous strides in this regard, lack
of financial resources have prevented them from improving to an acceptable degree the economic and racial mix of students entering the profession. All capable students, regardless of their sex, race or family financial resources, must be allowed to pursue a chiropractic education.

We strongly support continued funding of the Health Education Assistance Loan (HEAL) and the Health Professions Student Loans (HPSL) programs, and we request that chiropractic students be allowed to compete for these funds on an equal footing with the other health disciplines. We also strongly support the program of assistance to individuals from disadvantaged backgrounds detailed in Section 168 of S. 799. This program is essential if capable students from low-income backgrounds are to be able to enter the health professions. The chiropractic profession is committed to improving the income and racial mix of our students. Our inclusion in these programs is crucial to the success of that commitment.

INSTITUTIONAL ASSISTANCE

We agree with the premise of this legislation that health professional schools are a national resource that continue to bear a special responsibility in solving the health care needs of this nation. Accomplishing this goal, however, requires that schools be financially stable.

All of our chiropractic colleges are private, freestanding institutions; they are neither public institutions with the government as a primary funder nor are they parts of universities upon which
they can rely for financial support. Schools of chiropractic receive virtually no government support from either federal, state or local sources. As a result, many of our schools are dangerously close to bankruptcy. They must rely for funds solely on ongoing campaigns for philanthropic support and on tuition and fees. Tuition and fees in fact comprise nearly 70% of our colleges operating incomes, a figure sharply contrasting with the 9.9% average for the eight other health professional groups covered by federal assistance programs. These funding sources serve merely to maintain the status quo and keep chiropractic colleges solvent. Little if any of our funds remain available for special projects, improvements of facilities, continuing education, advanced clinical training, or recruitment of women and minority students.

Yet, the funding needs of our colleges are so large, and the need for new programs and improvements so great, that only through some form of additional federal support can these needs be met. Our teaching facilities are in particular need of renovation and capital improvements. Many of our colleges were constructed years ago, and are both inadequate for modern quality chiropractic education and are unable to meet the needs of a student body growing in size. Satellite clinical centers are needed to provide not only a quality clinical experience for our students, but to provide services to many of our underserved and elderly citizens who travel great distances to receive care at our present clinics. The exclusion of chiropractic from federal assistance places the profession at a serious disadvantage in the maintenance of quality education. This exclusion is neither consistent with the many federal programs which include chiropractic services, nor is it in the best interests of this country's
health care delivery system.

We therefore strongly support continued funding of the federal loan guarantees and interest subsidies programs, and we urge the Committee to allow chiropractic schools to participate on an equal basis for this federal assistance. Likewise, we support re-authorization of the financial distress grant program. Chiropractic colleges are not immune to the burden of inflation nor to the problem of maintaining accreditation in the face of steeply rising educational costs. Chiropractic colleges facing serious financial difficulty should be allowed to participate in the financial distress grant program.

We support continued funding for Area Health Education Centers (AHEC), and urge the inclusion of all health professionals, including chiropractic, in this program. Likewise, we support grant programs to schools providing support services to health professionals practicing in underserved areas. The Chiropractic profession has a long history of service in underserved rural areas; the poor and the elderly have traditionally been the most dependent users of chiropractic care. Our colleges would be most anxious to initiate programs to provide needed care to the underserved and elderly who are far removed from our present clinics and teaching facilities. Lack of funding has prevented the establishment of such services in the past. Inclusion of chiropractic in AHEC and grant support programs for underserved areas would go far in both maintaining quality chiropractic education and to providing much needed services.
April 1, 1981

The Honorable William Hefner
U.S. House of Representatives
2161 Rayburn Building
Washington, D.C. 20515

Dear Mr. Hefner,

It has come to our attention, through material that we have received from professional societies to which we belong, viz., the Society of Teachers of Family Medicine and the American Academy of Family Physicians, that President Reagan has recommended a marked and serious reduction in family medicine funds for residency, undergraduate, and faculty development programs for FY 81 under Section 786 of the Health Manpower Act. An example of the immediate concern we have is the Hatch Bill, S.799. In FY 82 it is anticipated that grants for family medicine residency, undergraduate, and faculty development programs will be reduced by $16 million dollars, from $26,450,000 to $20,450,000. A reduction of this magnitude at this time will significantly impair the progress and viability of educational programs in family practice in North Carolina. Additionally, and of serious import to the viability of family medicine, the President has proposed for FY 82 that all primary care programs (family medicine, general internal medicine, and general pediatrics) be consolidated in a single budget item of $36 million dollars. He did not - and this is important - spell out what portion would be allocated to family medicine. Grants to department of family medicine (Section 780) would not be included in the above budget item, but they would be reduced from $9.5 million dollars to $8.0 million dollars for FY 82, a 16 percent reduction. The Hatch Bill calls for an even more severe reduction to $7.0 million dollars.

We appreciate very much the efforts that are being exerted in getting our country on an even keel. However, there are programs, e.g., training family physicians, which are, without question, cost effective. A large cadre of well trained family physicians can improve the overall quality of health care in our country, and equally important, such a cadre can be effective in reducing the overall cost of medical care in this country. Though these reductions may have some immediate salutary effect on the budget problems facing the Administration and the Congress, the long term effect may well be a resultant increase in the national cost of health care delivery. It is indisputable that alternative delivery systems, viz., pre-paid groups (IPA's,
cannot be cost-effective without the active participation of generalists (family physicians, in particular, and general internists and general pediatricians) in the delivery of the large bulk of health services. Family physicians should be the cornerstone of our American health care delivery system.

In 1970 there were only seven departments and 16 divisions of family medicine in 101 American academic medical centers; in 1980 there were 97 departments and 11 divisions of family medicine in our academic medical centers. In 1973 only 53 residents in family medicine completed a residency training program; In 1980 there were 1,846 graduates that brought the 10 year total of family practice graduates to 8,579. This phenomenal growth is due, in large measure, to appropriate funding of family medicine by state legislatures and the federal government. Any reduction in federal and state support for family medicine will have an immediate deleterious effect on the viability of family practice residency training programs and other educational endeavors in family medicine. It is our strong belief that it will take another two decades, at the current effort level, to train an appropriate number of family physicians that are necessary for the support of a health care system. The GMEMAC report generally supports this contention. An increase in state and federal support is needed - not a devastating decrease. Such a decrease will send a signal to academic medical centers that will say in effect, "Go ahead with your traditional training of technically oriented subspecialists; the nation and the Congress are really not interested in having more primary care physicians trained; expensive hospital emergency rooms can be our triage mechanism; available, continuous, comprehensive, and personal family health care is a pipe dream; the efforts to change the professional distribution of health care professionals, e.g., training more family physicians, which was begun in the late 60's and accelerated in the early 70's, were inappropriate; we should have stayed with the status quo."

We do not believe these are the messages you want to send to our academic medical centers; yet that is precisely how the traditionalists in academic medical centers will react to any cut in funding for family medicine, whether it is in Section 780 or Section 786 of the Health Manpower Act. Institutionalizing family medicine, i.e., making family medicine a core unit in our academic medical centers along side of internal medicine, pediatrics, surgery, psychiatry, and obstetric/gynecology is difficult enough even with adequate funding. Too many of traditional medical educators and administrators feel threatened by family medicine. We - family medicine - are the new boy on the block; they are threatened by the entry of family medicine into their traditional territories. Turning back the clock to the subspecialization era of the 50's and 60's would, in their view, be most desirable! But is this what the nation needs? Is this what you want?
Instead of a cut in funding for family medicine by 44 percent, an increase of 15-20 percent is sorely needed. Instead of retrenchment, advancement is needed. Instead of more technically oriented subspecialists, more personal physicians are needed. We and our faculties, as have other family medicine department chairman and faculties, have done and are doing our bit by giving up our private practices to accept faculty appointments in family medicine at income levels and levels of financial security less than those found in the private sector. Therefore, we fear not for our own security; our concern is for the people whom you and we serve in our own ways.

If family practice is to survive - if the specialty of family medicine is to be able to fully mature into an established discipline within our academic medical centers and appropriate community hospitals - then family medicine urgently needs your help and the help of your colleagues in the Congress. If you feel we can be of help in this endeavor, rest assure that we will do anything, go anywhere, and work as hard as necessary in order to gather support for this cornerstone of American medicine. You only need to let us know what we can do. We will respond.

We apologize for the length of this letter. We know that the time in which you are able to give attention in detail to so many urgent things is limited. The length of this letter simply attest to our very deep concerns. Thank you for your attention.

Very sincerely yours,

Julian P. Keith, M.D.
Professor and Chairman
Department of Family and Community Medicine
Bowman Gray School of Medicine

Edward J. Shahady, M.D.
Professor and Chairman
Department of Family Medicine
University of North Carolina - Chapel Hill

cc: R. Michael Miller
Vice President for Socioeconomic Affairs
American Academy of Family Physicians

JPK:jc:W/W1

James G. Jones, M.D.
Professor and Chairman
Department of Family Practice
East Carolina University School of Medicine

Samuel W. Warburton, M.D.
Chief, Division of Family Medicine
Duke University Medical Center

The Honorable Orin Hatch
Chairman of Labor and Human Resources Committee
U.S. Senate
April 14, 1981

Honorable Orrin Hatch, Chairman
Committee in Labor and Human Resources
Room G237
Dirksen Building
Washington, D.C. 20510

Dear Senator Hatch:

Enclosed find a copy of my statement to the Committee on Labor and Human Resources regarding the issue of the Health Professions Educational Assistance and Nurse Training Act of 1981.

As a nurse who both provides direct patient care and is actively engaged in nurse continuing education, this issue concerns me greatly. I submit my statement in testimony of my beliefs as well as my concerns for the nursing profession.

Thank you for your interest and efforts on nursing's behalf.

Sincerely,

Margaret Mastal, R.N., M.S.N.
Coordinator
Human Resources Development

enclosure:
Mr. Chairman, the Committee on Labor and Human Resources is currently focusing on a vital issue: the Health Professions Educational Assistance and Nurse Training Act of 1981. The current shortage of nurses and other problems within the nursing profession are pertinent topics when considering funding for education. A recent study, "Why Nurses Leave Nursing and What Can Be Done About It," published in the American Journal of Nursing, January 1981 provides a summary of the problems as well as insight into their solutions. This investigation reveals that many of the problems arise from within the profession and must be resolved by nurses themselves and our professional organizations. For example, nurses are dissatisfied with salaries and fringe benefits, inadequate administrative support, unnecessary organizational tasks, and inexplicit state laws governing practice. These problems are outside the jurisdiction of the federal government; rather, they belong to nursing. However, this study, which surveyed 3500 nurses, also revealed that nurses are dissatisfied with the lack of opportunities for continuing education and the availability of inservice educational programs. These dissatisfiers are occurring at the same time that the American Nurses' Association has adopted a position that the baccalaureate degree be the basic preparation for entry into professional practice. Further, there is a trend among the states to mandate continuing education as a requisite for relicensure. Nurses provide the greatest portion of direct health care and are inadequately compensated and recognized for their services.
Low salaries do not support nurses in their efforts to continue their education and increase their professional capabilities. The proposed radical cuts in the budget for nursing education and advanced nurse training can only compound a painful situation. However, nursing educational funding must be limited if the national economic issues are to be resolved. Perhaps, as a compromise between nursing's dilemma, the health of the citizenry, and national economic interests, the proposed cuts to nursing education should stand but not on such a radical basis. Until nursing can resolve its own economic and other internal problems, we ask you to support our education efforts so that nurses can remain professionally competent.

Margaret Mastal, R.N., M.S.N.
The Americas Hospital Association, which represents over 6,100 member hospitals and health care institutions, as well as more than 30,000 personal members, is pleased to have this opportunity to present its views on nursing education and foreign medical graduate (FMG) proposals under consideration by this Committee. Although the FMG issue is not addressed in S.799 or S.801, AHA would urge the Committee to address FMG proposals in its discussion of health manpower issues.

Hospitals are sincerely committed to the delivery of high quality, cost-effective health care services to the patients they serve. In order to accomplish this mission, there must be an adequate supply of highly qualified health professionals to meet the staffing requirements of our nation’s health care institutions. Moreover, many hospitals are directly involved in educational programs for health professions by sponsoring clinical programs for graduate medical education, operating hospital-based nursing education programs, and conducting a variety of allied health education programs. At the present time, more than 48,000 nursing students are enrolled in hospital schools of nursing, and all nursing students receive at least part of their clinical training in hospitals. In addition, some 50,000 interns and residents, more than 70,000 undergraduate medical students and a substantial number of allied health professionals, receive significant portions of their educational experiences in hospitals.

Although the health manpower proposals pending before the Committee go beyond the nursing and FMG issues, the AHA has chosen to limit its remarks to these two issues, as a result of an Association policy decision to cooperate with admin-
istration and congressional efforts to reduce the federal budget and yet provide federal financial assistance to programs most necessary to the well-being of the American people. As the centers of health services delivery in their communities, hospitals are committed to ensuring an adequate supply of all such professionals. However, it is imperative that, during these times of limited federal dollars, Congress focus on issues of national priority.

NURSING EDUCATION

Hospital Efforts

From the American Hospital Association's perspective, even though there are many health manpower programs that it would like to see funded, federal nursing education programs stand out as extremely beneficial to maintaining the health of the American people. The AHA has singled out the nursing issue on behalf of the 5,000 hospitals which comprise its membership. Of these, 344 conduct educational programs to prepare students for professional nursing, 249 of which form an AHA membership group, the Assembly of Hospital Schools of Nursing. Many hospitals also contribute significantly to the education of nurses in both basic and advanced educational programs by serving as clinical facilities for the practical components of such programs.

In addition, hospitals are the major employers of nurses. A 1977 HEW-funded study revealed that more than 61 percent of the nation's practicing registered nurses (RNs) were employed in the hospital setting. It is clear that, despite alternative delivery systems and other employment opportunities, the majority of today's nurses work in hospitals.

Hospitals have begun to address the problems of nursing shortages in a constructive manner and are attempting to develop innovative solutions. At a recent AHA nurse recruitment and retention workshop, hospital representatives shared with each other some of their new strategies, among them:

- St. Joseph's Hospital, Stockton, California: Day-care services for children of hospital employees.
Many hospitals have undertaken education and training programs designed to assist nursing service administrators in their management roles. Hospitals also have applied management engineering techniques to the problems of nurse scheduling. In some institutions, computer-assisted nurse scheduling systems have maximized the ability of their administrations to apply nursing resources most productively, accommodate shift preferences, and minimize scheduling conflicts.

In addition, the AHA has recently initiated a National Commission on Nursing, which is an autonomous forum of national leaders in nursing, hospital management, medicine, government, academia, and business. The commission—chartered for a three-year period—is composed of 30 commissioners serving as either individual members or representatives of organizations. The health-related organizations represented on the commission are the American Association of Colleges of Nursing, American Hospital Association, American Medical Association, American Nurses' Association (ANA), American Society for Nursing Service Administrators, Assembly of Hospital Schools of Nursing, National Council of Hospital Governing Boards, National League for Nursing (NLN), and the Division of Nursing of the Department of Health and Human Services (HHS).

The commission has three interrelated and overlapping activities: collecting data and information, formulating recommendations, and developing practical
action plans. One of the commission’s major tools for collecting data and information has been a series of public hearings held across the country. The public hearings provide opportunities for a broad range of individuals and organizations at the grass-roots level to aid in identifying and defining problems and issues. Other data collection methods include reviewing current literature and existing studies and collecting reports of ongoing programs and projects that are designed to improve nursing and nursing practice.

Data and information gathered by the commission will be used to formulate recommendations that reflect a consensus of the commission members. It may also prove to be useful to public and private entities which have an interest in such information. The recommendations will lead to the development of action plans that will provide practical solutions for institutions and organizations confronting nursing problems.

The Nursing Shortage

While there are aggregate increases in the total supply of health professionals in certain fields, especially in nursing, hospitals are experiencing severe and chronic shortages. AHA-member hospitals indicate that they have between 90,000 and 100,000 nursing vacancies, and 60 percent of the nation’s hospitals are said to have unfilled nursing positions.

Recent information from state hospital associations confirm these statistics. For example:

- In October 1980, the Indiana Hospital Association reported that the vacancy rate for nurses in Indiana hospitals was 11 percent for 1980, 2.6 percent higher than the previous year. Overall, the nurse shortage is more severe in large urban areas. Shortages of nurses are also more severe in larger hospitals, with those having more than 150 beds reporting a vacancy rate of 12.5 percent, compared to a 5.3 percent rate in hospitals with fewer than 150 beds. The Gary area has the highest vacancy rate in the state, at 22 percent, followed by the Indianapolis area at 15.2 percent. Hospitals in Indianapolis and its
adjoining counties hired 550 more RNs in 1980 than in 1979, but were still short by 653 nurses. Evansville area hospitals reported a vacancy rate of 9.8 percent, 1.2 percentage points below the statewide figure, while the Fort Wayne area's vacancy rate was 4.7 percent. The lower vacancy rates in the Evansville and Fort Wayne areas can be partially attributed to the presence of four of Indiana's six hospital-based diploma schools of nursing.

- In March 1980, the Ohio Hospital Association reported that, of 15,249 full-time budgeted RN staff nurse positions in Ohio, 1,512 or 10 percent were vacant. Of the 7,248 part-time budgeted RN staff positions, 932 or 12.9 percent were vacant.

- In July 1980, the North Carolina Hospital Association reported that North Carolina needed 1,300 additional full-time RNs, 522 additional full-time LPNs, 198 part-time RNs, and 108 part-time LPNs.

- In February 1980, the Maryland Hospital Association reported that Maryland's community hospitals were experiencing a 14 percent shortage and an approximate 29 percent annual job turnover rate among RNs and LPNs. The specific turnover rate of RNs was 32 percent and for LPNs, 27 percent.

- In September 1980, the Illinois Hospital Association reported 4,982 vacant RN staff positions (13.4 percent) and 1,365 vacant LPN staff positions (12.1 percent) in Illinois. Regional data indicate that Chicago has the highest vacancy rate in the state.

- In May 1980, the Florida Hospital Association reported 2,520 vacant RN positions and 904 vacant LPN positions in Florida.

According to the Department of Labor's Bureau of Labor Statistics, of job openings in the health care field in the 1980s up to 50 percent will be for nurses—approximately 83,000 annual openings for RNs. Hospitals are not only concerned about the present shortage, but also about the future availability of
nursing personnel. Even though job opportunities abound, not enough people are going into nursing. The number of graduating nurses declined 2 percent in 1979—the first such occurrence in 10 years—and another 2½ percent in 1980, according to data from the KU. With the rate of unemployment for nurses—also 2 percent—remaining far below the norms for other categories of comparable professionals, the league predicts that the current nursing shortage will become even worse in the near future.

The factors underlying the shortage of professional nurses in hospitals are numerous and diverse. Nursing must compete with a variety of other career opportunities which have become increasingly available in recent years. Even in the profession of nursing, nurses have the opportunity for greater diversification—into industrial health, health promotion, community health centers, and clinics, for example—which have provided the profession with greater opportunities for mobility and career advancement as well as more convenient work hours.

Compounding the problem is the trend toward shorter lengths of stay by more acutely ill patients requiring more technologically complex nursing care. The creation of intensive care units and specialized services within hospitals has resulted in an increased demand for RNs, as have changes in the utilization patterns of hospitals, with shorter stays reflecting a greater focus on the planning of admissions and discharges and greater use of outpatient facilities.

The effectiveness of such special care units will be severely compromised if sufficient numbers of well-trained hospital nurses are not available. The pressures felt by hospital nurses are compounded by the trend to a more medically intensive hospital caseload. The demands on nurses are not simply physical and mental, but their emotional resources are called upon as well. Their ability to meet many demands is taxed by prolonged understaffing, in situations in which hospitals are unable to recruit nurses. Hospitals are, therefore, concerned that a persistently inadequate supply will compound the existing problem by further discouraging active nurses and increasing the potential for what has been called "burnout."
All purchasers of health care, public and private, bear a portion of the costs associated with the nursing shortage. Certainly one of the most important, yet least quantifiable, of these costs is the effect of a shortage of resources on the health of the nation. As we have noted, the mission of the hospital, as a central component of our health delivery system, is dependent on an adequate supply of nurses, not only to support new health care technologies but also to promote efficiency and effectiveness in the delivery of basic health services.

Other costs, which can be quantified to some extent, are significant, not only in their absolute amounts, but also in the context of opportunities foregone in a time of scarce economic resources. For example, many hospitals unable to obtain permanent nursing staff have responded by using nurse registries as sources of temporary personnel. This extensive use of registry nurses substantially increases the cost of providing care to hospital patients because the fees paid to registries far exceed the total of salaries and fringe benefits paid to permanent employees. In Chicago, more than $7 million was spent in one year for temporary nursing personnel. This figure understates the magnitude of the problem since it does not include the hidden costs involved in the constant orientation process that is needed to enable these nurses to function in particular hospital environments.

In addition, expenses incurred by hospitals to recruit nurses from other fields and to attract inactive nurses into the hospital setting have risen. The average hospital recruitment budget has risen 63 percent in the past year.

For each nurse who leaves, the National Association of Nurse Recruiters estimates that a hospital spends from $150 to $4,000, with an average of $1,000, to recruit a replacement. Hospitals unable to obtain permanent staff have often responded to nursing shortages by using nurse registries—services that provide pools of temporary nursing personnel. In response to a survey conducted by the AHA in January 1979, 33 state hospital associations reported that member institutions have become increasingly reliant on temporary nurses for their nursing departments.

As would be expected, nursing salaries also are rising with growing demand. Real
wages for RNs recently have increased at a faster rate than real wages for all non-supervisory workers in the private sector. In addition, many hospitals have begun special compensation incentives for weekend and night work. For example, a "two day alternative" in some hospitals offers nurses 36 hours of pay for 24 hours of weekend day shift work and 40 hours of pay for 24 hours of weekend night shift work. Other hospitals are paying $17 an hour to RNs on the night shift.

In addition, the shortage of professional nurses will have serious consequences for the physical well-being of the growing elderly population. Americans over 65 account for 23 percent of hospital discharges and 35 percent of total hospital days; they experience 50 percent longer lengths-of-stay and comparatively higher surgery rate.

According to HHS, the 65-and-older group is the fastest growing segment of the American population. By the year 2039, there will be more than 50 million Americans 65 years or older—an estimated 17 percent of the total population in that year. This sharp rise in the number of older Americans will have a dramatic effect on utilization of hospital and nursing home care. Projected trends for short-stay hospital days of care, reported by the National Center for Health Statistics Hospital Discharge Survey, show that during the next 25 years, total days per year will increase from 36 to 47 percent, with 12 to 20 percent of the increase due to the aging of the population.

The provision of health care for the older-age group will, of necessity, be shared among all health professionals within the delivery system; however, the greatest responsibility will undoubtedly fall to nurses, who must attend to patients’ daily needs. Hence, there is likely to be an even greater need for specially trained nurses to meet the unique medical requirements of the elderly, whose demands for restorative, maintenance, and palliative care are greater than those of the general population. For example, four out of five older persons have at least one chronic disease. Of the 81 percent who have chronic conditions, 46 percent experience activity limitations; 40 percent are limited in major activities. Moreover, the assessment and implementation of appropriate plans of care for elderly patients are more difficult because a variety of
physiological and psychosocial factors must be taken into consideration. Such factors deepen the severity of the nursing shortage.

Guidelines for Federal Support

In view of the current and projected nursing shortage, the ANA believes that federal support for nursing education should continue. Consequently, while addressing the FMC issue, the ANA is focusing its comments on certain programs under Title II, Nurse Training, in S.799, the health manpower bill before this Committee. In our opinion, the priorities for funding should be in the following order: (1) student assistance, (2) special project grants, (3) advanced nurse training programs, and (4) institutional support.

Student Assistance

The ANA believes that student loans and scholarships should be continued at the current funding level in order to assist students who may otherwise not be able to complete their education. Section 212 of S.799 proposes to eliminate the existing scholarship grant program for nursing education, and the bill would provide no new authorization for existing student loan funds. Instead, Section 208 of the bill would amend current law to permit all nursing students to apply for loans under the National Defense Education Act of 1958. In view of the extreme need for support of nursing education, ANA opposes changes in the scholarship grant and loan programs and urges their continued funding at current authorization levels. We believe that Section 208 of the bill is meritorious in that it would open an avenue of support that currently is not available to nursing students. However, by itself, the NDEA loan program will be insufficient to compensate for proposed changes in the scholarship grant and loan program, because competition for limited funding will make it difficult for nursing education to receive the priority it deserves.

Scholarships have been awarded in schools of nursing to those in greatest financial need; such students frequently come from backgrounds that make it difficult for them to borrow from the private sector. Moreover, such students are not in positions both to support themselves through part-time jobs and, if
course requirements dictate, to pursue needed remedial and supplementary pro-
gress.

Data obtained from the HHS publication, "Entry into Nursing, Part II," indicate
that the most significant determinants of a student's decision to apply to a
particular nursing program are the cost of the program and availability of
financial aid. Currently, one in every three applicants asks for financial
assistance.

An analysis of federal student assistance for Fiscal Year 1974 showed at 20
percent of nursing scholarships were awarded to black students, a proportion in
excess of the 2.5 percent of black nurses in active practice. The most recent
figures from the NLN show a decrease in enrollments for both minority and male
students in basic nursing programs. Cessation of scholarship funding would
certainly reinforce this trend.

In addition, many nursing schools report to us that up to 80 percent of their
student bodies may be dependent on some form of student assistance, with
federal funds supplying a significant proportion of that aid. Tuition costs for
nursing students also tend to be high in comparison with tuition costs for
educational programs in the liberal arts, because frequently there are labora-
tory fees, costs of transportation to clinical sites, and exceptionally high
teacher/student ratios in comparison with other undergraduate programs. The
withdrawal of federal student assistance funding would be particularly hard on
private nursing schools in states where public funds are available only for
state institutions.

Special Project Grants

The AHA is pleased that S.799 proposes to extend authority for special project
grants. The Association supports the continuation of such grants at current
authorization levels in order to increase the supply or improve the distribution
by geographic area of adequately trained personnel; to provide more opportun-
ities for disadvantaged or minority nurses; and to improve curricula, including those for pediatric, obstetric, and geriatric nursing.

The Association commends the chairman for including in S.799 special consideration for projects that would (1) promote career articulation for nurses who want to move up the professional ladder; (2) encourage mergers between hospital and collegiate schools of nursing; and (3) enhance the clinical training of nursing students, especially through internships/practicums and "reality-based" (i.e., 24-hour) experiences, and provide opportunities for nursing faculty to upgrade their clinical skills, especially via short-term traineeships. The special project grant section should focus on programs that encourage recruitment and retention strategies involving hospital and schools of nursing. Below is a list of some possible examples.

Career articulation: Special projects designed to encourage career motility. One of the major problems that exists today in nursing education is the lack of a standard, articulated career ladder that would enable most nurses to progress from entry level up to the highest level through a recognized hierarchy of steps. In fact, a direct educational career ladder does exist for some nurses who enter the system by earning a baccalaureate degree in nursing (BSN), are then qualified to enter a master's program leading to a nursing degree, and progress to a doctoral degree in nursing. However, because the vast majority of practicing nurses today, and the majority of nurses entering the profession in any given year, do not hold a baccalaureate degree, they are excluded from immediate access to advanced educational opportunities.

For nurses who wish to progress through the educational system, the baccalaureate degree is the gateway to advanced programs. A nurse who undertakes basic educational preparation for a practical, associate degree, or diploma program lacks such a gateway, in that his or her academic credits generally do not apply towards a baccalaureate degree.

Federal funding of special project grants designed to promote career articulation would have the following benefits:
Nurses seeking higher education would be qualified to move through the system in an orderly way.

All previous educational experiences in nursing would earn academic credit.

Employing institutions would have a more highly qualified work pool available to them and a staff potentially more able to satisfy their individual career aspirations.

Public and private funding for nursing education would be more effectively utilized if earned credits were transferable among programs.

Both individual nurses and employers would benefit if uniform expectations and skills were adopted for each level of education within a single system.

Mergers between hospitals and collegiate schools of nursing: Special project grant money should be used where appropriate to encourage hospital-based schools of nursing to merge with collegiate schools of nursing. It is our belief that, where cooperative arrangements exist to facilitate the integration of new professionals into the workforce, the retention of such professionals is higher. Such systems include joint appointments for clinical nurses as academic faculty members, supervised preceptorship and internship programs, and other such formal relationships between academic and service institutions to help close the widely identified gap between the education and service programs.

Recent mergers have shown the following benefits:

1. The values and particular virtues of the hospital school are maintained.
2. Students in schools that have merged with academic institutions are more easily accorded credit for general education coursework and for nursing courses.
3. The frustrations of RNs seeking to enter higher education levels are avoided.
4. The hospital that continues to serve as a site for clinical instruction potentially has the chance to recruit for its own labor force among the students of the program.
Clinical education: Special projects designed to encourage clinical education. Federal assistance for clinical education programs to both basic and advanced nurse training programs is crucial. According to hospital administrators, many basic education programs do not place sufficient emphasis on clinical training, which must then be provided on the job. Exposure to such training may also motivate students to choose the hospital setting as a work environment upon completion of their basic programs. Moreover, because of the increases in technology and the development of special care units, clinical training is essential at the advanced level to prepare nurses to meet the challenges of specialized nursing in the hospital setting.

Advanced Nurse Training

The ANA continues to support advanced nurse training programs which provide funding for three major categories: preparation of nursing faculty, the quality of whom has a direct effect on the quality of care given by students to patients; managerial education for supervisory and administrative nurses, most of whom presently rely on on-the-job training; and advanced training in specialty areas. Programs for training nursing administrators are particularly important because a lack of nursing service administrators, combined with the sometimes inadequate management training of many nurses serving in administrative capacities, has contributed to the growing dissatisfaction and subsequent shortage of nurses.

Advanced nurse training programs should be offered on a part-time, as well as on a full-time basis, since many prospective enrollees must continue to work to meet personal financial needs. Advanced nurse training funds can encourage the development of innovative work/study programs. For example, a program developed jointly by the ANA and the University of Illinois School of Nursing could be replicated in other places with advanced nurse training funds. The program enables practicing nursing service administrators to combine their continuing work experiences with alternating residential sessions, featuring self-learning modules supplemented by a local preceptor's instruction. Such a program, adopted nationwide, would help meet the urgent need for more formally educated management nurses in hospitals. Such courses should be credit-carrying to enable students to attain degree status by consolidating coursework.
Institutional Support

S.799 proposes to eliminate institutional support. ANA recommends that any reduction in federal institutional support should be a gradual and orderly process that will not jeopardize the viability of existing programs. Decreases in capitation funds should be accompanied by adequate funding for student assistance and special grants.

Should federal support for capitation grants to schools of nursing be continued, the ANA urges that the support be provided to all three basic nursing programs: diploma, associate degree, and baccalaureate degree. Nursing schools are dependent on capitation funds for general support, which is vital if they are to help meet the increasing demand for more hospital-based nurses and more nurses to fill positions in alternative settings. They also are dependent on such funds for enlargement of faculties, of which there is currently a serious shortage. Without such funds, the shortage would be aggravated, resulting in cutbacks in these educational programs.

Congress may wish to provide capitation on an incentive award basis, rewarding those schools that help meet national priorities, such as increased enrollment of disadvantaged students.

FOREIGN MEDICAL GRADUATES

Although S.799 does not currently address the FMG issue, the ANA recommends that language be added to the bill that would extend the "substantial disruption" waiver provision of Section 212 of the Immigration and Nationality Act to December 31, 1984. Existing law permits teaching teaching hospitals to request a waiver of certain provisions of the act (which limit the participation of FMGs in U.S. graduate medical education programs) if it is shown that exclusion of an alien medical graduate from the program would cause a substantial disruption in the health services provided by the hospital. Under current law, this waiver expires December 31, 1981.

Although hospitals are, in accordance with federal policy, reducing their re-
lience on "substantial disruption" waivers, such waivers are still being granted due to their importance to the hospitals receiving them.

Recent data show that there has been a steady decline in the number of FMCs since 1977: as of November 3, 1975, 7505; as of June 30, 1976, 7450; as of January 10, 1977, 5090; as of January 10, 1978, 3551; as of January 10, 1979, 2578; and as of January 10, 2000.

The availability of waivers for FMCs is critical to certain major urban health institutions. Many hospitals, both public and private, are experiencing severe financial difficulties as a result of the volume of uncompensated services provided to urban residents lacking health insurance or eligibility for public programs. A significant side-effect of this problem is the decreased ability of such hospitals to retain medical staff and to maintain graduate medical education programs. As financial conditions worsen, salaries in those hospitals cannot keep pace, and the ability of the institutions to maintain the equipment and support services required by physicians in specialty practices becomes severely limited. The inability of these hospitals to retain physicians in specialty practice hinders their ability to provide services to patients who need them.

The AHA also urges the inclusion in § 799 of a provision which would extend the length of time FMCs may spend in the United States for training from the existing two years to seven years. The proposed change would recognize that many postgraduate programs require more than two years to complete.

Attached is a chart which lists the number of residency vacancies requests and approvals by specialty.

CONCLUSION

The American Hospital Association appreciates this opportunity to present its views on the nursing and FMC issues being considered by the Committee and would be pleased to provide any further information or assistance that may be requested.
### STATISTICAL SUMMARY OF RESIDENCY POSITIONS BY SPECIALTY

<table>
<thead>
<tr>
<th>SPECIALTY</th>
<th># Positions 1979-80</th>
<th># Residents on Duty 9/1/79</th>
<th># Vacant Positions</th>
<th>% Vacant Positions</th>
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<tr>
<td>Allergy/Immunology</td>
<td>154</td>
<td>155</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Anesthesiology</td>
<td>2,799</td>
<td>2,491</td>
<td>308</td>
<td>112</td>
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<tr>
<td>Colon and Rectal Surgery</td>
<td>44</td>
<td>42</td>
<td>2</td>
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<td>Dermatology</td>
<td>797</td>
<td>801</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Dermatopathology</td>
<td>16</td>
<td>19</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Emergency</td>
<td>5.018</td>
<td>6,352</td>
<td>659</td>
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<tr>
<td>Internal Medicine</td>
<td>17,074</td>
<td>16,590</td>
<td>484</td>
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<tr>
<td>Neurological Surgery</td>
<td>596</td>
<td>579</td>
<td>17</td>
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<tr>
<td>Neurology</td>
<td>5,123</td>
<td>2,212</td>
<td>111</td>
<td>8.4</td>
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<tr>
<td>Nuclear Medicine</td>
<td>219</td>
<td>174</td>
<td>45</td>
<td>20.4</td>
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<tr>
<td>Obstetrics/Gynecology</td>
<td>4,705</td>
<td>4,696</td>
<td>209</td>
<td>4.51</td>
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<tr>
<td>Ophthalmology</td>
<td>1,532</td>
<td>1,533</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Orthopedic Surgery</td>
<td>2.633</td>
<td>2,572</td>
<td>0</td>
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<tr>
<td>Otolaryngology</td>
<td>1,079</td>
<td>1,028</td>
<td>41</td>
<td>4.0</td>
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<tr>
<td>Pathology</td>
<td>2,819</td>
<td>2,519</td>
<td>300</td>
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<tr>
<td>Blood Banking</td>
<td>29</td>
<td>21</td>
<td>8</td>
<td>32</td>
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<tr>
<td>Forensic Pathology</td>
<td>42</td>
<td>24</td>
<td>18</td>
<td>42.6</td>
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<tr>
<td>Neuropathology</td>
<td>62</td>
<td>52</td>
<td>10</td>
<td>16.2</td>
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<tr>
<td>Pediatrics</td>
<td>5,639</td>
<td>5,603</td>
<td>36</td>
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<td>Pediatric Allergy</td>
<td>55</td>
<td>53</td>
<td>12</td>
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<td>Pediatric Cardiology</td>
<td>144</td>
<td>128</td>
<td>16</td>
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<td>Physical Medicine/Rehabilit.</td>
<td>307</td>
<td>490</td>
<td>17</td>
<td>5.6</td>
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<tr>
<td>Plastic Surgery</td>
<td>422</td>
<td>412</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Preventive Medicine</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>General</td>
<td>237</td>
<td>199</td>
<td>38</td>
<td>16.2</td>
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<tr>
<td>Aerospace Medicine</td>
<td>45</td>
<td>22</td>
<td>20</td>
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<td>Occupational Medicine</td>
<td>87</td>
<td>70</td>
<td>17</td>
<td>19.3</td>
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<tr>
<td>Public Health</td>
<td>29</td>
<td>23</td>
<td>6</td>
<td>21.2</td>
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<tr>
<td>Psychiatry</td>
<td>4,730</td>
<td>3,901</td>
<td>829</td>
<td>17.2</td>
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<tr>
<td>Child Psychiatry</td>
<td>491</td>
<td>322</td>
<td>174</td>
<td>27.2</td>
</tr>
<tr>
<td>Radiology, Diagnostic</td>
<td>3,090</td>
<td>3,049</td>
<td>21</td>
<td>0.7</td>
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<tr>
<td>Radiology, Therapeutic</td>
<td>512</td>
<td>377</td>
<td>135</td>
<td>26.2</td>
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<tr>
<td>Surgery</td>
<td>8,539</td>
<td>7,689</td>
<td>850</td>
<td>10.2</td>
</tr>
<tr>
<td>Pediatric Surgery</td>
<td>24</td>
<td>23</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Thoracic Surgery</td>
<td>285</td>
<td>276</td>
<td>23</td>
<td>8.7</td>
</tr>
<tr>
<td>Urology</td>
<td>1,132</td>
<td>1,077</td>
<td>55</td>
<td>5.2</td>
</tr>
</tbody>
</table>

**TOTAL**                     | 69,036             | 64,613                      | 4,421              | 6.5               |

Source: "'80/'81 Directory of Residency Training Programs" American Medical Association

* Specialties in which waivers have been granted during 1978-80
The Honorable Orrin Hatch  
Chairman  
Committee on Labor and Human Resources  
United States Senate  
Washington, D.C. 20510

Dear Chairman Hatch:

I am writing to express the views of the American Dental Association on legislation (S.799) to amend and extend the Health Professions Educational Assistance Act (P.L. 94-484). Last year the Association submitted a detailed record statement on this important issue. Our comments in this letter are intended to emphasize certain aspects of federal health manpower assistance with which the Association has a particular concern. We respectfully request that these recommendations be included within the hearing record.

Institutional Support

Studies conducted by government and private entities over the last several years have shown that the collective capacity of the nation's dental schools is sufficient to meet and exceed the current and projected demand for dental services. The Association is in accord with these findings and therefore reiterates the position taken many times in the past that the government's support of the country's dental schools should not be linked to a formula that has already burdened the system by requiring or encouraging the admission of additional students.

A recognition that this country has achieved an adequate supply of health care practitioners does not, however, relieve Congress and the Executive of the obligation to continue supporting the enterprise which they have promoted and encouraged. Continuity and predictability of revenue is as important to the health education system as it is for any large and complex activity. Dental education in particular rests upon an extremely fragile economic base. Between 1970 and 1980 the average annual cost to train a dental student increased by over 120 percent. The current educational costs to a dental school exceeds $24,000 yearly - a level which is one of the highest among the health profession.
Schools of dentistry are presently receiving over $12 million in annual capitation grant support. Because of the inability of many schools to generate replacement funds, the American Dental Association urges the Subcommittee to give serious consideration to the establishment of an alternate mechanism for providing institutional assistance. Such a funding authority should not, as stated earlier, be linked to a student enrollment formula. Rather it should be structured to ensure an adequate and stable level of federal support calculated as a percentage of a school's instructional budget or non-federal expenditures. Previous studies by the Institute of Medicine of the National Academy of Sciences include specific recommendations on such an approach.

Student Assistance

The American Dental Association believes that a comprehensive and financially viable program of health professions student aid should be accorded a top priority in any renewal of the health manpower law. Our position on this issue is prompted by a concern that a prospective withdrawal of federal institutional support will force many dental schools to raise tuition to unacceptably high levels. The consequence of this action is already evident in the precipitous decline in dental school applications which has occurred since 1974. Between the academic years 1973-74 and 1979-80, the average tuition rate at all dental schools increased by 126. During the same period the number of individuals applying to dental schools fell by 26 percent. The most recent data available to the Association indicates that a sizeable majority of the more than 22,000 dental students require financial assistance to complete their education. It is reasonable to assume that the absolute number of students seeking aid, as well as the level of assistance required, will grow in proportion to the additional increases in tuition which can be expected to occur in the next few years.

It is important, we believe, that a student assistance program be responsive to the needs of the participant while in school rather than on a perception of income in later professional life. The American Dental Association supports the provisions of §799 which would permit health professions schools to continue, for three years, direct student loans from those sums which are and become available from their respective revolving funds. Unfortunately, the bill does not authorize additional federal contributions to the school loan accounts. We respectfully disagree that the sums which are repaid to the revolving funds will be sufficient to meet the financial needs of our dental students. The Association therefore strongly recommends that Section 742 of the existing law be retained with an annual authorization of $25 million.
The Honorable Orrin Hatch
April 28, 1981
Page 3

The bill, S.799, proposes a "graduated repayment plan option" for students who borrow under the federally insured loan program (HEAL). Although this provision will provide a measure of financial relief while a student is in training, the ultimate level of indebtedness may well become unmanageable as a consequence of a continuing accrual of interest. This concern underscores the urgent need to provide some form of interest subsidy under the HEAL authority. A provision of this nature must be considered by the Committee if federally insured loans are to become a viable mechanism for student aid during periods of high interest rates.

The number of exceptional financial need scholarships which have been available to dental students under the current law has admittedly been all too few. Nonetheless, those dental students who did receive this assistance during the 1980-81 academic would undoubtedly have been unable to pursue a dental career without such scholarships. The American Dental Association urges a continuation of this authority (Section 758) with amendments allowing exceptional financial need scholarships to be available for all four years of a recipient’s training.

Dental General Practice Residencies

The American Dental Association is most concerned over the proposed elimination, in S.799, of support for dental General Practice Residencies as authorized in Section 786 of current law. These programs have been particularly effective in providing the future general practitioners with the skills and experiences necessary for the provision of comprehensive, primary dental care. The number of general dentistry residency positions is limited, even with federal assistance. A withdrawal of this support would certainly preclude the development of any new residency programs and would likely jeopardize those which do exist. Given the stated emphasis on "stimulating training in primary care", we fail to understand the basis for the sponsors of S.799 to recommend a repeal of the one program which is designed to prevent overspecialization in dentistry. The ADA accordingly urges that that Section 165 of S.799 be amended to, (1) authorize a continuation of dental General Practice Residency support, and (2) earmark not less than 10 percent of the total sums authorized under Subsection (b) for this purpose.

Enrollment Commitments

The American Dental Association fully endorses the provisions of Section 122 of the bill which would direct the Department to
unilaterally release schools which have received construction grant assistance from all contractual enrollment commitments entered into under that authority. As we understand this, and other Sections of the bill, dental schools would then be free to establish enrollment levels which are compatible with their educational resources.

Sincerely,

Wilfred A. Springer, D.D.S.
Chairman
Council on Legislation
STATEMENT OF THE
ASSOCIATION OF SCHOOLS AND COLLEGES OF OPTOMETRY
AND THE
AMERICAN OPTOMETRIC ASSOCIATION
ON
HEALTH PROFESSIONS EDUCATION AND NURSE TRAINING
(S. 799)
AND
NATIONAL HEALTH SERVICE CORPS
(S. 801)
TO THE
COMMITTEE ON LABOR AND HUMAN RESOURCES
UNITED STATES SENATE

April 9, 1981
The Association of Schools and Colleges of Optometry and the American Optometric Association appreciate the opportunity to submit comments on the proposed legislation S. 799 and S. 801 under consideration by the Committee on Labor and Human Resources. We represent the sixteen schools of optometry in the United States and the 20,000 practicing optometrists which are vitally interested in the role the Federal Government has and will play in health professions education.

We have reviewed S. 799 and S. 801 and wish to comment on the provisions as well as to suggest amendments necessary for ensuring the American people an adequate supply of optometrists as well as quality vision care services in the future.

Over the last two decades the Congress has demonstrated its concern for education in the health professions by passage of significant legislation which has increased the numbers of optometric graduates, provided educational access for the less affluent and effectively upgraded the quality of education. Great strides have been made and the Congress can be justly proud of its contributions.

In many ways S. 799 represents a sudden and unwarranted retreat from this success which, if allowed to stand, will reverse the trend toward adequacy and quality. Recent studies, testimony before this and other committees, and a general public attitude suggests that unless we immediately cease all Federal support there will be a large and detrimental excess of health professionals in our country. Further, that the "excessive" income levels of health professionals justify that they go into significant debt to gain their education. These statements may possibly be true for some health professions but it is our
opinion that they are being erroneously translated to apply to all.

An excess of orthopedic surgeons should not control the education of podiatrists, nor should the existence of too many ophthalmologists justify that they perform optometric functions. Other studies show that shortages remain and will continue in many of the non-medical health professions. In optometry 50% of the present 20,000 practitioners will leave active practice in the next 15 years due to retirement and death. Our schools will be hard pressed to replace this loss, let alone address the unmet needs and increasing need due to population and the increased demand of an aging population for vision services. The expected indebtedness will affect the practice circumstances of our graduates and result in a negative effect on what has generally been a better than average geographical distribution.

As relates to income I can assure you that the non-medical practitioners are not, particularly in the early years of practice, commanding incomes that allow for repaying $50-$80,000 indebtedness incurred in their education. You have been given annual income figures in the $50 and $60 thousand range during the first year of practice. These most certainly do not apply to optometry. The average net income of the first five years of practice is in the range of $20,000. Equally important is the fact that the economically deprived cannot conceive of such a debt, even if it were possible to repay. Their social and cultural experiences would force them to reject such a suggestion. We are left then with the rich and near-rich as the only remaining group to pursue health professions. The advances in this area over the last 20 years cannot be dealt such a blow.

Let us turn now to specifics as relates to S. 799 and S. 801:
A. Health Professions Data:
We fully support the proposed changes in Sec. 708 to collect and analyze significant elements relating to health professions. A continuum of information and knowledge in this area is critical for decision making for the future. Considering the complexity of the undertaking we question whether $3,000,000 is an adequate funding level since at least in optometry, much of the data is not presently available.

B. Grants and Loans for Construction of Teaching Facilities:
We certainly favor continuation of this authority. There is a need to expand the clinical teaching capacity of our schools and to renovate some existing facilities. The continued emphasis on off-campus clinical education through affiliations can be enhanced through this support.

C. Student Assistance:
The recommended change in Sec. 729(a) to provide a maximum of $20,000 is supported. Presently optometric students have had minimal participation in this program. The ever-increasing costs of education and the limitations of other loans and scholarship support indicate that there will be a rapid and dramatic increase in participation. The change in Sec. 731(a) to provide for a graduated repayment plan addresses the need for the professional to become established. We would, however, alert the committee to the fact that the ultimate repayment with increased interest results in a higher debt. Such a provision only delays and exacerbates the inevitable. It will result in higher and higher health care costs--just the opposite of what the Congress,
the Administration and the people would hope for. It will also cause undesirable practice choices both in type and geographic site. Sec. 740 of the Health Professions Student Loan Program is continued under this bill but would terminate the Federal capitalization. The interest rate is increased to the level of 9%. We are pleased that this highly cost-effective program is to be continued but strongly recommend that the Federal capitalization be restored. Many of our schools are just beginning to have repayments made into their funds and the newer schools, three in number, have not yet had the opportunity to establish a program. This inequity should be corrected.

D. Area Health Education Centers:
The Association of Schools and Colleges of Optometry has observed the functioning of AHEC's and fully concurs in the purposes for which the Congress established this authority. Unfortunately, the medical leadership required by the existing authority has not seen fit to include participation in the program of many of the non-medical health professions. We strongly recommend that the authority be amended to include further incentives for inclusion of optometry and others. We would be pleased to work with the Committee on identifying such incentives.

E. Support Services in Underserved Areas:
We concur in the proposals related to these authorities.

F. Financial Distress:
We concur in the proposals related to these authorities.
G. **Start-Up Assistance:**

Within the last two years three new schools of optometry have been established. They are in critical need of the support under the Start-Up authority and have based their class size and acceleration of the timing of the first class on the availability of this program. These schools are not yet under the Start-Up program due to administrative problems over which they had no control. We urge the committee to continue this support by amending the bill for those schools established but not yet receiving such support.

I would like to turn briefly to S. 801 which extends and amends the National Health Service Corps Scholarship program. The optometric profession has supported this initiative. We recognize, as does the Administration and this Committee, that continued management as in the past would result in excessive government cost in the face of a reducing need and an excess of physicians obligated to service. As we have testified in the past, the management of the NHSC has consistently ignored the unmet vision care needs of the unserved public (other non-medical provider services have also been ignored). Nearly 400 vision care shortage areas have been designated under Sec. 333(c). We urge the Committee to amend the authority to provide that the scholarship allocations be in accordance with and proportional to the shortages as determined under Sec. 333(c) of the act. With the primary medical care needs now expected to be met, the resources should address other equally beneficial services.

By exclusion the proposed legislation terminates a number of authorities which exist under the present law. We would like to speak to some of these and suggest amendments to S. 799 related to them.
There has been an emphasis within our profession to attract minorities and other economically disadvantaged students. The Exceptional Financial Need Scholarship is the last remaining program to assist us in this goal. We have not yet made the progress we desire. Our efforts, however, will be further hampered if we cannot provide the needed financial assistance such potential students require. We ask that the Committee seriously consider restoring this program and the funds necessary for effective support.

Optometry like most health professions is dynamic. There is a constant body of new knowledge, practice changes and the impact of system changes occurring at a rapid rate. The assimilation of these changes into the optometric curriculum; changes in the existing curriculum, and strengthening of the faculty is critical to the continued quality of our product—the graduate optometrist. The development of educational administrators is also a need. We have maintained some level of timeliness in this regard through the support of the Federal program under Sec. 788(c) and (d). We note that while the authority has not been repealed, no funds for continuation of such curriculum and faculty projects grants are provided. We recommend that appropriation authorizations be included to restore these grants and contracts to assist in maintaining the present quality of health professions education.

Institutional assistance is of great importance to our institutions. It was expected that while the Congress would ultimately terminate this direct support program a phasing-out would be provided. Our institutions have worked toward adjusting to this circumstance. The economic situation within the states negates the potential that state appropriations would be increased. At present the precipitous
terminations will work a very serious hardship on our schools. At the least it will require significant tuition increases but will most likely result ultimately in reduced class size and a further shortage in the late '80's and '90's. We urge the Committee to fully consider the long-term impact of what appears to be a short-term dollar saving.

We remain available to work with the Committee and its staff on these and other issues of common interest.
April 7, 1981

The Honorable Orrin Hatch
Chairman
Senate Committee on Labor and Human Resources
United States Senate
G 237 Dirksen Senate Office Building
Washington, D.C. 20510

Dear Senator Hatch:

As a member of the U.S. Senate Committee on Labor and Human Resources, we are pleased to provide you with the enclosed information on the physician assistant profession and its training programs. As you know, we have requested permission to present testimony at the Committee's upcoming hearing on health professions manpower legislation to be held April 8, 1981. For your information, we are enclosing a copy of that testimony along with other materials about the profession.

Thank you for taking the time to review these materials. If you have any questions, please don't hesitate to contact me.

Sincerely,

James Hughes
Director of Administration

JH:lpk

Enclosures
In the past decade, physician assistant (PA) educational programs have undergone significant development with strong philosophical and financial support from the Congress and both Republican and Democratic Administrations. The need for physician assistant education was addressed by the Administration and Congress in 1971 with the passage of the Comprehensive Health Manpower Training Act and continued support was demonstrated by the passage of the Health Professions Educational Assistance Act of 1976. Over 75% of the profession fostered by this federal support is providing vital primary care to the American public. In addition, physician assistants locate in rural and low income areas at a rate twice that of physicians.

The most important factor in physician assistant education and deployment is the potential it represents to the government in reducing health care costs. Physicians are far more expensive to train than PAs; the total differential between training a physician and a PA is $110,000. In addition, physician assistants are far
less expensive to employ (average salary $17,611 in 1978) and yet research results show the majority (up to 75%) of adult and pediatric ambulatory visits for common problems and preventive care can be safely delegated to a PA. Most importantly the study entitled "Survey and Evaluation of the Physician Extender Reimbursement Experiment," funded by the Social Security Administration, concluded that PA-assisted practices provided more visits per $1,000 of practice cost, at a higher quality of care, and with less charge to the patient or third party payor than do traditional physician practices. Educating PAs to function in appropriate settings -- and yet function dependently under physician supervision -- will assist the federal government in meeting its objective of decreasing costs while maintaining the delivery of quality care.

These facts are in part responsible for the favorable recommendations made to Congress regarding PA education and reimbursement. The Graduate Medical Education National Advisory Committee recommended the continued production of PAs at current levels while concurrently calling for a decrease in the number of physicians trained in certain specialties. The rationale for this recommendation is based upon the fact that by 1990 PAs can potentially provide 294.7 million patient visits and the committee concluded that non-physician providers, under the supervision of physicians, can provide these services at decreased costs while at the same time providing a broader range of services.
The Institute of Medicine study entitled, "A Manpower Policy for Primary Health Care," concluded that PA training should remain at the current level and should continue to receive direct federal support because PAs are among the most feasible practitioners providing primary care to underserved populations.

Congress and the Administration face an unfortunate dilemma: meeting the immediate need to limit federal spending and curb inflation while at the same time continuing to support programs which can significantly reduce national health care costs. The proposed Administration budget figure for FY 81 of $8.1 million and the elimination of funds for physician assistant educational program support in FY 82-84 will lead to physician assistant program closures.

The Association of Physician Assistant Programs recognizes the need for its member institutions to be active participants in the effort to reduce federal expenditures. The Association of Physician Assistant Programs makes the following recommendation to the Congress and the Administration for consideration.

Recommendation

The FY 81 budget figure for physician assistant educational program support be established at $8.8 million and that funding for physician assistant educational programs be continued in future health manpower legislation at $8.1 million for the fiscal year ending September, 1982 and each of the next two fiscal years.
SUMMARY

The Graduate Medical Education National Advisory Committee recommended the continued production of PAs at current levels and the Institute of Medicine study ("A Manpower Policy for Primary Health Care") recommended that educational programs for physician assistants should continue to receive direct federal support. Physician assistants have improved access to care and have been shown to be effective in decreasing the cost of health care delivery.

The above recommendations will allow for the continued education of PAs while affording programs the necessary transition time to obtain non-federal support for their educational endeavors.

The attached paper entitled "Statement of the Association of Physician Assistant Programs on Physician Assistant Education and Proposed Health Manpower Legislation" provides additional information and appropriate references which further document the need for continued federal support for physician assistant education.

This statement was prepared and approved by the Board of Directors of the Association of Physician Assistant Programs.
STATEMENT BY THE ASSOCIATION OF PHYSICIAN ASSISTANT PROGRAMS ON PHYSICIAN ASSISTANT EDUCATION AND PROPOSED HEALTH MANPOWER LEGISLATION

INTRODUCTION

The Association of Physician Assistant Programs (APAP) represents over fifty training programs for physician assistants (PAs). Since its founding in 1972, the Association has been providing information about the PA profession, developing and evaluating educational curricula, assisting in the development of a role delineation for the PA, developing continuing education programs, and conducting research on the PA profession. These research results have been made readily available to the public, Congress, foundations, and institutions of higher learning.

The Association's member programs graduate approximately 1,500 PAs annually from programs based in twenty-eight states. To date over 10,000 graduates have been produced. APAP programs carry various titles such as physician assistant, surgeon assistant, MEDEX, physician associate, child health associate, and family nurse practitioner, yet, each is involved in educational activities which train assistants to the primary care physician.

The purpose of this document is to present our rationale for proposed future support for physician assistant training programs. The report is divided into two (2) sections. The first section describes the evolving nature of today's health problems and the impact of physician assistants in the delivery of care in this evolving system. The impact is described in terms of economics of care, access to care, and quality of care. The second section offers specific recommendations on future funding of physician assistant training.

SECTION I: EVOLVING NATURE AND IMPACT OF PHYSICIAN ASSISTANTS

A host of statistics document that Americans are living longer and are healthier today than ever before. The dramatic decline in mortality from infectious disease since 1900, particularly in infancy and childhood, has been accompanied by a significant increase in life expectancy at birth.

While medicine and public health measures contributed significantly to these improvements in the health status of U.S. citizens, the degree of impact during the past 20 years has been much less than in the preceding 20 years. The age-adjusted mortality rate decline has slowed to less than one percent per year. Since the 1950s, life expectancy for adults has increased by only a small margin. The major health problems of today are the result of multiple factors and have only recently been considered amenable to prevention.
Chronic illnesses, including those associated with aging, are the primary causes of disability and death in middle age and later life. The longevity resulting from medical advances creates a situation where chronic diseases now affect many more persons for longer periods of time than was previously the case. This situation often imposes extended burdens on the patient, families, and on society as well.

Physicians are not well distributed by geographic region or specialty to deal with these pressing health problems. It is imperative that the Congress of the United States enact legislation that places greater emphasis on health promotion and protection as well as to adequately address the misdistribution and over-specialization of our health care providers. Such legislation must carefully consider the cost to the American people. The potential for modifying the existing system of health care delivery focusing on these issues exists today. PAs can do much to meet the challenge of improving health status in the United States. As the nature of the delivery system changes, action should be taken to insure the important, cost-effective role of the physician assistant.

The Physician Assistant

The PA profession has experienced a rapid rate of growth since the first program began in 1965. In 1967, the National Advisory Commission on Health Manpower reported, "The development of health personnel at the intermediate professional level has been repeatedly explored. We recommend that the federal government give high priority to the support under university direction of programs which train and utilize new categories of health professional." By the early 1970's the National Center for Health Services Research and Development funded pilot programs for MEDEX and physician assistants. In 1970, the American Medical Association (AMA) defined the PA as "...a skilled person qualified by academic and practical training to provide patient services under the supervision and direction of a licensed physician who is responsible for the performance of that assistant." Further development of the PA profession was encouraged by Congress with passage of the Comprehensive Health Manpower Training Act of 1971, which provided funds for the implementation of a new PA program.

Strict standards for training and certification have been developed. In 1971, educational essentials for PA programs were developed by the American Medical Association in collaboration with the American Academy of Family Physicians, the American College of Physicians, the American Academy of Pediatrics, and the American Society of Internal Medicine. These organizations formed the initial Joint Review Committee on Educational Programs for Physician's Assistants, later joined by the American Academy of Physician Assistants, the American College of Surgeons, and the Association of Physician Assistant Programs. The Joint Review Commission is responsible for reviewing the results of on-site evaluations of PA programs. The Committee makes recommendations for program approval to the Committee on Allied Health Education and Accreditation (CAHEA, which was formally the Council on Medical Education, AMA).
In 1973, the National Board of Medical Examiners first administered a national certifying examination, which now is administered annually under contract from the National Commission on Certification of Physician Assistants (NCCPA). The Commission maintains a record of all certified PAs. They also require continuing medical education for biannual reregistration and recertification which is required every six years.

The Health Professions Educational Assistance Act of 1976 (P.L. 94-484) authorized the continuation of federal support for PA training programs. As a result, over 50 programs exist today and graduate approximately 1500 PAs each year.

**PA Impact - Access and Deployment**

Available data reveal a wide distribution of PAs throughout all fifty states, with the majority practicing in primary care settings. Forty-five states have enacted legislation recognizing and regulating the practice of physician assistants. Scheffler surveyed post-entry level PAs and found graduates were practicing in non-metropolitan areas more frequently than physicians. Geographically, over one-quarter of PAs are practicing in rural areas where 25% of the U.S. population resides. This compares to only 13% of physicians practicing in rural settings. Other data show 53% of PAs in communities of 50,000 population or less where 37% of the population resides, but only 28% of physicians practice. Finally, several studies have revealed a positive relationship between location of training programs and the location of graduates.

Relative to the provision of care, two large surveys show that between 73% and 83% of PAs are working with family practice physicians. PAs are also providing care in public hospitals (10%) and community public health clinics (9%). Another 16% report working in remote or satellite clinics where direct physician services are not always available. Approximately 100 PAs currently serve in the National Health Service Corps, with many more on the waiting list.

PAs have improved patient access to care by increasing the availability of health care services given their geographical distribution and diffusion into the primary care marketplace. Increased productivity measures also improve patient access since more patients are able to be seen.

**Economic Productivity**

Research on PA productivity is quite favorable. PAs do increase the volume of office visits and can improve patient access to care by expanding the physician’s practice. Controlled studies of MEDEA graduates in Washington State and New England reinforce this conclusion with practice productivity increases measured from 37% to 50%. A study of rural California practices revealed PAs were quite productive, averaging 19 patients per day. A study performed for the Social Security Administration concluded that practices with new health practitioners are 50-70% more productive by number of visits.
The study also found that utilization of a PA allows more time per patient visit. Hershey and Kopko reported (1979) that when a linear programming model is used, 393 patients can be seen per week in a practice with a PA and 208 patients in a practice with no PA. Finally, after performing extensive research and analyzing the literature, Record has stated that new health practitioners make extremely valuable adjuncts to primary care physicians and assist them in meeting a larger number of outpatient visits and that new health practitioners are capable of performing at high levels of productivity.

It has been concluded through empirical research that PAs are cost-effective if properly employed in private practice. Record estimates a cost-saving of $20,000 per year per PA employed in a health maintenance organization due, in part, to the salary differential between a PA and a physician. Studies of PAs in rural primary care practice, however, demonstrate some problems caused by a lack of Medicare reimbursement. The 1977 Rural Health Clinic Services Act (P.L. 95-210) does not entirely rectify this situation due to stringent federal standards for clinic certification regulated by the Health Care Financing Administration.

Recently, the Institute of Medicine Primary Care Study recommended equal reimbursement for PA and physician services under Federal programs to resolve this significant problem. The data cited above and other research support the conclusion that PAs are cost-effective in both the private and public settings.

Further evidence of the economic productivity of PAs is revealed in a study by Blake and Guidd on "Mid-Level Practitioners in Rural Health Care A Three Year Experience in Appalachia." Their findings indicate that during the first three years of operation of three (3) rural Appalachia clinics, 76% of the geographically defined population of 5,500 received services. PAs and NPs provided care in half of the 40,252 medical encounters and 89% of their contacts were managed without consultation with, or referral to, the physician. They further reported that the PAs managed 36% of first-year visits, 51% of second-year visits, and 54% of third-year visits. Population surveys indicated that consumer satisfaction with PA services is high and that health care from this system is perceived as being more accessible than care from alternative sources.

Impact of PA training and employment on costs can be measured in two important, yet different, ways—manpower production (training) costs and utilization (employment and care purchase) costs. Educational costs data on PAs from the National Center for Health Services Research show the training costs to be approximately $15,100 per graduate. Many PA programs report an annual cost per student of $8,000-$12,000. Obviously, PA training costs are substantially less than physician training costs. In addition, the PA can provide about two years of service before a physician, who simultaneously began his/her education, can even begin residency.
From the above cited research it can be concluded that PAs improve access to health care in areas of greatest need and that when economic factors are considered, PAs, when utilized properly, afford considerable savings to the health care system (public dollars).

Quality of Service - Quality of Care

There are a large number of studies which validate the level of competence of PAs. Nelson24, Pondy25, and Henry26 have shown patient acceptance as a function of perceived quality of care to be highly favorable. For example, Nelson found that more than 85% of patients rated PAs as highly competent and professional, and 71% reported an improvement in the quality of care. Task analysis studies find PAs performing complete history and physical examinations, diagnosing acute and chronic disease, and providing preventive medicine and counseling services to the patient and the family under the supervision of a physician. Record reports no significant differences in morbidity or outcomes of care in primary care services delivered by PAs compared to physicians in an HMO setting. A 1977 DHHS report concluded that "physician assistants provide at least the same quality of care as the physician with whom they were compared on the same task." A 1977 DHHS report concluded that "physician assistants provide at least the same quality of care as the physician with whom they were compared on the same task."28 This has been further substantiated by Sox (1977) when he concluded that the quality of primary ambulatory care given by NPs and PAs was indistinguishable from that given by physicians.49 Most importantly, it has been stated that as a result of decreased patient waiting time and increased continuity of professional care, the inclusion of a PA in a practice was an excellent deterrent to the ever present threat of malpractice.30

Concerning patient acceptance of the PA, the literature is rich with studies reporting that PAs are well accepted by their patients.31,32 A DHHS Physician Extender Work Group reviewed existing research on patient acceptance and found excellent consumer satisfaction with PA-rendered care.33

SECTION II. CONCLUSIONS AND RECOMMENDATIONS

A review of the available research data indicates that PAs are assuming a significant role in the delivery of health care in rural/urban areas, and by doing so are improving patient access to care. PAs are well accepted by patients, are productive, and have been identified as a resource which increases efficiency in the delivery of health care services. In addition, PAs are delivering high quality care.

As further evidence of the value of physician assistants in providing health care, the Graduate Medical Education National Advisory Committee made the following recommendations to the Secretary of the Department of Health and Human Services regarding the continued use of PAs.

Even in the event that there is an adequate number or surplus of physicians in a particular specialty, the use of nonphysician providers (NPs, PAs or nurse-midwives) may be supported for one or more of the following.

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Statement on PA Education and Proposed Health Manpower Legislation
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1. When they increase the accessibility of services.
2. When they decrease the costs or expenditures associated with health care delivery.
3. When they are the providers of choice for some consumers.
4. When the utilization of nonphysicians increases the quality of service; i.e., services provided by a team composed of a physician and nonphysician are superior to those which a physician working alone could provide.35

In 1978, the Institute of Medicine's report of a study entitled, "Manpower Policy for Primary Health Care" recommended:

Continued support for physician assistants... is based on the Committee's belief that underserved populations, especially in rural areas, can obtain economical and quality medical care from these providers.

...the Committee recommends that training programs for ... physician assistants should continue to receive federal... support, because these practitioners are the most feasible providers of primary care to underserved populations.36

The PA profession offers a significant opportunity for this country to realize its primary objective in promoting a balanced supply of health professionals to meet the health care needs of the American people. Accordingly, the Association of Physician Assistant Programs makes the following recommendations for the funding of PA training programs in health professions education legislation.

1. Federal authorization for PA training should be maintained at current levels.

This is critical to guarantee the continued production of well-trained graduates at current numbers and to increase the supply of primary care health professionals. PA programs have not yet and cannot be expected to become entirely self-supporting in the period covered by the current Act (P.L. 94-484).

Surveys conducted by the Association PA Programs (APAP), data from the Office of Special Programs (Bureau of Health Planning), and the General Accounting Office (GAO) Report on PA Training confirm that the cost to produce a PA graduate is approximately $10,000 - $15,000 as compared to $112,400 to produce a board eligible family physician. If one accepts the average production cost figure for PAs at $7,000 per year and recognizes that 53 programs are now in need of ongoing support, with an annual production of 1,500 graduates or 30 graduates per program per year, we estimate the expenditures for eligible PA programs each year to be $11.13 million. Assuming $500 per graduate in tuition revenues per year or a
total of $75 million in tuition revenues, and assuming that state revenues will cover approximately 10% of estimated educational expenditures ($1.1 million), then $10 million in federal monies will be necessary to meet the expected expenditures of existing PA programs each year. If more graduates are to be produced, additional revenues must be provided.

2. PA students should be made eligible for all appropriate federal health professions scholarships, traineeships, and loan forgiveness programs.

Our experience indicates that students entering PA training are older and tend to have greater financial responsibilities than students in medical, osteopathic, dental, and nursing schools. It has also been demonstrated that most PA students, are from a lower economic background than the above named students.

At the present time, the requirements for traineeships for PAs do not conform to those for traineeships for NPs. Thus in any new health manpower initiative, these requirements must conform. This should include but not be limited to: 1) permitting individuals who do not reside in a health manpower shortage area to receive a traineeship, but providing for special consideration for individuals who do reside in such an area, and 2) clarify the Secretary's authority to determine the service commitment required of each beneficiary.

In addition, the provisions of the current law (P.L. 94-434) governing the Health Education Assistance Loans Program should be amended in order to make PA students, who are eligible for loans, able to receive them.

3. PA training funds should be authorized separate from nurse practitioner funds. This is important to prevent needless confusion over allocation of training funds.

4. Legislative priorities for awarding Physician Assistant Training Grants should be as follows.

A. Encourage deployment of graduates to designated health manpower shortage areas and other underserved areas.

B. Encourage cooperation of the programs with other local primary care training programs.

C. Encourage cooperation with local Health Planning Agencies, or collaboration with Area Health Education Centers.

The Association of Physician Assistant Programs expresses its appreciation to you for reviewing this statement. If you wish to receive additional information on physician assistants, please contact the Association of Physician Assistant Programs, 2341 Jefferson Davis Highway, Suite 100 Arlington, Virginia 22202 (703/920-5732).
REFERENCES


4. Essentials of an Approved Educational Program for the Assistant to the Primary Care Physician, American Medical Association, Council on Medical Education, 1971.


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17. Mendenhall, R: The Social Security Administration study of PA and NP reimbursement, presented at the Mid-year Meeting of the Association of Physician Assistant Programs, New Orleans, Louisiana, October 1978.


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The concept was born in 1961 when Charles L. Hudson, MD, in an article in the Journal of the American Medical Association, called for "an advanced medical assistant with special training, intermediate between that of the technician and that of the doctor, who could not only handle many technical procedures but could also take some degree of medical responsibility."

Four years. In 1965, Eugene A. Stead, Jr., MD, launched at Duke University the first PA program with admission of four exmilitary corpsmen to be trained as assistants to the primary care physician.

Twelve programs were in operation by 1972. Since then, under the impetus of the Comprehensive Health Manpower Training Act of 1971, the number of programs has risen to nearly 50 from which some 1,500 PAS are graduated annually.

Yes. The programs must be accredited. This began in 1972 when, under the sponsorship of the American Medical Association, a Joint Review Committee was formed to inaugurate a process of accrediting programs that was approved by the U.S. Commissioner of Education in 1974.

The Association of Physician Assistant Programs was founded in 1972 to facilitate the exchange of information and to provide mutual support in such areas as curriculum development and continuing medical education. Virtually all accredited programs are now members of the Association which has been instrumental in defining roles of PAS in the health care delivery system.

In 1972 when the National Board of Medical Examiners began development of a PA certification examination - the first non-MD examination it had ever produced. The examination was first given in 1973. The following year 14 national organizations voluntarily formed the National Commission on Certification of Physician's Assistants which now determines eligibility for the examination and establishes its criteria, and administers the examination.
ARE THERE ANY PROVISIONS FOR THE CONTINUING EDUCATION OF PHYSICIAN ASSISTANTS?

Yes. In order to maintain their membership in the American Academy of Physician Assistants, PAs must every two years meet rigid continuing education requirements. The Academy was organized in 1968 and is now recognized as the inclusive organization most representative of the physician assistant profession in the United States today.

WHERE MAY I OBTAIN ADDITIONAL INFORMATION ON PHYSICIAN ASSISTANTS?

American Academy of Physician Assistants
2341 Jefferson Davis Highway, Suite 700
Arlington, Virginia 22202
Telephone (703) 920-5730
FACT SHEET

the PHYSICIAN ASSISTANT'S training

WHAT TRAINING DO PHYSICIAN ASSISTANTS HAVE?

They are graduates of accredited programs which train them to be health care practitioners who practice under the direction and supervision of a licensed physician.

WHO ACCREDITS PHYSICIAN ASSISTANT PROGRAMS?

PA programs are accredited by the Joint Review Committee on Educational Programs for Physician Assistants which was established by the American Medical Association. Collaborating with and supporting the Joint Review Committee are the American Academy of Family Physicians, American Academy of Pediatrics, American Academy of Physician Assistants, American College of Physicians, American College of Surgeons, American Society of Internal Medicine, Association of Physician Assistant Programs, and the American Medical Society.

WHAT HEALTH CARE FUNCTIONS IS THE PHYSICIAN ASSISTANT TRAINED FOR?

A physician assistant is trained to perform patient histories, give comprehensive physical examinations, do simple diagnostic laboratory tests, implement basic treatment procedures for common illnesses, and treat emergency cases. In fact, PAs are qualified to perform a minimum of 70 percent of the clinical procedures carried out by physicians in general practice.

HOW LONG IS THE PHYSICIAN ASSISTANT'S EDUCATION?

Generally 24 months in length. The programs are offered at medical schools and colleges and universities affiliated with teaching hospitals.

HOW IS THE CURRICULUM OF PHYSICIAN ASSISTANT PROGRAMS STRUCTURED?

Programs normally are divided into approximately nine months of basic science and preclinical subjects followed by 15 months of structured clinical practicums consisting of rotations through such areas as clinical medicine, surgery, pediatrics, ob-gyn, and psychiatry.

WHAT ARE THE FIRST YEAR COURSES?

Such basic science studies as anatomy, physiology, pathology, microbiology, and pharmacology, as well as courses in behavioral science and medical ethics.
DO PHYSICIAN ASSISTANTS HAVE EXPERIENCE IN OTHER HEALTH CARE FIELDS?

Some 55 percent of those who graduated in 1976 had prior informal training in another health field, 47 percent had prior military experience in another health field, and 30 percent had prior civilian experience in another health profession.

WHERE MAY I OBTAIN ADDITIONAL INFORMATION ABOUT PHYSICIAN ASSISTANTS?

American Academy of Physician Assistants
2341 Jefferson Davis Highway, Suite 700
Arlington, Virginia 22202
Telephone: (703) 920-5730
The PHYSICIAN ASSISTANT'S professional credentials

ARE PHYSICIAN ASSISTANTS LICENSED OR CERTIFIED?

PAs are certified by the National Commission on Certification of Physician's Assistants which was formed by 14 national organizations in 1974 to determine examination eligibility and establish examination criteria. More than 34 states now require PAs to be certified in order to practice.

HOW IS PHYSICIAN ASSISTANT CERTIFICATION OBTAINED?

The physician assistant must pass a stringent examination developed and administered by the National Board of Medical Examiners under a contract with the National Commission on Certification of Physician's Assistants (NCCPA).

ARE THERE ANY LIMITS ON CERTIFICATION?

Certification is for six years and must be re-registered every two years.

WHAT ARE THE REREGISTRATION REQUIREMENTS?

The National Commission on Certification of Physician's Assistants requires PAs to earn 100 clock hours of approved continuing medical education credit every two years in order to reregister their certification.

HOW DOES THE NCCPA KNOW ITS REQUIREMENTS ARE MET?

Through the American Academy of Physician Assistants, which authenticates continuing medical education records.

HOW DOES THE ACADEMY RECORD THE CREDITS?

It maintains continuing medical education computerized log credits which are verified twice a year for each of its members as part of its membership services. It does the same for nonmembers on a fee basis.

WHAT DO THE CONTINUING EDUCATION CREDITS CONSIST OF?

There are two continuing medical education credit categories. The first consists of educational activities under accredited sponsorship. The second is made up of activities carried out by nonaccredited sponsors and other meritorious learning experiences.

(over)
WHAT ARE CONTINUING EDUCATION PROGRAMS WITH ACCREDITED SPONSORSHIP?

Any continuing medical education program recognized by the American Medical Association or a recognized state medical association. They also include programs of other organizations approved by the American Academy of Physician Assistants.

WHAT ARE THE PROGRAMS IN THE SECOND CATEGORY?

Any continuing medical education activities sponsored by an organization not accredited by the American Medical Association, the American Academy of Family Physicians, or the American Academy of Physician Assistants. They also include such activities as teaching health professions personnel, making formal presentations at medical meetings, writing medical papers, and self-learning experiences.

ARE THERE SPECIAL REQUIREMENTS REGARDING THE TWO CATEGORIES?

A minimum of 40 of the required 100 hours must be accredited sponsorship programs. The balance can be in either category.

CAN MORE THAN 100 HOURS OF CME BE ACCUMULATED IN TWO YEARS?

CME credits can be cast backward and forward on CME logging records with a maximum limit of 25 hours placed on carrying forward credits and no limit placed on casting back. The procedure must be followed six months prior to or six months after the NCCPA registration date.

WHERE MAY I OBTAIN ADDITIONAL INFORMATION ABOUT PHYSICIAN ASSISTANTS?

American Academy of Physician Assistants
2341 Jefferson Davis Highway, Suite 700
Arlington, Virginia 22202
Telephone: (703) 920-5730
FACT SHEET

the PHYSICIAN ASSISTANT'S role

WHAT IS THE FUNCTION OF A PHYSICIAN ASSISTANT?

To provide diagnostic and therapeutic patient care in order to free the supervising physician to spend more time with complex patient problems only he can treat. The PA is qualified to perform a minimum of 70 percent of the clinical procedures carried out by general practice physicians.

HOW DEEPLY INVOLVED IS A PHYSICIAN ASSISTANT WITH PATIENT HISTORIES?

The PA interviews patients and compiles patient histories. In so doing, he gives physical examinations as necessary and orders or gives required diagnostic tests.

WHAT DOES THE PHYSICIAN ASSISTANT DO WITH A COMPLETED PATIENT HISTORY?

The PA analyzes it along with the physical examination results to make a preliminary diagnosis with or without consulting with the physician he assists. That depends on the type of case involved and the PA's working relationship with the physician.

WHAT HAPPENS AFTER THE DIAGNOSIS?

The PA develops a treatment plan and explains it to the patient. When appropriate, he also will confer with his supervising physician and other professionals before implementing treatment.

WHAT TYPE OF THERAPY AND PROCEDURES DOES A PHYSICIAN ASSISTANT PERFORM?

The PA administers medications and performs intubation and cannulations. Also performed are a wide range of musculoskeletal, pulmonary, ear, nose, throat, cardiovascular, gastrointestinal, genitourinary, obstetrical, and gynecological therapies.

WHAT ABOUT SURGICAL PROCEDURES?

The PA carries out a variety of minor surgical procedures. They range from administering topical and digital block anesthesia through caring for wounds to excising superficial skin lesions.

IS A PHYSICIAN ASSISTANT INVOLVED IN TREATMENT OF EMERGENCY CASES?

The PA treats all types of emergency cases from severe drug reaction to cardiac arrests. They are also trained to handle psychiatric crises and to carry out uncomplicated deliveries.

(over)
IS A PHYSICIAN ASSISTANT CONCERNED WITH PATIENT EDUCATION AND COUNSELING?

The PA counsels patients and their families on the implications of tobacco and alcohol abuse, the warning signs of cancer, and many other preventive health care topics. They also educate them on such things as nutrition, prevention of infections, home care, symptomatic therapy, and aspects of pregnancy, childbirth, and parenthood.

DOES PHYSICIAN ASSISTANT COUNSELING INCLUDE MENTAL HEALTH?

Only in nonreferral mental health problems. The PA is trained to assist patients in such areas as exposing and expressing their feelings and relating their psychological needs to their physical ability.

IN WHAT PARTS OF THE COUNTRY DO PHYSICIAN ASSISTANTS WORK?

The results of a 1976 physician assistant national survey showed that of the 3,167 PAS who responded, one-third resided in the south while the northeast, north central, and western states each had one-fifth.

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage of PAS</th>
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</table>

HOW AUTHENTIC IS THE INFORMATION YOU HAVE PROVIDED ME?

It is based on a government study of some 4,000 physician assistants who were asked what duties they performed during the first year following their certification.

WHERE MAY I OBTAIN ADDITIONAL INFORMATION ON PHYSICIAN ASSISTANTS?

American Academy of Physician Assistants
2341 Jefferson Davis Highway, Suite 700
Arlington, Virginia 22202
Telephone: (703) 920-5730
FACT SHEET

the PHYSICIAN ASSISTANT’s role in hospitals

WHAT FUNCTIONS DO PAS CARRY OUT IN HOSPITALS?

Under the supervision of a licensed physician, PAS carry out a variety of delegated functions that permit medical staffs to focus their skills where they are most needed. These PA functions include conducting patient histories and physical examinations, carrying out general workups following physician diagnosis of patient problems, and assisting in rounds.

ARE THERE OTHER FUNCTIONS PAS CARRY OUT?

PAs also initiate orders for appropriate examinations or tests required to evaluate a patient's illness, counsel patients, prepare summaries of patient hospital and clinic care, manage medical emergencies, and assist in surgery.

WHAT IS THE RELATIONSHIP OF A PA TO OTHER HOSPITAL NONPHYSICIAN PERSONNEL?

Normally the directions given by a PA under the delegated authority of a physician are carried out as though given by the physician. Deviations from this procedure, however, may be present due to state laws or to a particular hospital's general, institutional, or PA guidelines.

WHAT IS THE POSITION OF THE AMERICAN MEDICAL ASSOCIATION AND THE AMERICAN HOSPITAL ASSOCIATION ON HOSPITAL UTILIZATION OF PAS?

Both recommend PAS be utilized under the supervision of a licensed physician and be integrated into a single medical staff governed by a single set of bylaws. They also recommend the extent of functions, responsibilities, and privileges be determined for each PA based on individual credentials, qualifications, and competency.

IS THERE ANY DIFFERENCE IN THE POSITIONS OF THE AMA AND AHA ON THE UTILIZATION OF PAS BY HOSPITALS?

The APA feels a PA should be an employee of a licensed physician affiliated with the hospital rather than of a hospital on grounds that this system better assures the quality of PA services. The AHA calls only for the designation of a physician supervisor.

WHAT DOES THE JOINT COMMISSION ON ACCREDITATION OF HOSPITALS SAY ABOUT HOSPITAL UTILIZATION OF PAS?

The JCAH supports the concept that PAS can "exercise judgment within their areas of competence, participate directly in the management of patients under supervision, and write orders." To back this, it requires hospital
medical staffs to establish rules and regulations governing the utilization of PAS.

DOES A HOSPITAL UTILIZING THE SERVICES OF A PA FACE ADDED LIABILITY?

Both HEW and the AMA general counsel have stated evidence does not support a PA increases liability. There have been no malpractice judgments against PAS and professional liability insurance is available both for PAS and PA employers.

WHAT IS THE EMPLOYEE STATUS OF PAS WORKING IN HOSPITALS?

The PA may be an employee of the hospital or a hospital-salaried staff physician, an employee of and supervised by a hospital-salaried staff physician, or employed and supervised by a private physician, who is a member of the hospital's attending staff, in order to render services exclusively for the employing physician.

HOW ARE PA SERVICES GENERALLY REIMBURSED?

Under existing public and private insurance plans, reimbursement for PA services always goes to the employer whether it is a hospital or a physician.

DOES MEDICARE REIMBURSE FOR PA SERVICES?

Medicare policy considers the services of hospital-employed PAS as allowable costs under Part A. Employing physicians are reimbursed under Part B when the physician is directly involved in the encounter with the patient and the services rendered are normally furnished in the physician's office and are commonly included in the physician's bills. In both cases of such reimbursement, the PA's activities must be under direct and immediate physician supervision.

DOES MEDICAID REIMBURSE FOR PA SERVICES?

Policy varies from state to state. Generally, recognition is given a physician's right to employ PAS, within legal parameters, and to bill and be reimbursed through Medicaid in accordance with prevailing regulations for their services when performed under the physician's direct supervision.

DO私ETHREE-PARTY CARRIERS REIMBURSE FOR PA SERVICES?

Most private third-party carriers consider services rendered by hospital-employed and supervised PAS as reimbursable as part of the hospital's general service expenses. Reimbursement for the services of physician-employed PAS assumes the existence of direct physician involvement.

WHERE MAY I OBTAIN ADDITIONAL INFORMATION ABOUT HOSPITAL UTILIZATION OF PAS?

American Academy of Physician Assistants
2341 Jefferson Davis Highway, Suite 700
Arlington, Virginia 22202
Telephone: (703) 920-5730
FACT SHEET

THE PHYSICIAN ASSISTANT'S COST EFFECTIVENESS IN AN HMO

DOES THE USE OF PHYSICIAN ASSISTANTS SAVE AN HMO MONEY?

A special study at a California health maintenance organization revealed that physician assistants made possible a 92 percent reduction in physician time per patient and cut average visit costs by 20 percent.

HOW WERE THE TIME AND COSTS COMPUTED?

On a physician-only vs. physician assistant-only basis treating respiratory infections, urinary and vaginal infections, headache, and abdominal pain. Protocols were used to guide the PAs in their work.

WAS THE PHYSICIAN SEE THE SAME PATIENTS AS THE PHYSICIAN ASSISTANTS?

Physicians saw their own patients alone and served as consultants to the PAs. Patients treated by the PAs saw a physician only when judged necessary by the PA.

HOW MUCH TIME DID PHYSICIANS DEVOTE TO CONSULTATION?

Physician time required for consultation on physician assistant patients was 92 percent less than the time the physicians devoted to dealing with the same clinical problems of their own patients.

WAS PHYSICIAN EFFICIENCY IMPAIRED BY CONSULTATION DUTIES?

The study did not measure whether the time the physicians spent in consultation regarding physician assistant patients affected their efficiency in treating their own patients. However, the physicians did not think their efficiency was affected.

WAS THERE ANY DIFFERENCE IN THE TIME SPENT WITH PATIENTS?

The physician assistants spent only four to nine minutes more than physicians per patient visit.

WHAT ABOUT MANPOWER AND OTHER COSTS?

Physician assistant manpower costs were 46 percent less than those of the physicians. Laboratory and medication costs were not significantly different. Physician assistant overall combined costs were 20 percent below those of the physicians.

(over)
HOW MANY PATIENTS WERE TREATED DURING THE STUDY?

Over a five-month period, 472 visits of new patients were studied with 203 of them assigned randomly at a ratio of two patients treated by a physician assistant to one treated by a physician.

WHAT WAS THE PATIENT RETURN VISIT PATTERN?

Approximately one-third of all patients made return visits for related problems within two months of their initial visits. Two physician assistant patients and two physician patients were hospitalized for problems related to their initial visits.

DID STUDY RESULTS AFFECT STAFFING OF THE CLINIC?

Prior to the study 10 physicians and three physician assistants saw approximately 2,700 patients per month. Two years later 6.5 physicians and six physician assistants were seeing 2,900 patients per month at a savings of $108,030 in annual salary costs.

WHERE MAY I OBTAIN ADDITIONAL INFORMATION ON PHYSICIAN ASSISTANTS?

American Academy of Physician Assistants
2341 Jefferson Davis Highway, Suite 700
Arlington, Virginia 22202
Telephone: (703) 920-5730
PHYSICIAN ASSISTANT FACT SHEET

CONCEPT BEGAN IN 1968 - DUKE UNIVERSITY, DURHAM, NC
NUMBER OF PA TRAINING PROGRAMS - 49 PRIMARY CARE - 3 SURGICAL
AVERAGE NUMBER OF PA GRADUATES PER YEAR - 1,500
NUMBER OF PAS IN THE COUNTRY - 14,133 includes graduates and students

AAPA MEMBERSHIP TOTALS - (JANUARY 1981) - Approximately 6,619

STATES WITH PRESCRIPTIVE PRACTICE LAWS FOR PAS - (SEE BACK)

1. ALASKA
2. ARIZONA
3. CALIFORNIA (pilot project)
4. COLORADO (Child Health Associates only)
5. MAINE
6. MICHIGAN
7. NEBRASKA
8. NEW MEXICO
9. NEW YORK
10. NORTH CAROLINA
11. OREGON
12. PENNSYLVANIA
13. SOUTH DAKOTA
14. WASHINGTON

FORTY-NINE STATES AND WASHINGTON, DC ALLOW PAS TO PRACTICE.
FORTY-ONE STATES HAVE SPECIFIC ENABLING LEGISLATION (REGULATORY).

SIX STATES HAVE DELEGATORY RESPONSIBILITY -

1. CONNECTICUT
2. DELAWARE
3. MINNESOTA
4. MONTANA
5. TENNESSEE
6. WASHINGTON, DC

THREE STATES - NO SPECIFIC LEGISLATION
1. KENTUCKY
2. MISSISSIPPI
3. MISSOURI

NEW JERSEY IS THE ONLY STATE WHICH PROHIBITS PAS FROM PRACTICING.

PAS ARE CERTIFIED BY THE NATIONAL COMMISSION ON CERTIFICATION OF PHYSICIAN'S ASSISTANTS AND ARE RE-REGISTERED EVERY 2 YEARS BASED ON 100 HOURS OF CONTINUING MEDICAL EDUCATION AND RECERTIFIED EVERY 6 YEARS BY EXAMINATION. THE MEMBER ORGANIZATIONS OF THE NCCPA ARE:

AMERICAN ACADEMY OF PHYSICIAN ASSISTANTS
AMERICAN MEDICAL ASSOCIATION
AMERICAN ACADEMY OF FAMILY PHYSICIANS
AMERICAN ACADEMY OF PEDIATRICS
AMERICAN COLLEGE OF PHYSICIANS
AMERICAN COLLEGE OF SURGEONS
AMERICAN HOSPITAL ASSOCIATION
AMERICAN NURSES' ASSOCIATION
AMERICAN SOCIETY OF INTERNAL MEDICINE
ASSOCIATION OF AMERICAN MEDICAL COLLEGES
ASSOCIATION OF PHYSICIAN ASSISTANT PROGRAMS
U.S. DEPARTMENT OF DEFENSE
FEDERATION OF STATE MEDICAL BOARDS OF THE U.S.

American Academy of Physician Assistants
2341 Jefferson Davis Highway, Suite 700, Arlington, Virginia 22202, 703/920-5730
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* Estimated number of PAs (includes graduates and students) in the state as of 11/15/80. Foreign countries - 32.

** Those states with specific legislation, rules and regulations, or attorney general decisions granting prescriptive privileges to physician assistants.
April 16, 1981

Honorable Orrin G. Hatch
Chairman, Committee on Labor and
Human Resources
411 Russell Senate Office Building
Washington, D.C. 20510

Dear Mr. Chairman:

The American Association of Dental Schools would like to submit
a statement for the record presenting our views on S. 799, the
Health Professions Educational Assistance and Nurse Training Act
of 1981.

We appreciate the opportunity to make these comments. If the
Association can provide any assistance to you, the members of
the Committee or the staff, please do not hesitate to contact us.

Sincerely,

Harry W. Bruce, Jr., D.D.S.
Executive Director

encl:
cc: Mr. Hal Christensen
    Dr. Thomas Ginley
    Executive Committee
The American Association of Dental Schools appreciates the opportunity to submit a statement for the record concerning S. 799, the Health Professions Educational Assistance and Nurse Training Act of 1981, now pending before the Senate Committee on Labor and Human Resources. Before presenting our views on the health manpower bill, we will first outline some of the problems facing dental schools and their students and present our views about the appropriate Federal role in addressing these problems.

The most serious difficulty that dental schools and their students confront is that of finding ways to cope with the rapid escalation in the costs of providing and obtaining a dental education. For the dental school, the cost of educating a dental student reached a staggering average figure of over $24,000 per year in the 1979-80 academic year. This yearly cost to the institution is certainly one of the highest of the health professional schools. In that same academic year, first-year tuition and fees in public dental schools averaged $2,377 for residents and $5,700 for nonresidents. For first-year students attending a private institution, tuition and fees averaged $7,660 and for some the total was as high as
$12,000. In the current year, average tuitions have climbed another 15 percent and they are scheduled to again increase significantly in the coming school year. It is obvious that continued inflation is steadily worsening what has already become a serious situation for both the institution and the student.

However, it is important to note that there have been several significant developments within the dental schools that have also contributed to rising costs. Schools have expended large sums of money in order to comply with the Federal requirements that have been prerequisites for institutional support. In addition, technical equipment which rapidly becomes outmoded in highly utilized dental school clinics has required replacement and modification in order to respond adequately to new program needs, and long overdue improvements have been effected in faculty-student ratios.

The primary concern of the dental schools is to maintain the quality of their programs and remain financially viable. In a survey completed early last year by the American Association of Dental Schools the schools that are receiving capitation grants were asked to specify the actions they expected to take in order to accommodate
to the reductions anticipated in capitation funding. Without Federal support, dental schools in general would have to obtain replacement funds to support up to 57 percent of faculty and staff salaries. Private dental schools would have to obtain sufficient replacement funds for almost 62 percent of their faculty and staff salaries. One school anticipated the closing of the school library. All were concerned that the actions they were taking would make it increasingly difficult to recruit and retain competent clinical faculty in the years ahead.

In addition, almost three-fifths of the schools responding to the survey planned an immediate increase in tuition and fees to compensate in part for the reduction in funds. Some institutions reported that they would also be forced to curtail or eliminate various student programs, including programs aimed at the recruitment and retention of minority students. Increases in tuition, no matter how necessary, would certainly exacerbate the serious financial problems that already confront the needy student who wishes to attend dental school. Current student assistance programs although potentially workable, are underfunded and are accompanied by heavily restrictive regulations which tend to deny assistance to many students from the middle income group.
The Health Educational Assistance Loan (HEAL) program that was designed to assist students in these circumstances has not been available at all to students in schools that have opted to forego capitation, and those students who are able to avail themselves of the HEAL program find that their original indebtedness is greatly inflated by the high interest charges for HEAL loans. To their educational indebtedness, newly graduated dentists who wish to enter practice must immediately incur large additional debts to establish their practices. Repayment of educational and practice indebtedness begins during a period in their careers when their earnings are their lowest.

What this is the federal role in helping schools and students to address these serious difficulties? We believe this role is two-fold: (1) the federal government should supplement other sources of school income thereby assuring the fiscal stability of the schools so they can provide quality education for the future dentists of the country; and (2) the federal government should provide well designed and adequately funded student assistance programs, so that all students may be assured equal access to a dental education and student indebtedness may be kept at a manageable level. We believe it is appropriate that the federal government assume these responsibilities because dental schools have demonstrated exceptional
responsiveness in meeting national health manpower needs. Indeed, there are seventeen states without dental schools and these states must rely upon the schools located in other states for their supply of dentists.

Without a federal supplement it will be difficult and in many cases totally impossible for schools to generate sufficient income to attain anything resembling fiscal stability. It is already apparent that income from private and state sources cannot adequately replace the loss of revenues that would be experienced by a severe cut or elimination of institutional support from the federal government. We believe that it is essential for the federal government to assist the schools through institutional support to minimize their need for tuition increases.

Also, it is important for student assistance programs to be truly responsive to student needs. It is unrealistic and unfair to ask the health professions student to bear the total burden of educational costs simply because of the high income potential of a successful professional practice. It is a potential that seldom is realized until many years after graduation and, for some, not even then.
Specific comments on S. 799 follow.

Institutional Support

The Association is distressed that S. 799 includes no provision for institutional support for health profession schools. We believe that a continuation of institutional support is absolutely essential in maintaining fiscal stability for these institutions. At the same time, we believe that modifications are needed in the current institutional support authority. The assurances that dental schools must meet in order to receive institutional support under the current authority are either obsolete or unnecessarily burdensome. They further escalate the cost of dental education and they result in the production of more dental graduates than are needed to meet the demand for dental services. The preferred mechanism would be institutional support with no required assurances. Schools could then direct funds into their own particular curriculum which ordinarily has been developed with the needs of the community and region in mind. At minimum, any assurances tied to institutional support must be reasonable, flexible and not overly burdensome.

We emphasize that these assurances must be within the context of institutional support. We do not think that the objective of fiscal stability can be realized through project grant authorities, because
special project grants are targeted authorities carrying a forward commitment for operating resources. However useful project grants may be in contributing to educational quality and innovation, they do not and cannot provide the basic consistent financial assistance that is so sorely needed by the dental schools.

Student Assistance
The Association endorses the student assistance provisions contained in S. 799 but believes that, taken as a whole, they do not constitute an adequate program for meeting the financial needs of health professions students. Although we welcome the proposed three-year postponement in phasing out the health professions direct student loan program, we were aghast to find that S. 799 contains no authorization for appropriations for federal capital contributions to the loan funds for this three-year period. At a time when growing numbers of students not only need assistance but need more assistance than ever before, it seems nothing short of folly to diminish the schools' capacity to provide financial assistance by forcing them to rely solely on roll-over monies. We are not unmindful of the need for fiscal restraint, but, given the circumstances, we urge the Committee to reinstate Section 742 of the PHS Act, providing new authorizations for capital contributions in fiscal years 1982.
through 1986. We fear that the time is near when only students from wealthy families and those who can afford to heavily mortgage their futures will be able to obtain a dental education.

The Association also believes that the elimination of the authority for scholarships to students of exceptional financial need is both unfortunate and mistaken. Although EFN scholarships have been available to few students, those who have received them probably could never have embarked upon a dental career without such help. It is the only aid program targeted for those in greatest need.

For most students in need of financial assistance, there will be no alternative but to borrow under the high-cost HEAL program. Although S. 799 provides for graduated loan repayments, this provision, while highly desirable because it will permit young practitioners to repay their indebtedness in keeping with the growth of their practices, in the long run will mean an even heavier load of indebtedness for the HEAL borrower. What is needed is a program of interest subsidies covering the period HEAL recipients are still in training as well as a reauthorization of the loan repayment feature of the current program.
Support for General Practice Residencies

The Association is also concerned that S. 799 contains no authorization for grants in support of general practice residencies (GPRs) in dentistry. By creating new postdoctoral training positions in general dentistry, the GPR program has not only been helping to avert overspecialization in dentistry but it has also enabled new graduates to receive the additional year of clinical training that many educators and students deem essential preparation for the practice of dentistry. Almost 60 percent of all graduating seniors surveyed last year expressed a need for additional clinical experience before entering dental practice, and significantly, their overwhelming preference was for additional training in general dentistry rather than training in a specialty. However, with only one GPR position available for every eight graduates, there are far too few GPR positions to accommodate these students and, given the financial situation of the schools, there is little possibility that additional programs can be instituted without federal assistance.

The GPR program is particularly important to the dentist who wishes to practice in an area where specialists are scarce or where he or she must provide dental services for patients with special health problems. Participation in a GPR program prepares
the dentist to provide a broad range of services, including the care of geriatric patients, the medically compromised and the handicapped. In addition, the program affords dentists an opportunity to interact with physicians, nurses and other health professionals in settings that facilitate their awareness of oral health problems which complicate the lives of patients already compromised with debilitating diseases. We urge the Committee to add language to Section 165 of S. 799 reauthorizing grants for GPR programs in dentistry and earmarking for these GPR programs, 10 percent of the funds authorized under this section.
March 30, 1981

Honorable Orrin G. Hatch
United States Senate
411 Russell Senate Office Building
Washington, DC 20510

Dear Senator Hatch:

We at Beth Israel, as do many others across the country, face the imminent demise of our primary care residency training program, a program that already has had extraordinary impact on our Hospital and Harvard Medical School. Not many realize it, but fully one-third of all trainees in internal medicine at Harvard teaching hospitals today are in a special track preparing them for careers as primary care internists. This flies in the face of the tradition of subspecialty concentration at Harvard, and shows how successful we, with federal help, have been in getting our students and trainees to enter careers as generalists. Of the seventeen first graduates of our Hospital’s program, all but two are in general medical practice now, and many are working for the underserved, in inner city health centers and in rural settings. We have had a real impact in trying to turn around the trend to subspecialization and inpatient care, and it would be terribly damaging for our program to disappear.

We urge you to support training in general internal medicine as mandated by Title VII, section 784, of the Public Health Service Act. We oppose the cutback of 35% in such programs for FY 81 and urge that the proposed rescission of more than 30% for primary care training in FY 81 be defeated or diminished.

The impact of this section of the Public Health Service Act on general medicine training has been profound nationally since its inception four years ago.

- 95% of primary care residents choose to practice as generalists.
- rural and inner city communities are the preferred practice sites of the graduates.
- faculty supported by this program serve as generalist role models for all medical residents.
- the proportion of all internal medicine residents choosing generalist careers has risen during the last four years from 15 to 50%.
The Administration's Manpower budget and legislation proposes that primary care residency training programs in internal medicine and pediatrics be continued at a reduced but stable level of funding. The proposed level of funding indicates that these programs form an important part of the Administration's plan to improve geographical and specialty distribution nationally and to give high priority to the implementation of cost effective clinical practice. You must recognize the disastrous consequences if funding in 1981 and 1982 is reduced in a precipitous manner:

- Cutoff of support for one third of all primary care residents nationally in the middle of training.
- Termination of community based training for primary care physicians in Home Care, Nursing Home Care and Health Centers.
- Reversion to subspecialty dominated, in-hospital training for all medical residents.
- Lower quality of care for ambulatory patients in our and other participating hospitals.

I urge you to help restore adequate funding to the FY 81 rescission budget in order to support qualified, approved programs. I also recommend that budgeted funds be adequate in FY 82 to enable the Administration's and the program's goals to be accomplished, namely - to continue the training of physicians who will devote themselves to the practice of primary care in communities across the nation.

I enclose a statement for your hearing to be held on April 7. I hope that it will give you a further sense of what we are trying to do and why such programs make sense even in a day of federal restraint.

Sincerely,

Thomas L. Delbanco, M.D.
Chief, Division of General Medicine and Primary Care
Associate Professor of Medicine
Harvard Medical School and Beth Israel Hospital

TLD/paw
A STATEMENT

by

Thomas L. Delbanco, M.D.
Chief, Division of General Medicine
and Primary Care
Beth Israel Hospital
Associate Professor of Medicine
Harvard Medical School

April 5, 1981

Prepared for Orrin G. Hatch, Chairman of the Committee on Labor and Human Resources,
United States Senate.
My name is Thomas Delbanco. I am a board certified, general internist; Associate Professor of Medicine at Harvard Medical School; and Chief of the Division of General Medicine and Primary Care at Beth Israel Hospital, one of the Harvard teaching hospitals. I am also Director of the Henry J. Kaiser Fellowship Program in General Medicine at Harvard Medical School, a program which is preparing physicians for careers as teachers and scholars in primary care and general medicine. I am a councillor of the Society for Research and Education in Primary Care Internal Medicine (SREPCIM), a national organization of physicians involved in practice, research, and training in general internal medicine. Three years ago I was privileged to work in the Congress as a Robert Wood Johnson Health Policy Fellow, working on the staff of Senator Bob Dole.

When the availability of primary health services reached its low point ten years ago, the American public seemed to wake up and notice that we were preparing too many subspecialists and too few general physicians. The doctor who used to care for us when we were growing up had disappeared, and he was being replaced by doctors with skills in sharply circumscribed areas. We noticed also that medical care was getting very expensive. Medical technology was loading and proliferating. A new test was invented every week. Physicians were using more and more gadgets and charging a lot for their use.

What excites me about the proposed legislation is that it addresses two issues head on: the imbalance between generalists and specialists, and the mounting costs of health care. The impetus behind training programs in primary care is to stimulate us to turn out more general physicians and, by implication, fewer subspecialists.
It is my sense that if we do that, we may have a real chance to improve health care and at the same time keep down some of the costs that frighten us all today.

What have the training programs in family medicine, general internal medicine, and pediatrics done so far? Stimulated first by private philanthropy and then by the Health Professions Educational Assistance Act (94-484) in 1976, medical schools have mounted exciting programs which have attracted more and more young physicians into primary care. If I had told my colleagues at Harvard five years ago that in 1981, 30 percent of trainees in Harvard internal medicine programs would choose special programs preparing them for careers in primary care, they would have thought I was hallucinating. But that is the case today, and the legislation should help maintain this momentum and help us move further ahead. Last year, 293 programs were supported by the government, and it is extraordinary to watch how primary care has taken an important role in even some of our most conservative health science centers.

In addition to giving further support for the teaching programs that are now underway, the proposed legislation moves into a new area. You propose to fund programs to train future faculty for careers in family medicine, general internal medicine, and pediatrics. I am presently directing such a program in the Division of Primary Care and Family Medicine at Harvard with the support of the Henry J. Kaiser Family Foundation. In recent years, the Robert Wood Johnson Foundation, and more recently the Kaiser Foundation have helped establish several programs for preparing such faculty. We need federal support. I cannot overstate the importance of the faculty role model in the academic health science center. There are few of us in medicine who cannot point to one or two individuals who had a remarkable influence on our subsequent careers. I believe that one of the principal reasons it has been difficult to get our young doctors to enter primary care is the fact that these role models have just not
existed at the medical school in recent times. Slowly but surely the academically accomplished young generalist is emerging. We have to train more of them, and I suspect that the money you spend in this area will have an enormous payoff for our society. It will have a ripple effect in terms of attracting the young physician into primary care that will far exceed its initial cost.

Primary care training programs help our nation address explicitly some of the economic forces that play such an important role in health care. The incentive system in health today rewards the wrong things. How can I make the most money? I can order too many laboratory tests; I can put too many people in the hospital; I can certainly make sure that I do not give care to the poor and underserved. This has important implications for primary care training programs. Why? Because in large part they are located at the academic health science center—and more specifically in the outpatient clinic. And at the hospital, the incentives are just as confused.

Let me give an example of what I mean. If I run a hospital, and the professor of urology comes to me and says he would like to hire a few more residents to train more urologists, I am delighted, because I can make a pretty safe bet that over time I shall fill more hospital beds and keep the operating room a little busier. On the other hand, if the primary care professor comes and says he would like to train more generalists and care for more patients in the outpatient department, and by the way do his best to keep the patients he is serving out of the hospital, I might not be so thrilled. In particular, I may be very worried because the house officer caring for patients who can still walk and talk can often not charge a physician's fee which third-party payers will honor.
There is yet another problem. It is an extraordinary fact that today almost one out of every four visits to a doctor is to a hospital outpatient department. Hospital clinics have been an abomination in the past. They were the last place you would choose to go for ongoing medical care if you had any choice. But training programs which hope to produce good primary care doctors use primarily the outpatient departments, and they learn very quickly that you cannot attract the young into careers in primary care if you try to seduce them in a setting where patients do not receive excellent care. We can see already that these training programs have been crucial for improving the care the clinic gives. Moreover, the academic health science center often serves the inner city, or is the focal point for widespread rural populations. The most successful programs are integrating care in one setting for both the underprivileged and the more fortunate. We all know that separate but equal has never worked very well in our country. This is just as true in medical care as in the public schools on which we have focused.

What happens when training programs in primary care mature? In these settings we very rapidly become the patient's advocate. We keep our patients out of those expensive hospital beds, not just because we are cost conscious, but because we have learned that the best medical care need not be centered on the hospital wards. Our students learn quickly that patients, and particularly the elderly, sometimes fall apart in the hospital bed. Frequently the biggest favor we can do our patients is to manage them as outpatients. It does not make sense to teach doctors the way I was taught. I thought that good medical care meant hospitalizing a sick patient. I have learned by now that good medical care more often than not means keeping the patient out of the hospital. That is what we teach our students in the programs the Government has supported.
In these programs we do not profit from the laboratory tests we order. We spend a lot of time teaching our students to think critically about the cost implications of their practices. Do they really need to order that expensive x-ray right now, or can they perhaps afford to wait awhile and see what happens to abdominal pain over time? In our primary care programs we teach our doctors what not to order; on the wards the traditional trainee sometimes orders everything in the world to see if something will turn up.

I strongly support this legislation and urge you to consider raising the authorization levels for the primary care training programs. Please realize that programs such as these form an important part of the Administration's plan to improve geographical and specialty distribution nationally and to give high priority to the implementation of cost-effective clinical practice. Budgeted funds must be adequate in FY 82 to enable the Administration's and the program's goals to be accomplished, namely—to continue the training of physicians who will devote themselves to the practice of primary care in communities across the nation.
April 15, 1981

Orrin Hatch, Chairman  
Committee on Labor & Human  
Resources  
United States Senate  
4228 Dirksen Senate Office Bldg.  
Washington, D. C.  20510

Dear Senator Hatch:

The American Association of Colleges of Podiatric Medicine respectfully submits the enclosed statement regarding S.799, the proposed Health Professions Educational Assistance and Nurse Training Act of 1981. We request that our statement be made a part of the permanent hearing record on S.799.

We stand ready to cooperate fully with you and your very able staff in the development of this important legislation. Please call on us if we can assist you in any way in this endeavor.

Sincerely yours,

Robert A. Capone  
Executive Director

RAC/cjb  
Enclosure
STATEMENT OF
THE AMERICAN ASSOCIATION OF COLLEGES
OF PODIATRIC MEDICINE

ON

S.799 THE HEALTH PROFESSIONS
EDUCATIONAL ASSISTANCE AND NURSE
TRAINING ACT OF 1981

APRIL 14, 1981
INTRODUCTION

The American Association of Colleges of Podiatric Medicine represents the five colleges which educate this nation's doctors of podiatric medicine. We respectfully submit this statement in regard to S.799, the Health Professions Educational Assistance and Nurse Training Amendments of 1981, and request that it be made a part of the permanent hearing record.

The challenges facing podiatric medicine in the 1980's will be unique among the health professions. Unlike our colleagues in the other major health disciplines, podiatry is a profession that remains critically undermanned. Additionally, podiatry remains the most seriously maldistributed of all the health professions. Both of these facts have been frequently reiterated time and time again in studies conducted by the Department of Health and Human Services. The September 1980 "Report to the President and Congress on the Status of Health Professions Personnel" is the most recent confirmation of these points.

In overall terms, this Association finds the authorization levels contained in S.799 for podiatric medical education programs to be inadequate to assure the nation an appropriate supply of foot health care professionals.

INSTITUTIONAL ASSISTANCE

With the impetus of past federal aid, the five colleges of podiatric medicine have dramatically increased enrollments since the mid-1960's. In 1966, there were 700 podiatric medical students enrolled; today there are over 2,500. In 1966, the colleges awarded degrees to 135 individuals and in 1980 to 577 individuals.

Additionally, each college now has a newly constructed or completely renovated physical plant.

Despite this success, much remains to be done. The Department of Health and Human Services has identified a need to double by 1990 the number of practicing podiatrists in this country and has projected a 30% shortfall of this goal at current graduation rates.

With each of our schools currently educating maximum numbers of podiatrists, there is no chance of eliminating this shortfall.
without a federal commitment to counter this adverse trend.

Remote Site Training

We propose that the Committee institute a special project authority within the Health Professions Educational Assistance Act designed to alleviate both the shortage and maldistribution problems in podiatry through regional efforts by the colleges of podiatric medicine. Under the proposal we envision, our colleges would receive Federal funds to institute an intensive effort to recruit students from underserved areas across the country. In addition, the colleges would guarantee that each such student would receive the equivalent of at least one and one-half years of clinical training in an underserved area.

We believe that this type of special project would have an immediate and positive impact on both the shortage and maldistribution problems in podiatry. The program would provide our colleges with unique and needed incentives and resources for increasing enrollment. Further, by focusing recruitment and clinical training efforts in podiatric underserved areas, (of which DHHS has identified 1,400 nationwide) we would be more certain of attracting significant numbers of students with an orientation toward eventual practice in such areas.

Financial Distress Grants

We note the limited support for Financial Distress Grants in S.799. It seems likely that the contemplated cut of capitation grants to health professions schools might, at least temporarily, heighten the need for financial distress grants, and we suggest that a precipitous cut in authorization levels for that program would be untimely at present.

STUDENT ASSISTANCE

Student assistance programs are critically important to students of podiatric medicine. At the present time, our students pay a far larger share of the total cost of their education that do students of any other health profession. Half of the $14,000 annual cost of podiatric medical education is borne by the student in the form of...
tuition and fees.

Cessation of federal capital contributions to the health professions Student Loan program will, if enacted, reduce available student loans an estimated fifteen percent per capita in our colleges. Many students, especially minorities and the economically deprived, would be placed at a distinct disadvantage by such a reduction in available funds.

We are distressed to note the lack of support in S.799 for the National Health Service Corps and its scholarship program. Students of podiatric medicine have only recently begun participating in the NHSC scholarship program. With proper recruitment and orientation of recipients, we are convinced that this program can be successful in assuring the availability of quality foot health care in the nation's many underserved areas. We urge continuation of the NHSC scholarship program with an appropriate earmarking of support for podiatric medical students.

NATIONAL ADVISORY COUNCIL ON HEALTH PROFESSIONS EDUCATION

Many of the concerns expressed in this statement were recently voiced by the National Advisory Council on Health Professions Education. In a unanimous resolution, a copy of which is submitted for the hearing record, the Council pointed out the critical manpower shortages in podiatric medicine. The Council urged that the federal government provide full professional and resource support to podiatry in its efforts to increase the supply of doctors of podiatric medicine.

CONCLUSION

In introducing S.799, Senator Hatch expressed his view that the bill addresses the nation's most critical needs for health care professionals. Yet, the national shortage of podiatrists, consistently recognized by the federal government, is never addressed by the proposal. We urge the Chairman and the members of the Committee to act to correct this unfortunate omission. As always, we stand ready to cooperate fully with the members and their staffs in the development of this important legislation.
Resolution on Podiatric Medical Education  
(adopted by the National Advisory Council  
on Health Professions Education 1/29/80)

WHEREAS, The Bureau of Health Manpower's 1978 Report to the  
President and Congress on the Status of Health Professions  
Education points out that the number of podiatrists in this  
country are currently inadequate to meet national health  
care needs, and

WHEREAS, because podiatry is moving toward an expanded  
function role in the areas of health promotion and disease  
prevention, the future needs for podiatrists take on an  
added dimension of concern, and

WHEREAS, statistical data contained in the above-mentioned  
Bureau of Health Manpower report projects a need for 24,000  
footcare practitioners by 1990 while less than 9,000 are  
now available, and

WHEREAS, the five schools of podiatric medicine are now  
operating at full capacity and certain regions of the country  
including the South have no schools of podiatric medicine, and

WHEREAS, geographic maldistribution of podiatrists is more  
acute than in any other health profession,

THEREFORE, BE IT RESOLVED, that the Bureau of Health Manpower  
and its parent agency, the Health Resources Administration  
are urged to provide full professional and resource support  
to podiatry in its efforts to increase the number of graduates;  
to continue the provision of incentives to assure the mat-  
rículation of additional numbers of currently underrepresented  
population groups; continue the provision of incentives,  
especially by means of the National Health Service Corps  
scholarship program, to assure the placement of podiatrists  
in underserved areas; to participate in the continuing  
assessment of the functions performed by the various members  
of the health care team in a variety of urban and rural  
settings; to provide new incentives to stimulate the integration  
of new podiatric medical educatio programs into existing  
medical schools or health science educational programs; to  
encourage podiatric and interdisc.inary postdoctoral training,  
including increasing the number of residencies and encouraging  
participation of podiatrists in Area Health Education Centers  
and other continuing education programs; to continue to provide  
support to existing schools of podiatric medicine with a view  
toward educating greater numbers of podiatrists; and to provide  
regular reports to the Council, the Surgeon General, and the  
Congress regarding progress in reaching these important  
podiatric manpower goals.
April 14, 1981

Ms. Debra Turner  
Labor and Human Resources Committee  
United States Senate  
Room 4228 Dirksen Building  
Washington, D.C. 20510

RE: Remote site didactic and clinical health professions education and S. 799.

Dear Ms. Turner:

Thank you for meeting with Drs. Canfield, Powell, and me on April 27th during our recent visit to Washington, and for discussing the Regional Dental Education Program (RDEP) being developed cooperatively between the School of Dentistry here at the University of Washington and the University of Utah and the Idaho State University.

I am writing this letter to submit a statement to be included in the record of hearings held by the Labor and Human Resources Committee on April 8, 1981. I understand materials may be submitted for inclusion in the record of hearing within a ten-day period following the actual date of hearing.

My purpose in submitting this statement is to recommend that language which provides authority and funding for the Secretary to enter into grants and contracts with accredited Health Professions Schools to develop and implement programs of remote site didactic and clinical education be included in S. 799. "A BILL to amend the Public Health Service Act to revise and extend titles VII and VIII of such Act with regard to training in the health professions and nursing, and for other purposes."

This recommendation is based on experiences in Medical and Dental Education here at the University of Washington. These experiences show that remote site didactic and clinical education directly and significantly impacts at least four major problems in health care. These are:

1. Reduction of constraints for admission to health professions schools faced by applicants from states and territories without selected professional education programs in their systems of higher education.

2. Maldistribution of practitioners.

3. Assuring replacement levels of health manpower in states without selected professional education programs, some of which are projected to have population increases requiring modest increases in manpower supply.

Behavioral Health, University of Washington, SC-82, Seattle, Washington 98195 Telephone (206) 543-6884
0 - efficient and cost effective utilization of higher education resources in preparing health professionals.

These experiences have been and are taking place in connection with the remote site didactic and clinical education programs known as WAMI (Washington, Alaska, Montana, and Idaho) in the School of Medicine and as ROEP (the Regional Dental Education Program between Washington, Utah, and Idaho) in the School of Dentistry. In each of these programs, students are admitted from their participating home state to the health professions school here at the University of Washington according to requirements meeting accreditation. Admitted students then take the first year of their preparation in a home state university which is identified as satellite to the health professions school at the University of Washington. During the second, third, and part of their fourth years, these students then transfer to the University of Washington, Seattle campus, where they receive training in full mix with students originally admitted to the central university.

During the latter part of the fourth year, students originally taking the first year in their home state satellite university then return to their home state for clinical training in what are titled "Community Clinical Units." These "CCU's" are chosen by the University of Washington both for their capacity to provide high quality clinical training and for their location in regions and areas which are underserved, while working in the "CCU," students are supervised by local practitioners persons who are given appropriate appointments to the faculty of the central university by reason of their qualifications and ability to teach. Also, while in the "CCU," students are given opportunity to prepare for and take licensing examinations in their home state.

The WAMI Program in the School of Medicine has been operational and funded by the participating states for several years. It has assured applicants from states without medical schools opportunity for admission to medical education. Students taking the sequence outlined above are returning to their home states to practice in primary care, family medicine, and specialties required by the home state. States without medical schools are able to maintain replacement levels of needed manpower and they are able to do this by using their already high quality non-medical-school higher education systems to provide a portion of medical professional training, thus foregoing need to construct costly new medical education facilities. Furthermore, the University of Washington School of Medicine is able to maintain the critical mass of students necessary for high quality education without pumping all of its graduates into the State of Washington, a state which is near average in the ratio of physicians to population.

The ROEP program is currently under development in the states of Utah and Idaho. A total of 27 students will have been admitted by the fall of 1981. To date, it has established that both didactic and clinical dental education can be provided on a remote site basis. Educators in participating states evaluate the program positively (i.e., students admitted to satellite programs are performing at least as well as students admitted to the central university in Seattle). These educators are prepared to recommend assumption of program operating costs by their respective states upon termination of the Federal Contract (HRA-237-79-0069) under which the program is being developed.

School of Dentistry, University of Washington, SC-62, Seattle, Washington 98195 Telephone (206) 543-5864
As so clearly identified in the "Report to the President and Congress on the Status of Health Professions Personnel in the United States" (August, 1978), the problem of practitioner mal-distribution remains with us even though we have sufficient supplies of medical and dental manpower projected through the middle 1990's. The WAMI-RDEP model of remote site didactic and clinical education provides a means whereby the resources of health professions education are marshalled to address this problem.

Not only with respect to mal-distribution, but also with respect to the question of admission of citizens from states without professional schools, the WAMI-RDEP model provides an answer. This is an important aspect because as states with health professional schools find it appropriate to modify their admissions policies in the face of reduced manpower needs and fiscal constraints, it is most often the citizen from a state without medical and dental schools which finds it increasingly difficult to obtain admission, regardless of how well qualified. Furthermore, states with medical and dental education programs are not especially interested in the out-of-state student if it means that students will probably remain or return to the state in which he/she was educated, rather than to the state from which admitted to school.

With present national manpower levels in medicine and dentistry, the nation does not need to invest in additional costly educational facilities and programs for the preparation of these practitioners. The WAMI-RDEP model of remote site didactic and clinical training provides an alternative by which manpower levels can be maintained, presently available higher education resources in both health sciences centers and general systems of higher education used efficiently, and issues of manpower location addressed.

I would be pleased to submit additional information upon request.

Sincerely yours,

Lawrence J. Sharp, M.D.
Associate Professor, Community Dentistry
Lecturer, Department of Sociology

cc: Robert C. Canfield, O.O.S.
G. Lynn Powell, O.O.S.
David Sondfeld, M.O.
Diane Rowland

School of Dentistry, University of Washington, SC-82, Seattle, Washington 98195 Telephone (206) 543-5994
April 14, 1981

Dr. Robert Graham
Acting Director
Health Resources Administration
3700 East West Highway
Hyattsville, MD 20782

Dear Bob:

Have HHS and HRA become the refugee camp for defectors from the "other" branch? I hope the manpower legislation has a better fate than the NIH bill you and the Secretary worked on.

In reviewing the testimony of Charlie Miller, before the Senate Labor and Human Resources Committee on April 8, I noted that the Administration supports making Health Education Assistance Loans (HEAL) available to nursing students. We represent the Association of Nurse Anesthetists and are interested in that proposition; particularly since the anesthetist traineeship program is eliminated in the Administration's bill.

At present, there are about 15,000 active, practicing nurse anesthetists nationwide. A study by the Department of Health, Education, and Welfare in 1976 forecast a supply need of 22,000 to 25,000 nurse anesthetists by 1980. Therefore, according to this estimate, we presently have a supply shortage of some 7,000 to 10,000 nurse anesthetists. The number of training programs has been dropping also from 225 only a few years ago to 145 now.

Since the Administration and Chairman Hatch have proposed legislative elimination of the separate authorization for nurse anesthetist traineeships, there is likely to be no authority for traineeship support. Anesthetists currently are ineligible for
the Nurse Training Act loan program because it applies only to students in "schools of nursing" and anesthetists train for 18 to 24 months in hospital programs. We, therefore, welcome the Administration's initiative to extend the HEAL program to nursing students, assuming nursing students included anesthetists. The Service Contingency Loan program in the 1980 Senate bill included nurse anesthetists.

We would propose that Section 737 of the Public Health Service Act, containing the definition of "eligible institution" for purposes of student assistance, be amended to include "an accredited program for the training of nurse anesthetists". Also, it would be useful to establish in statute or by legislative history that nurse anesthetist trainees are to be conclusively deemed "students" for purposes of this program. We would be pleased to work with you further in drafting appropriate technical and conforming amendments to Section 701 (containing Subchapter definitions) and Sections 727-739.

Thanks for your consideration of this issue. Have your staff call either me or Gordon Thomas in this firm if we can be of further assistance.

Sincerely,

Richard E. Verville

cc: Dr. Dan Whiteside
    Ms. Jo Eleanor Elliott
    Dr. Gordon Vidmer
    Mr. Charles Miller
Appendix 1:

Reimbursement, Physicians' Incomes, and Physicians’ Specialty and Location†

Decisions

JACK HADLEY

Several chapters in this book have alluded to physicians' responsiveness to financial incentives as an important determinant of the ultimate impact of a number of potential financing policies: reimbursement reform, subsidized loans, obligated scholarships, and direct grants to physicians. This Appendix will summarize some of the available evidence pertinent to the question of the sensitivity of physicians' career choices to financial incentives. Although the quantity of prior research on physicians' career choices is impressive, most of these earlier studies have either ignored reimbursement and physicians' incomes or relied on indirect proxies, such as area per capita income or population growth. Unfortunately, the few studies which have attempted to

†For surveys of this literature, see Jack Hadley, Models of Physicians' Specialty and Location Choices, Technical Paper Series No. 6. (Rockville, Md.: National Center for Health Services Research, 1975); Elliot Long, The Geographic Distribution of Physicians in the United States (Minneapolis, Minn.: Interstudy, January 1973); Richard L. Ernst and Donald E. Yett, Determinants of Physician Specialty and Location Choices (Los Angeles: Human Resources Research Center, University of Southern California, 1978).

account for the effects of physicians' incomes or fees tend to be outdated, hampered by poor quality data, and not directly addressed to current policy concerns about physician maldistribution (too few primary care specialists and too few physicians in rural and urban medically underserved areas). Thus, inferences drawn from these studies' findings can only be considered tentative at best.

With these caveats in mind, we review three groups of studies: analyses of physicians' specialty choices, analyses of geographic distribution as a function of average fee levels, and analyses of geographic distribution as a function of physicians' gross or net incomes. Included in the last set are two studies of physician distribution in Canada. These use more accurate data on physicians' payments and net incomes than have been available for analysis of U.S. distribution. The applicability of this body of research is based on the underlying premise that increasing the reimbursement rate for a particular specialty or location raises physicians' incomes.2

Physicians' Specialty Choices

The area which has received the least amount of prior research is the impact of income on physicians' specialty choices. Two studies, by Sloan and Lee, were discussed in Chapters IV and V, and will not be discussed again here.3 Both found that higher specialty income was associated with a greater number of residents in that specialty's training programs. In both cases, however, the magnitude of the estimated relationship was small. A 10 percent increase in a specialty's income would increase the number of residents in that specialty by between .4

2In general, physicians' incomes could be increased in two ways: increasing prices paid for physicians' services or granting lump-sum payments (bonuses) to physicians. In both cases, the increase in income may lead to a reduction in the numbers of hours worked by physicians. We ignore such effects in this review. For empirical evidence on this issue, see Martin S. Feldstein, "The Rising Price of Physicians' Services," The Review of Economics and Statistics 52 (May 1970): 121-33, Frank A Sloan, "A Microanalysis of Physicians' Hours of Work Decisions," in The Economics of Health and Medical Care, Mark Perlman, ed (London: MacMillan, 1974), Stephen G. Vahovich, "Physicians' Supply Decisions by Specialty," Industrial Relations 16 (February 1977) 51-60

and .5 percent. A third study investigated the probability of individual physicians entering one of nine alternative specialties. It found that the choice of internal medicine relative to general practice was positively related to the ratio of internists' incomes to general practitioners' incomes. Income did not have a significant impact on choosing any of the other specialties. However, these estimates are likely to be biased downward because the measure of specialists' incomes used probably understated the conceptually appropriate variable, individual physicians' expectations of their earnings in alternative specialties.

Physicians' Fees and Geographic Distribution

Studies by Fuchs and Kramer, Ramaswamy and Tokuhata, and Cantwell have investigated the relationship between cross-sectional variations in the number of physicians per capita and some measure of the price of physicians' services. Although each used a different data set, geographic unit of analysis, and definition of price, all three found that price had a positive and generally statistically significant effect on the relative number of physicians in the area. Fuchs and Kramer estimated a multiequation model of the physicians' services sector using 1966 data for thirty-three states. Their physician supply equation related the number of active, patient care physicians per 100,000 population, to the average price of a physician visit (measured in GP-equivalents), income per capita, hospital beds per 1,000 population, the number of medical schools in the state, and the average number of visits per physician. Because of the high correlations among the variables, esti-

mates of the quantitative effect of price on supply were sensitive to the specific set of variables included in the equation. Elasticities (the percentage change in physician supply for a 1 percent change in price) ranged from .419 to 1.144, with three of the six reported values significantly different from zero. Although these findings are consistent with prior expectations, the results are suspect because of the very poor quality of the underlying data.\(^6\)

Ramaswamy and Tokuhata estimated a model identical to Fuchs' and Kramer's, but with a very different and much more precise data file. A random sample of 658 self-employed physicians was drawn from Pennsylvania Blue Shield's claims files for 1972. Data on the sample physicians' prices charged and quantities of services provided were aggregated to the county level to form a cross-sectional data file with sixty observations. Average price was defined as a weighted index of fees charged for specific procedures. Although their results show the same sensitivity as the Fuchs and Kramer findings, their elasticity estimates were always positive and significantly different from zero, with values ranging from 2.47 to 6.20.

These values are considerably higher than those reported by Fuchs and Kramer. However, this is due in part to an important difference in the definition of the unit of output. The two sets of estimates can be made comparable by assuming that the Ramaswamy and Tokuhata output measure, the weighted physician's service, is equivalent to 3.29 GP visits, the output measure used by Fuchs and Kramer. (The conversion factor is simply the ratio of the average prices in the two studies, expressed in 1967 dollars.) Applying this transformation results in elasticities ranging from .75 to 1.884, still larger than the Fuchs and Kramer estimates, but nevertheless remarkably similar given the differences in the underlying data.

Cantwell used data from the American Medical Association's 1975 Periodic Survey of Physicians to construct two cross-sectional data files consisting of 261 standard metropolitan statistical areas (SMSAs) and fifty non-SMSA areas. (Non-SMSA counties within each state

\(^6\)See Fuchs and Kramer, Determinants of Expenditures, pp. 27-29, for details on the construction of their variables. Both the quantity of services per physician and average price per service had to be estimated by indirect methods.
were aggregated to form each observation.) His dependent variable was the number of nonfederal patient care physicians in the SMSA or nonmetropolitan area. Price was represented by the average fee for a follow-up office visit. Other variables in the equation included population, mean physician visits per capita, hospital beds, a measure of physicians' gross billings in equilibrium, an index of the quality of life in the area, and the number of graduates of local medical schools in the area. Although the choice of estimation method is subject to question, the price variable still has the expected sign in both the SMSA and non-SMSA equations and is statistically significant in each specification. The estimated elasticities were quite similar for both types of geographic areas. Their values ranged from .43 to .52 for SMSAs and from .43 to .55 for rural areas.

Physicians' Incomes and Geographic Distribution

A second approach to investigating the geographic distribution of physicians is to analyze the relationship between the number of physicians in an area and some measure of physicians' incomes. If the

Both price and gross billings are probably simultaneously determined with the number of physicians. This implies that use of ordinary least squares regression analysis would result in coefficient estimates biased toward zero.

There are also three studies which investigate the probability of making a particular type of location choice. These will be only briefly mentioned here because their dependent variables cannot be easily translated into actual physician supply in an area.

Brown found a positive, statistically significant, but quantitatively small impact of physicians' earnings on the probability of choosing a nonmetropolitan practice location in Nova Scotia.

Yett and Sloan investigated the probability of a state's retaining physicians who had some prior medical educational contact or were born there. Their sample consisted of physicians who were in training or in the military in 1965 but in practice in 1966. They found that physicians' net incomes in the state (as reported in the American Medical Association's Periodic Survey) had a negative and in two cases statistically significant impact on the overall retention probabilities for both specialists and general practitioners.

Finally, Hadley investigated the probability of an individual physician practicing in a particular state, given different combinations of prior contact with that state. He did not find physicians' income in the state to have a statistically significant effect on any of the location probabilities.
number of services or units of output produced by a physician is not very sensitive to small changes in price (reimbursement), then a change in the reimbursement rate, say a 10 percent increase, is equivalent to increasing income by the same amount. If, on the other hand, an increase in reimbursement either stimulates additional production or induces physicians to take more leisure time, then the change in income will be either larger or smaller than the change in the reimbursement. Unfortunately, evidence on this issue is ambiguous. Therefore, in order to facilitate comparisons across studies, we shall assume that physicians' incomes can be altered by changing reimbursement rates by an equivalent amount.

Five studies, three using U.S. data and two using Canadian data, have investigated the impact of physicians' incomes on physician distribution. Sloan, and Harrison and Jud, investigated interstate distribution in 1960 and 1967-68, respectively. Held studied the migration behavior of physicians who graduated from medical school between 1955 and 1965. Hadley and Berry et al. analyzed physician


A fifth study by Benham, Mauritz, and Reder also estimated a physician distribution equation. However, it used data for 1930. See L. Bennam, A. Mauritz, and M. W. Reder, "Migration, Location and Remuneration of Medical Personnel Physicians and Dentists," Review of Economics and Statistics 50 (August 1968) 332-47.


distribution in Canada. Hadley's study is unique in that it pooled provincial data spanning a nineteen-year period, 1958-76. The Berry et al. study also has two unique features. First, it examined physicians' location choices within the province of Quebec using sixty-five medical service areas as the geographic unit of analysis. Second, data on individual physicians' gross billings for each of five years were made available by Quebec's provincial health insurance agency.

Sloan estimated two physician supply equations as part of a multi-equation model of the distribution of medical care resources. The two equations' dependent variables were the number of active, nonstudent physicians per 100,000 population and the proportion of active, non-student physicians who received their M.D. degrees between 1945 and 1954. The former focuses on the physician stock and the latter on physician flow (recent graduates). Both equations were estimated using state data for 1960. The physicians' mean net income variable was constructed from Internal Revenue Service data on the incomes of sole-proprietorship physicians in 1960. Other variables in the equations included hospital assets per capita, medical students per 100,000 population, public school expenditures per pupil, the number of medical students from the state per 100,000 population, a measure of the cyclical sensitivity of the state's income level, the failure rate on the physician-licensure examination, and the proportion of physicians working more than forty-nine weeks.

The physician stock equation was estimated in both static and dynamic forms. The latter includes a variable measuring the value of the dependent variable ten years earlier (1950). The dynamic specification is based on the assumption that it takes several years for the number of physicians in a state to fully adjust to a change in physicians' incomes. This equation generates both short- and long-run estimates of the income elasticity of physician supply. Since physicians' income is simultaneously determined with physicians' supply in Sloan's


model, structural equations were estimated using two-stage least squares regression analysis.

Estimates of the short-run elasticity ranged from .28 to .39. The latter, which is from an equation which included the lagged dependent variable, was also statistically significant. The long-run elasticity, however, was considerably larger, with a value of .98. This suggests that a 10 percent increase in physicians' mean net income in a state would eventually result in an almost equal increase in the number of physicians per 100,000 population.

The physician flow equation also indicated that higher physicians' incomes are associated with a greater flow of recent graduates into the state. The elasticity of physicians' income in that equation was .26. Another variable associated with financial opportunities, the proportion of physicians working more than forty-nine weeks, also had a positive and statistically significant effect on the number of recent graduates.

Held analyzed the location behavior of recent medical school graduates by focusing on the in- and out-migration rates by state for a subsample of 1955–65 graduates of U.S. medical schools. Looking only at physicians who did not attend medical school in the state in which they were practicing in 1971, he found that physicians' income (measured by solo practitioners' net profit in 1966) had a positive effect on the rate of in-migration. However, the estimated coefficient was statistically significant only for physicians who had residency training in the states. The elasticities for these physicians were .94 for general practitioners and .88 for specialists. For physicians who had no prior contact in their state of eventual practice location, the elasticities were only 12 and .04 for general practitioners and specialists, respectively. Physicians' income had a negative, though insignificant effect in three of four out-migration equations.

The model formulated by Harrison and Jud is conceptually similar to Sloan's, but somewhat more parsimonious. They focus on only two equations which explain physicians' earnings and the number of active,
nonfederal physicians per capita. The latter was assumed to depend on physicians' earnings, which were measured by average net earnings reported by sole-proprietorship physicians' practices to the Internal Revenue Service, the number of medical students in the state, and the proportion of the population living in metropolitan areas. State data for two years, 1967 and 1968, were pooled to form a sample of sixty-seven observations. Using two-stage least squares regression analysis to estimate the model's parameters, they found that physicians' net income had a positive and statistically significant effect on the number of physicians in a state. The computed elasticity was 1.65.

Hadley analyzed data on physician distribution in Canada using data for nine provinces over a nineteen-year period, 1958-76. Because of the relatively long time series available for each province, he was able to formulate a dynamic model in which the number of active, fee practice physicians per 1,000 population depends on physicians' mean net income from medical practice, the number of medical school graduates in the province three years earlier, and the dependent variable lagged one year. The last variable incorporates the assumption that it takes several years for the equilibrium stock of physicians to adjust to changes in net income. The source for the income variable was Revenue Canada, Taxation, which had access to physicians' tax returns. Thus, the measurement of this variable is probably more accurate than in other studies reported above. Other variables in the physicians' income equation were per capita income in the province, the number of short-term hospital beds per 100 population, and a dummy variable for the introduction of universal, comprehensive health insurance in each province.18

Using a simultaneous equation method to estimate a linear supply function, Hadley found physicians' net income to enter with a positive and statistically significant coefficient with a short-run elasticity of .49. The speed-of-adjustment parameter implied a full adjustment period of 6.70 years. The long-run elasticity was 3.28.19 These elasticities imply

18 Comprehensive health insurance was implemented separately in each province beginning with Saskatchewan in 1962 and ending with Quebec and Prince Edward Island in 1971.
19 Estimation of the model in logarithmic form produced estimates of .64 for the short-run elasticity, 3.39 years for the adjustment period, and 2.17 for the long-run elasticity.
that a one-time increase in all physicians' net incomes in the average province would cost about $70,000 (in 1976 U.S. dollars) per net addition to the physician stock in the first year. After full adjustment, however, the cost drops to about $56,000 per net addition per year.

Finally, Berry et al. estimated a series of equations explaining in- and out-migration rates of physicians in Quebec over the years 1971 through 1975. Their geographic unit of analysis was a medical service area, which was defined on the basis of clusters of physicians and hospitals within the province. Physicians' income in the market area was measured by average gross payments from the Quebec insurance agency to physicians in the previous year. They found that the net migration rate for general practitioners was positively related to gross payments to general practitioners in the previous year. The implied elasticity was quite high, with a value of 3.44. They also found that new general practitioners are more responsive than established general practitioners, with elasticities of 2.10 and 1.67 respectively. For specialists, on the other hand, income was negatively and significantly related to the net migration rate.

In interpreting these results, it is important to emphasize that specialists in Quebec must be board-certified. Consequently, about half of Quebec's physicians are general practitioners. This differs significantly from the United States, where medical specialty statistics are based on self-designation. Thus, a Quebec specialist is much more likely to depend upon a relatively large population and ready access to a hospital for the conduct of his or her practice. This greater dependency on nonfinancial factors may help explain the unexpected results found in the specialists' migration equations.

What conclusions can be drawn from this review? First, the literature on physicians' specialty choices and financial incentives is very small and characterized by extremely poor data. Keeping this in mind, the three studies reviewed imply a small positive or insignificant effect of income on specialty choice. The literature on geographic distribution is larger, with a total of eight studies reviewed. In spite of considerable variation in data, models, and estimation methods, all of the studies found income to have a positive and generally statistically
significant impact on the number of at least some types of physicians in a geographic area. However, the magnitude of this relationship, measured by the percentage change in the number of physicians for a 1 percent change in income or price, varied considerably, from .06 to 6.20.

Table A1.1 summarizes these studies and their findings. Of particular interest is the estimate of the cost per new physician per year of using financial incentives to attract physicians into an area. The formula used to compute this cost is based on the assumption that all physicians in the area receive a 10 percent increase in net income and that new physicians also receive the higher average income. In symbols, this can be represented by

$$\left[ \left( \frac{\Delta Y}{Y} \right) (DOCS) (Y) + (1 + \frac{\Delta Y}{Y}) (\Delta DOCS) (Y) \right] / \Delta DOCS,$$

where $\frac{\Delta Y}{Y} = \text{percentage change in physicians' net incomes}$

$Y = \text{physicians' net incomes}$

$DOCS = \text{number of physicians}$

$\Delta DOCS = \text{number of new physicians attracted to area}.$

This expression can be simplified to

$$\frac{Y}{\eta} + (1 + \frac{\Delta Y}{Y}) Y,$$

were $\eta$ is the elasticity of the number of physicians with respect to physicians' incomes. In effect, then, the cost per new physician depends critically on the value of $\eta$ as well as on physicians' income levels and the proposed change in income.

The last column of Table A1.1 shows this clearly. Annual cost per new physician based on data from studies which estimated elasticities greater than 1.0 ranged from about $56,000 to $93,000 in 1975 dollars. Cost estimates are more than two times larger, however, using the elasticities reported by Cantwell and Hadley.

There is reason to believe, though, that in general these cost
### TABLE A1.1 Summary of Physician Distribution Studies with Physicians' Income or Fee Variables

<table>
<thead>
<tr>
<th>Study</th>
<th>Years Analyzed</th>
<th>Geographic Unit of Analysis</th>
<th>Dependent Variable</th>
<th>Independent Variable</th>
<th>Elasticity Estimates</th>
<th>Elasticity²</th>
<th>Mean MDs per 100,000</th>
<th>Mean Income (current $)</th>
<th>Cost per New Physician (1975 $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fuchs and Kramer</td>
<td>1966</td>
<td>33 states</td>
<td>active, patient care physicians per 100,000</td>
<td>price of a GP equivalent visit</td>
<td>.42 to 1.14</td>
<td>86</td>
<td>95.4</td>
<td>31.265³</td>
<td>117.000</td>
</tr>
<tr>
<td>2. Ramaswamy and Tokuhata</td>
<td>1972</td>
<td>60 Pennsylvania counties</td>
<td>private practice physicians per 100,000</td>
<td>weighted average price per service</td>
<td>2.47 to 6.20</td>
<td>3.90</td>
<td>72.1</td>
<td>45.433³</td>
<td>79.000</td>
</tr>
<tr>
<td>3. Cantwell</td>
<td>1974</td>
<td>201 SMSAs</td>
<td>nonfederal, patient care physicians</td>
<td>price of a follow-up office visit</td>
<td>43 to 52</td>
<td>46</td>
<td>180</td>
<td>51.742³</td>
<td>184.000</td>
</tr>
<tr>
<td>4. Sloan</td>
<td>1960, 1971</td>
<td>48 states</td>
<td>active non-student physicians</td>
<td>mean net income of solo proprietor physicians</td>
<td>.43 to 55</td>
<td>.48</td>
<td>76</td>
<td>50.380⁴</td>
<td>174.000</td>
</tr>
<tr>
<td></td>
<td>1960</td>
<td>48 states</td>
<td>active, non-student physicians who received MDs between 1945-1954</td>
<td>mean net income of solo proprietor physicians</td>
<td>28 to 39.</td>
<td>98⁴</td>
<td>59</td>
<td>88 (Specialists)</td>
<td>536</td>
</tr>
<tr>
<td>5. Held</td>
<td>1971</td>
<td>48 states</td>
<td>1955-65 MD graduates who had intern and/or residency in state</td>
<td>mean net income of general practitioners in 1966</td>
<td>.94 (GPs)</td>
<td>88 (Specialists)</td>
<td>536</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study</td>
<td>Years Analyzed</td>
<td>Geographic Unit of Analysis</td>
<td>Dependent Variable</td>
<td>Independent Variable</td>
<td>Elasticity Estimates</td>
<td>Mean MDs per 100,000</td>
<td>Mean Income (current $)</td>
<td>Cost per New Physician (1976 $)</td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
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<td>---------------------</td>
<td>----------------------</td>
<td>----------------------</td>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td>6. Harrison and Jud</td>
<td>1967–1968</td>
<td>67 states</td>
<td>active non-federal physicians</td>
<td>mean net income of sole proprietors in state</td>
<td>.65</td>
<td>1.65</td>
<td>144$</td>
<td>35,510$</td>
<td>93,000</td>
</tr>
<tr>
<td>7. Hadley</td>
<td>1958–76</td>
<td>9 Canadian provinces</td>
<td>active fee-practice physicians</td>
<td>physicians' mean net income in current year</td>
<td>.49</td>
<td>.49</td>
<td>108.9$</td>
<td>48,801$</td>
<td>70,000</td>
</tr>
<tr>
<td>8. Berry et al.</td>
<td>1971–1975</td>
<td>65 medical market areas in Quebec</td>
<td>net general practitioner migrants</td>
<td>mean gross payments to GPs in the market area in the previous year</td>
<td>3.28$</td>
<td>3.28$</td>
<td>108.9$</td>
<td>48,801$</td>
<td>56,000</td>
</tr>
<tr>
<td></td>
<td>1971–1975</td>
<td>65 medical market areas in Quebec</td>
<td>net total physician migrants</td>
<td>mean gross payments to all physicians</td>
<td>1.08</td>
<td>1.08</td>
<td>63.1</td>
<td>44,906$</td>
<td>91,000</td>
</tr>
</tbody>
</table>

Notes: 'Cost per new physician for a 10 percent increase in physicians' net incomes is computed using the following formula:

\[
C = \left(1 + \left(1 \frac{\eta}{\hat{\eta}} \right)^{-1}\right) \text{MDY} = \left(1 + \left(1 \frac{\eta}{\hat{\eta}} \right) \right) \text{MDY} \left(\frac{1.1}{1}\right) \left(\frac{\Delta \text{DOCS}}{\text{DOCS}}\right)
\]

where MDY = average physician income in the area
\eta = estimated elasticity
\text{DOCS} = number of physicians
\Delta \text{DOCS} = change in the number of physicians = \left(1 - \left(\frac{\eta}{\hat{\eta}}\right) \right) \text{DOCS}

1. Average of elasticities reported in study
2. Estimated by multiplying mean of physicians by 65. the average ratio of net to gross income from data in the Profile of Medical Practice
3. Long-run elasticity
4. 1976 data, income in U.S. dollars
5. Gross payments multiplied by 75, the ratio of net to gross incomes in Quebec in 1977
7. General practitioners per 100,000, market area average
8. Current year Canadian dollars
estimates may be biased upward. First, the Berry et al. study indicated that new general practitioners have a higher elasticity than any other category of physician. Second, the mean income expected by new physicians is likely to be lower than the mean income for all physicians. Third, the Berry et al. and Hadley studies spanned time periods of rapid increases in the stock of physicians. Thus, their estimates may be more relevant to the projected situation in the United States than studies which used only single period cross-sections and/or data from the 1960s. These observations suggest that a policy which is implemented during a period of expanding physician supply and which limits financial incentives for locating in particular areas to new physicians in primary care specialties might be less costly than indicated by Table A1.1.

Perhaps the strongest conclusion of this review is that more research with recent and good quality data is needed. This is especially true for the question of the effect of incomes and fees on specialty choice. Although the geographic distribution research is consistent with regard to its qualitative conclusion, there is considerable variation in the exact magnitude of the income effect. As the calculations in Table A1.1 suggest, the value of this parameter is key in estimating cost implications of a financial incentives policy.
Appendix 2

The National Health Service Corps*

JACK HADLEY

The National Health Service Corps (NHSC) was established by the Emergency Health Personnel Act of 1970 (P.L. 91-623). Its purpose was "to improve the delivery of health services to persons living in communities and areas of the United States where health personnel and services are inadequate to meet the needs of residents of such communities and areas."1 This objective was reiterated in the Health Professions Educational Assistance Act of 1976 (P.L. 94-484), which directed the Secretary of DHEW to use the NHSC "to improve the delivery of health services in health manpower shortage areas."2 In spite of this singleness of purpose, there appears to have been a fairly major shift in the government's perception of the role of the NHSC. The initial concept of the Corps was that of a facilitator which helped link physicians interested in practicing in underserved areas with needy...

*I would like to thank Richard Schulman, Terry Smegelsky, Nancy Devlon, and Gary Wold of the Bureau of Health Manpower for making current data available and providing helpful comments.


National Health Service Corps

communities. Recruitment was to be primarily voluntary, and the Corps' presence in any particular community limited to the transition period needed for the physician to become reasonably established. The major emphasis was on bringing physicians to rural areas. The most recent legislation, on the other hand, projects a NHSC greatly expanded in size and directly tied to obligated service scholarships and loans with forgiveness options. Also the Corps' future orientation is likely to be more urban and institutional. In effect, the NHSC now appears to be the primary policy instrument for direct intervention into the physician distribution process.

Because of the expanded role envisioned for the Corps and its direct link to major financing options for undergraduate medical education, this Appendix will describe the NHSC and provide data on some aspects of its performance. However, the rapid changes in the Corps' nature and size and its relative immaturity preclude a full-scale evaluation at this time. Also, this review will concentrate on physicians in the NHSC, even though the Corps includes several other health professions.

The Health Services Administration, an agency of DHEW's Public Health Service, administers the NHSC. This entails assigning recruits to eligible communities and managing the day-to-day operations of Corps sites. Another Public Health Service agency, the Health Resources Administration, has primary responsibility for two other activities directly related to the NHSC operating the scholarship and loan programs which are now the major vehicles for recruiting physicians into the Corps; and designating areas, populations, and institutions which have health manpower shortages and therefore are eligible to become Corps sites.

Both the recruitment and the assignment processes are geared toward increasing the odds that a physician will remain to practice in a shortage area, either as a voluntary member of the NHSC or in private practice. Thus, preference for award of an NHSC scholarship is given to applicants who plan to enter primary care residency training, who come from medically underserved urban or rural areas, have had work experience in health manpower shortage areas, and/or express plans to work in a health manpower shortage area after completing the NHSC.
service obligation. Financial need of the applicant is not a criterion. Assignment of physicians operates primarily on a cooperative rather than a command basis. Each physician is permitted, at government expense, one visit to a prospective site before agreeing to serve there. The Corps also assists eligible communities in developing, organizing, and managing a medical practice facility in order to make them as attractive as possible to NHSC physicians. Thus, the Corps retains some of the spirit of its first years by continuing to serve a broker function between communities and physicians.

Scholarships in exchange for NHSC service were first authorized by the Emergency Health Personnel Act Amendments of 1972 (P.L. 92–585). Each award consisted of full tuition and fees, paid directly to the student’s medical school, plus $6,750 per year paid to the student for living expenses. The scholarship could be renewed for up to four years of full-time attendance in a medical school. The service obligation consisted of one year of service in the NHSC (or the Indian Health Service or Bureau of Medical Services, which are also components of the Public Health Service) for each year of scholarship support, with a minimum requirement of two years of service. The beginning of the service period can be deferred for up to three years for internship and residency training.

Scholarship awards were made to 4,710 medical students over the five years (academic years 1973–74 through 1977–78) covered by P.L. 92–585. About $110 million was obligated during this period, with about 31 percent going to medical and osteopathic schools for tuition and fees. Table A2.1 reports annual expenditures and numbers of students assisted each year under this law. Total expenditures increased more than tenfold over the five years, from $3.0 million in

2Ibid
TABLE A2.1 National Health Service Corps Scholarships, 1973-74 to 1980-81

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount Authorized (millions)</th>
<th>Amount Appropriated (millions)</th>
<th>Total No. of Awards</th>
<th>Amount Awarded (millions)</th>
<th>Annual Stipend Amt</th>
<th>Average of Tuition &amp; Fees</th>
<th>Average Amt of &quot;Other Ed Expenses&quot;</th>
<th>Average Amt of Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973-74</td>
<td>$3.01</td>
<td>$3.01</td>
<td>372</td>
<td>$3.01</td>
<td>$6,750</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>1974-75</td>
<td>40.0</td>
<td>22.5</td>
<td>2,457</td>
<td>22.5</td>
<td>6,750</td>
<td>$2,407</td>
<td>NA</td>
<td>$9,157</td>
</tr>
<tr>
<td>1975-76</td>
<td>40.0</td>
<td>22.5</td>
<td>2,336</td>
<td>22.5</td>
<td>6,750</td>
<td>2,882</td>
<td>NA</td>
<td>9,632</td>
</tr>
<tr>
<td>1976-77</td>
<td>40.0</td>
<td>22.5</td>
<td>2,267</td>
<td>22.5</td>
<td>6,750</td>
<td>3,175</td>
<td>NA</td>
<td>9,925</td>
</tr>
<tr>
<td>1977-78</td>
<td>40.0</td>
<td>40.0</td>
<td>3,570</td>
<td>36.6</td>
<td>6,750</td>
<td>4,342</td>
<td>NA</td>
<td>11,092</td>
</tr>
<tr>
<td>1978-79</td>
<td>75.0</td>
<td>60.0</td>
<td>5,252</td>
<td>59.5</td>
<td>5,148</td>
<td>5,253</td>
<td>$931</td>
<td>11,332</td>
</tr>
<tr>
<td>1979-80</td>
<td>140.0</td>
<td>75.0</td>
<td>6,1954</td>
<td>74.2</td>
<td>5,4364</td>
<td>5,5614</td>
<td>9874</td>
<td>11,9844</td>
</tr>
<tr>
<td>1980-81</td>
<td>200.0</td>
<td>79.54</td>
<td>6,1954</td>
<td>78.74</td>
<td>5,7364</td>
<td>5,9214</td>
<td>1,0464</td>
<td>12,7034</td>
</tr>
</tbody>
</table>


Notes: 1. Authorized under Emergency Health Personnel Act Amendments of 1972 (HSA)
2. A Statement of average cost of awards for FY 1974 would be misleading in that scholarships were awarded for only a partial year.
3. The figures for FY 1974-1977 pertain to the PHS/NHSC Scholarship Program (Sec 225, PHS Act). Those for FY 1978-1980 pertain to the NHSC Scholarship Program (Sec 751, PHS Act).
4. Estimated
NA = Not Available
1973–74 to $36.6 million in 1977–78. Some of this growth was due to
the increase in the average value of a NHSC scholarship, to almost
$11,100 in 1977–78. However, the bigger share of the increase is
attributable to the growth in the number of awards made each year.
Data for 1977–78, the first year covered by the 1976 Act, illustrate the
dramatic growth intended for the NHSC. The number of awards
increased by 32 percent and total amount awarded jumped by over 60
percent.

As of June 1978, 2,867 of the medical students who received
scholarships were still in school and 1,416 in deferred status. More
than 80 percent of those in residency training were in the three primary
care specialties of family practice, internal medicine, and pediatrics.
Thus, almost 92 percent have yet to fulfill their service obligation. Of
the remainder, 169 are on active duty, 73 have completed their service,
and 133 chose financial repayment. (This last figure appears to ex-
clude 4 deaths and 43 students who failed to complete medical school.)

Although the number of students not fulfilling their service obliga-
tions is small relative to the total number of students receiving scholar-
ships, it represents more than 30 percent of students not still in medical
school or graduate training. Table A2.2 breaks down monetary repay-
ment cases by reason. Under the terms of the scholarship program,
those who complete their degree but refuse to serve their obligation are
required to repay the full amount paid to them and on their behalf
within three years of default at the maximum interest rate allowed in
the District of Columbia (currently 8 percent). As noted in Chapter V,
this effectively converts the scholarship into a loan. The principal
amount depends on the number of years an award was made plus
tuition at the student's medical school. If we assume an average annual
tuition of $3,000 during the period covered, then the maximum repay-
ment would be $39,000 plus interest. The average monetary repay-
ment, however, may be considerably smaller, which makes default an
attractive option for physicians who face financially rewarding
alternatives.

7Ibid.
8Ibid., Table 3.
9Ibid., Table 2.
Not surprisingly, NHSC scholarships were most attractive to students at private universities. Table A2.3 lists the ten schools of medicine and osteopathy which received the largest number of awards between 1973–74 and 1977–78. Two of the top three medical schools have predominantly nonwhite student bodies. The other six medical schools charged relatively high tuitions, thus increasing the value of the NHSC scholarship. In 1976–77, average tuition and fees per medical student at all medical schools was $3,295.10 Excepting Howard and Meharry, tuition ranged from $4,000 to $7,000 for that year in the other medical schools listed in Table A2.3. These ten schools accounted for almost twenty-five percent of the total awards made. At the same time, thirteen schools had fewer than ten NHSC scholarship awards over the five years. Among the apparent reasons for these low participation rates are a strong nonprimary care orientation, low tuition rates (particularly at public medical schools), and generous state financial aid to students.

The Health Professions Educational Assistance Act of 1976 expanded the scope of the NHSC in two ways. First, the criteria for

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TABLE A2.2 Summary of Medical Default Cases as of April, 1978

<table>
<thead>
<tr>
<th>Reason for Default</th>
<th>Number of Defaults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal or Family Problem^</td>
<td>21</td>
</tr>
<tr>
<td>Deferment Unacceptable</td>
<td>27</td>
</tr>
<tr>
<td>Assignment Unacceptable</td>
<td>10</td>
</tr>
<tr>
<td>Program Policies Unacceptable</td>
<td>12</td>
</tr>
<tr>
<td>Change in Career Goals</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
<tr>
<td>Unknown</td>
<td>34</td>
</tr>
<tr>
<td><strong>Sub-Total</strong></td>
<td><strong>133</strong></td>
</tr>
<tr>
<td>Withdrew from Medical School</td>
<td>20</td>
</tr>
<tr>
<td>Dismissed from Medical School</td>
<td>23</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>176</strong></td>
</tr>
</tbody>
</table>


Note: \^Includes 12 waivers for personal hardship or disability
### TABLE A2.3
Ten Medical and Osteopathic Schools Receiving the Greatest Number of NHSC Scholarship Awards, 1973-74 to 1977-78

<table>
<thead>
<tr>
<th>School</th>
<th>State or District</th>
<th>Total Awards (1973-77)</th>
<th>Tuition 1976-77 ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meharry Medical College School of Medicine</td>
<td>Tennessee</td>
<td>198</td>
<td>2,750</td>
</tr>
<tr>
<td>Georgetown University School of Medicine</td>
<td>District of Columbia</td>
<td>189</td>
<td>6,800</td>
</tr>
<tr>
<td>Kansas City College of Osteopathic Medicine</td>
<td>Missouri</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td>Howard University School of Medicine</td>
<td>District of Columbia</td>
<td>134</td>
<td>2,078</td>
</tr>
<tr>
<td>Loma Linda University School of Medicine</td>
<td>California</td>
<td>131</td>
<td>6,000</td>
</tr>
<tr>
<td>George Washington University School of Medicine</td>
<td>District of Columbia</td>
<td>127</td>
<td>7,000&lt;sup&gt;1&lt;/sup&gt;</td>
</tr>
<tr>
<td>Medical College of Thomas Jefferson University</td>
<td>Pennsylvania</td>
<td>105</td>
<td>4,000</td>
</tr>
<tr>
<td>College of Osteopathic Medicine and Surgery</td>
<td>Iowa</td>
<td>102</td>
<td></td>
</tr>
<tr>
<td>Temple University School of Medicine</td>
<td>Pennsylvania</td>
<td>99</td>
<td>4,000&lt;sup&gt;2&lt;/sup&gt;</td>
</tr>
<tr>
<td>Tufts University School of Medicine</td>
<td>Massachusetts</td>
<td>89</td>
<td>4,360</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Health, Education, and Welfare, Health Services Administration, National Health Service Corps, "First Annual Report to the Congress". Tuition figures were obtained from the schools.

Notes:
- <sup>1</sup>First-year students only
- <sup>2</sup>In-state residents' tuition was $2,000
designating health manpower shortage areas were expanded to cover needy populations within otherwise adequately served counties; and institutions such as hospitals, state mental institutions, community health centers, and prisons. In addition, designation takes into account not only the ratio of physicians to population, but also health indicators such as infant and maternal mortality, access to health services, and the number of foreign medical graduates practicing in the area. As a result, the number of designated areas has more than doubled, from 1,100 in 1975 to about 2,800 in 1979. More importantly, this change will permit a much greater penetration of the Corps into urban areas.

Second, authorized appropriations for NHSC scholarships have been increased dramatically. For fiscal year 1977, the last year covered by prior legislation, $40 million was appropriated for scholarship support. Under the new legislation, NHSC scholarship appropriations are increased to $60, $75, and $79.5 million for fiscal years 1978 through 1980. DHEW estimates of the number of scholarships awarded to medical students for these years are 4,118, 9,542, and 13,292 at an average annual cost per award of $11,000. In 1977-78, 1,593 awards were made. Because of deferments for medical education and residency training, current awards will not have a major impact on actual NHSC field strength for several years.

There were about 1,000 physicians assigned to NHSC sites in 1978 and 1979. DHEW has estimated that if the NHSC is to be the primary vehicle for meeting critical health manpower shortage area needs by 1990, approximately 5,000 physician assignees would be required each year. Although this represents almost a fivefold increase over current size, the NHSC would still absorb no more than a small fraction of the total stock of patient care physicians in the United States. If half of the NHSC physicians complete their obligations and

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11 Mike and Zuckert, "National Health Service Corps," Table 1
12 Ibid., Table 7
13 Ibid., Table 6
14 Ibid., Table 9.
drop out of the program in any given year, then NHSC obligations will be required from about 15 percent of future medical school classes in order to maintain staffing.

A third significant change incorporated into the 1976 law affects the penalty for defaulting on a service obligation. The financial penalty was increased to three times the amount of scholarship award plus interest at the maximum prevailing rate (currently 13½ percent). The payback period was also shortened from three years to one year. Since the average award is about $11,000 per year for two or more years, this increases the monetary cost of default to about $70,000 which would have to be paid in one year. Although there has not been any experience yet under the new default provisions, this would appear to be a significantly greater deterrent than was in effect under the previous legislation.

In spite of the major role projected for the NHSC, there has been relatively little experience with actually operating practice sites staffed by scholarship obligees. Because of deferments for medical education and the Corps’ very modest funding in its first years, the number of staffed sites in operation in 1978 was 668, less than 15 percent of the total number of sites projected for 1983. Furthermore, these sites tended to be predominantly rural and organized along the lines of a traditional fee-for-service practice with one or two physicians. By contrast, DHEW anticipates that in 1983 almost 80 percent of Corps assignees will be placed in some type of institutional setting, with about 35 percent located in urban areas. Thus past data may not be very reliable for assessing future performance of NHSC sites.

With this caveat in mind, Table A2.4 reports various data on Corps sites for the years 1975 through 1978. Cost per encounter appears to be relatively comparable to fees charged by private practitioners in non-metropolitan counties. According to an American Medical Association survey, the average fee for an initial office visit was $16.90 in 1976. These data are not adjusted for physicians' medical specialty or age. Table A2.5, from a recent study of the Corps, compares cost per medical encounter in the Corps and several other types of practice settings. These data suggest that NHSC sites are more expensive than

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private, solo practice physicians. However, the Corps practices compare favorably to several other types of ambulatory care delivery settings.

**TABLE A2.4** Various National Health Service Corps Data, 1975 to 1978

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Population Served (000s)</td>
<td>398</td>
<td>492</td>
<td>566</td>
<td>726</td>
</tr>
<tr>
<td>2. Sites Staffed (One or More Assignees)</td>
<td>248</td>
<td>331</td>
<td>398</td>
<td>668</td>
</tr>
<tr>
<td>3. Number of Assignees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physicians</td>
<td>488</td>
<td>596</td>
<td>690</td>
<td>1289</td>
</tr>
<tr>
<td>Dentists</td>
<td>313</td>
<td>395</td>
<td>465</td>
<td>694</td>
</tr>
<tr>
<td>Other</td>
<td>74</td>
<td>95</td>
<td>106</td>
<td>210</td>
</tr>
<tr>
<td>4. Retention Rate (Physicians)</td>
<td>30%</td>
<td>38%</td>
<td>47%</td>
<td>48%</td>
</tr>
<tr>
<td>5. Authorizations (000s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Appropriations (000s)</td>
<td>$16,000</td>
<td>$30,000</td>
<td>$34,000</td>
<td>$47,000</td>
</tr>
<tr>
<td>7. Patient Fees Collected (000s)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and Returned to the Treasury</td>
<td>2,010</td>
<td>4,267</td>
<td>4,520</td>
<td>1,626</td>
</tr>
<tr>
<td>8. Cost per Encounter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Average Cost per Field Assignee</td>
<td>$31,000</td>
<td>$32,700</td>
<td>$36,000</td>
<td>$42,000</td>
</tr>
</tbody>
</table>


Notes:
1. Includes assignees eligible to leave NHSC who voluntarily extend their tours for at least one more year and those who terminate their service to establish private practice in shortage areas.
3. Includes $2 million reprogrammed to CHCS.

**TABLE A2.5** Estimates of Cost Showing Relative Rank of Providers by Functional Cost Per Ambulatory Medical Encounter

<table>
<thead>
<tr>
<th>Rank</th>
<th>Type of Provider</th>
<th>Weighted Mean Functional Cost Per Medical Encounter</th>
<th>Proportion of Cost Contributed Directly by Federal Grant (1974,%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Voluntary Hospital Outpatient</td>
<td>$25.46</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Prepaid Private Group Practice Plans</td>
<td>$23.23</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Rural Health Initiative Practices</td>
<td>$22.90</td>
<td>48.0</td>
</tr>
<tr>
<td>4</td>
<td>Comprehensive Health Centers</td>
<td>$22.00</td>
<td>77.0</td>
</tr>
<tr>
<td>5</td>
<td>National Health Service Corps Practices</td>
<td>$21.70</td>
<td>42.0</td>
</tr>
<tr>
<td>6</td>
<td>Migrant Health Care Projects</td>
<td>$20.13</td>
<td>92.0</td>
</tr>
<tr>
<td>7</td>
<td>Private Physician Group Practices</td>
<td>$20.06</td>
<td>0.0</td>
</tr>
<tr>
<td>8</td>
<td>Private Physician Solo Practices</td>
<td>$15.43</td>
<td>0.0</td>
</tr>
</tbody>
</table>


Notes:
1. The ranking is superficial in that the completeness and availability of the data and the judgmental nature of the samples permit only estimates of the true cost in most cases.
2. All data are adjusted to calendar year 1976 levels were required using the appropriate medical component of the CPS. Adjusting to FY 1977 or FY 1978 levels does not appreciably affect relative positions in the ranking.
3. The costs recovered from other sources refer to the billed amounts rather than actual receipt.
Annual data on productivity are not available. However, Table A2.6 reports the findings of a study of thirty NHSC sites conducted in 1975. Productivity is measured as encounters per physician or physician-hour. The results indicate that higher productivity is associated with the presence of a physician extender, the degree of the site’s financial self-sufficiency, and the site’s initial staffing year. The average numbers of encounters per physician and per physician-hour over all sites in the sample were 4,664 and 2.4. For the most self-supporting sites, the figures were 7,092 and 3.3.

### TABLE A2.6  
Physician Encounters Per Physician and Physician Encounters Per Physician-Hour, by Selected Cohorts, FY 1976  
(Major Cross-Sectional Analysis)

<table>
<thead>
<tr>
<th>Productivity Measure</th>
<th>Sample Sites</th>
<th>Self Support Ratio Categories¹</th>
<th>Initial Staffing Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician Encounters/Physicians (All Sites)</td>
<td>4664</td>
<td>7092</td>
<td>4568</td>
</tr>
<tr>
<td>(Sites with no P.E.s)</td>
<td>(130)</td>
<td>(30)</td>
<td>(52)</td>
</tr>
<tr>
<td>Physician Encounters/Physician (Sites with P.E.s)</td>
<td>4428</td>
<td>6420</td>
<td>4048</td>
</tr>
<tr>
<td>(Sites with no P.E.s)</td>
<td>(94)</td>
<td>(23)</td>
<td>(40)</td>
</tr>
<tr>
<td>Physician Encounters/Physician (Sites with P.E.s)</td>
<td>5272</td>
<td>9304</td>
<td>6296</td>
</tr>
<tr>
<td>(Sites with no P.E.s)</td>
<td>(35)</td>
<td>(7)</td>
<td>(12)</td>
</tr>
<tr>
<td>Physician Encounters/Physician-Hour (All Sites)</td>
<td>2.4</td>
<td>3.3</td>
<td>2.3</td>
</tr>
<tr>
<td>(Sites with no P.E.s)</td>
<td>(1.39)</td>
<td>(30)</td>
<td>(52)</td>
</tr>
<tr>
<td>Physician Encounters/Physician-Hour (Sites with P.E.s)</td>
<td>2.6</td>
<td>5.2</td>
<td>2.9</td>
</tr>
<tr>
<td>(Sites with no P.E.s)</td>
<td>(36)</td>
<td>(7)</td>
<td>(12)</td>
</tr>
<tr>
<td>Physician Encounters/Physician-Hour (Sites with P.E.s)</td>
<td>2.2</td>
<td>2.8</td>
<td>2.1</td>
</tr>
<tr>
<td>(Sites with no P.E.s)</td>
<td>(94)</td>
<td>(23)</td>
<td>(40)</td>
</tr>
</tbody>
</table>

Source: Heaton, et al., Comparative Cost and Financial Analysis of Ambulatory Care Providers. Table 12, p 73

Note: ¹Self support ratios measure the relation between the total revenues from all sources and total costs experienced at sites at a given time. Category 1 sites are the most self-supporting, diminishing to category 3.

Again using American Medical Association data for comparison, unadjusted figures for the numbers of patient visits per physician and
per physician-hour in nonmetropolitan counties in 1975 were 7,975 and 3.37. These are roughly 70 and 40 percent higher than the average for NHSC sites. Limiting the private practice sample to solo, nonmetropolitan, primary care physicians between the ages of thirty and thirty-five reduces the annual patient visit figure to 6,627. However, this is still about 40 percent higher than the NHSC average.

A number of factors may explain these differences:

- natural selection of private practices into the most productive and financially viable locations
- unwillingness of local populations to give up traditional sources of care
- salaried reimbursement of NHSC physicians, as opposed to fee-for-service reimbursement of private practices
- differences in the style and quality of care delivered
- continual practice-building and start-up periods, due to turnov- ers in NHSC physicians

Identifying the relative importance of these factors is critical to determining the viability of the one-or-two physician practice model which has so far dominated the NHSC experience. Some of these possible sources of low productivity may be dealt with by altering program structure, for example, offering productivity bonuses for NHSC physicians.

If, on the other hand, the NHSC is to serve as a provider of last resort in areas which, under current insurance and reimbursement systems, cannot support private practices, then the apparent low productivity and high cost may be an inevitable component of efforts to redistribute medical care. In this regard, the NHSC would be much like other public programs which provide services to rural and/or poor populations at subsidized rates. Whether or not this is desirable for

1Sharon R. Henderson, ed., Profile of Medical Practice, 1977 (Chicago American Medical Association, 1977), data are from tables on patient visits per week, hours per week, and weeks per year

medical care is a political decision which transcends this analysis.

Per physician cost of the NHSC depends on several factors: total scholarship money awarded, average annual salary while in the Corps, and length of service. Data reported above indicate that Corps physicians' salaries were approximately $32,000 in 1975. If we ignore general inflation and assume an average annual scholarship award of $11,000 which could have accumulated interest at 8 percent for seven years (four years of medical school plus three years of residency training), this adds an additional cost of almost $19,000 to the physician's first-year salary and to each year up to the minimum required. If no physician served in the Corps beyond the minimum, then the average annual cost per physician would be about $51,000. To the extent that physicians stay in the Corps, scholarship costs can be spread over more years of service, thus reducing average annual cost per physician. Unfortunately, data on average tenure in the NHSC are not available. However, according to data reported in Table A2.4, the proportion of physicians remaining in an underserved area for at least one additional year has increased to almost 50 percent in 1977 and 1978, compared to only 26 percent in 1976. This will lower cost per physician-year somewhat.

In 1975, median net incomes for physicians in nonmetropolitan counties were $48,286 for all specialties, $41,900 for general practitioners, $48,500 for internists, and $46,000 for pediatricians. Evidence cited in Appendix 1 suggested that physicians' location decisions could be influenced directly through manipulation of the reimbursement system. Although calculations were necessarily crude, it was estimated that if physicians' location choices are relatively sensitive to financial incentives, the average annual cost per physician attracted to an underserved area might be on the order of $60,000 to $90,000 per year based on a 10 percent increase in physicians' net incomes. If adjustments were made for productivity differences between private and NHSC practices, then the two policy strategies appear to be roughly comparable in cost per physician year.

If there were no political constraints on policy options, then the redistribution of physicians and medical care services in general could

Gaffney, Profile of Medical Practice. p 256
be tied to reform of the system of paying for physicians' services. This case was argued in Chapter III. However, major changes in either reimbursement or insurance coverage are unlikely in the near future. Given the existing legislative authority for a greatly expanded National Health Service Corps, it would seem that use of the Corps in conjunction with institutional providers of medical care services may be an effective strategy for alleviating existing physician distribution problems.
Alternative Methods of Evaluating Health Manpower Distribution

by

Jack Hadley

The Urban Institute
Washington, D.C. 20037
February, 1979

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Alternative Methods of Evaluating Health Manpower Distribution

Abstract

Four desirable characteristics of an ideal method of evaluating health manpower distribution are postulated. Current approaches are evaluated using these criteria and are shown to be unsatisfactory. An alternative method, based on the economic theory of production, is then described. The paper concludes with some recommendations for further research.

I. Introduction

Analysts, administrators, and legislators generally agree that the principal health manpower supply issue is no longer an inadequate total supply of personnel, but rather a maldistribution among activities and locations. Implicit in this assessment is the notion that there are known optimal distributions against which existing manpower allocations can be compared. In the case of the geographic distribution of physicians, such a comparison might result in a ranking or listing of areas according to their apparent physician deficit or surplus. Policy-makers would then have a clear indication of what types of reallocations of existing physicians and/or assignments of future physicians would lead to a more socially desirable physician distribution.

Although described very simply, this scenario underlies much recent federal legislation and program activity. For example, the National Health Service Corps, Health Professions Loan Forgiveness, Health in Underserved Rural Areas, and the Rural Health Clinics Act in one way or another all rely upon the designation of certain areas as "shortage" locations in order to make their own allocation decisions. Thus, the fiscal stakes involved in distributing federal resources are already large and could grow much larger still under schemes envisioned by some national health insurance proposals.

This paper has three objectives. The first is to describe some characteristics which one might wish to incorporate into a method of determining underservice. This in turn provides a backdrop for evaluating existing methods.
Lastly, we propose an alternative approach and outline some exploratory research to investigate its feasibility.

II. Some Desirable Characteristics

Postponing until later the critical question of data availability, what properties would we like an ideal method of determining underservice to have? At least four come to mind:

- an explicit identification of the good which is in short supply,
- the ability to identify the source of the underservice,
- the ability to make cardinal comparisons across areas or populations, and
- an explicit allocation rule for addressing the underservice.

The first of the four is simultaneously the most obvious and the most complex requirement. Although all of us probably feel that we have a good intuitive sense of shortage or underservice, i.e., we'd know one if we saw it, translating this notion into a formal statement is entirely a different matter. The problem arises primarily because it is health that we are ultimately concerned with and it is also health that so far has eluded most attempts at definition and measurement. There is a good deal of important and interesting research underway which is tackling the problem of developing a health status index [3, 6, 10]. However, the short term prospects for a widely accepted and easily implemented index are not good.

Given this gap, there appear to be two principal alternatives. One defines underservice in terms of the presence of ill health and focuses on items such as mortality from various causes or among particular populations, restricted activity days, work loss days, or disease incidence. The second concentrates on measures of either the use or availability of
medical care, e.g., physician visits and hospital admissions as use measures, and physician and hospital bed to population ratios as availability measures. As luck would have it, availability measures are probably farthest from what it is that we're really interested in, yet readily attainable data make them the most widely used.

The second characteristic proposed is the ability to identify the source of the underservice. Given that one area has lower health or greater illness than another, what are the reasons for these differentials? In asking this question, it is important to emphasize that there is very likely more than one reason for underservice. This in turn implies that there is more than one way to skin a cat. One need not, and in fact should not be limited to a single type of resource in attempting to compensate for perceived maldistributions. Thus, not only should our method identify the sources of underservice, but also their relative contributions or effects on the value of the variable measuring underservice.

We would like our method to tell us, on the one hand, whether the problem lies in too few physicians, hospital facilities, or other medical care personnel. Or should we focus instead on factors like income levels, housing and sanitation conditions, education, nutrition, or transportation services? It is important to point out in this context that even if the latter set of factors has a greater absolute impact than medical care, it does not at all follow that the former should be neglected. The costs and time required to change environmental conditions could be enormous. If so, medical care might still be the best policy option even though it is not the most important health determinant.
Clearly, methods which define underservice in terms of either the use or availability of services have no difficulty in satisfying this second requirement. Just as clearly, however, they do so in a purely tautological fashion. To the extent that one is dissatisfied with defining underservice in terms of the physician to population ratio, for example, then knowing that increasing the supply of physicians will alleviate the underservice is of little comfort.

The third desirable property is the ability to make cardinal comparisons among areas or populations. This is particularly relevant for measures of underservice which are defined as indices or composites of multiple factors. In particular, if one area has an index value of fifteen and another a value of thirty, does this mean that the first is twice as worse off as the second? Should it get twice as many additional resources, assuming that we know what the relevant resources are? Thus, unless we are interested only in relative rankings of areas, which for some purposes may be fully adequate, it is important that the measure of underservice permit cardinal as well as ordinal rankings.

Finally, we would probably like the method of determining underservice to incorporate a meaningful allocation rule. Assuming that the first three conditions are satisfied, how should additional resources be allocated and where do we stop? For example, should we strive for equal health, equal use of medical care, or equal availability? Alternatively, are there minimum standards or thresholds below which no area or population should fail? If one brings resource constraints into the picture, as one obviously should, then another possible rule is to maximize the aggregate impact on the measure of underservice, given the limited budget. Ultimately, of course, these types of considerations require political and social deliberations which transcend the more narrow technical calculations.
III. Observations on Current Methods of Determining Underservice

As noted in the introduction, some recent legislation explicitly requires considering the adequacy of health manpower supply or the extent of underservice. For example, Section 1122 of the Social Security Act requires that the adequacy of the health manpower supply in an area be taken into consideration in certifying the need for new capital expenditures, including construction. What is meant by "adequacy" or how that determination is to be made are not specified. Similarly, the Emergency Health Personnel Act of 1970 (P.L. 91-623), which created the National Health Service Corps (NHSC), the Health Maintenance Organization Act of 1976 (P.L. 93-222), and the Health Professions Education Assistance Act of 1976 (P.L. 94-684) require the Secretary of DHHS to designate health manpower shortage areas for the purposes of assigning NHSC personnel and forgiving medical education loan obligations. Again, little guidance is given other than suggesting criteria such as "...manpower to population ratios, indicators of need such as infant mortality, access to health services, health status, and the number of foreign medical graduates" [17].

What methods have been used to make such designations? Early in 1976, the National Center for Health Statistics analyzed variations in infant mortality by State Economic Areas (SEA) [7]. The Rural Health Coordinating Committee later decided to designate any SEA which was among the highest fifty in either white, non-white, or total infant mortality as a High Infant Mortality Area [14]. The Bureau of Health Manpower defined its Critical Medical Shortage Area (for physicians and physician extenders) as an area which has a ratio of resident population to fulltime equivalent, non-federal, primary care physicians greater than 4000:1 [16]. (Adjustments are made to the ratio if there is a contiguous area which has a population to physician
Finally, the Bureau of Community Health Services employed the Index of Medical Underservice to designate medically underservice areas for the federal HMO program [5].

Identification of the ranking criterion in the first two cases is self-evident. More problematic are how the cutoff point was chosen and, perhaps most importantly, what implications the particular ranking or criterion has for health manpower distribution or policy. In particular, the High Infant Mortality Area designation by itself conveys no information at all about the availability or use of medical care resources or about other factors that might influence geographic variations in mortality. Conversely, use of the population to physician ratio says nothing about the health state of the population. Furthermore, the single cutoff point, even if based upon expert opinion and average conditions, fails to take account of the extensive geographic variation in population characteristics, physician characteristics, the availability of hospital beds and non-physician personnel, as well as variations in geographic and environment conditions [1,13].

The Index of Medical Underservice (IMU) is the most sophisticated approach taken so far [5]. Using a variety of techniques, groups of experts in three states made consensus assessments of the scarcity of personal health services in communities in their states. Statistical techniques were then used to develop a set of weights for combining four variables (physicians per 1,000 population, percentage of the population below the poverty level, percentage of the population age 65 and over, and the infant mortality rate) such that the composite index produced a ranking which would be consistent with the expert assessments. On average, the model explained about sixty percent of the variation in local experts' assessments.
even if the DIU can successfully rank areas, its major difficulty is that it suggests very little about the sources or causes of underservice, or what policies might be used to address the problems [19]. Further, because the DIU is an artificial index with no ready interpretation, its power is limited to ordinal rankings. Thus, one cannot make meaningful comparisons across areas, nor is there any obvious way to select the appropriate cutoff point. This problem was illustrated by two studies [8,12] which compared adequately served and underserved non-metropolitan counties designated by the Bureau of Community Health Services. There were no statistically significant differences in physicians' patient loads, hours worked, and appointment waiting times, or in households' medical care use and medical conditions.

Although this has been a fairly cursory review, it points out some of the difficulties faced by existing methods. In fairness, however, it should also be emphasized that most of these methods were designed only to determine eligibility for certain programs. For these purposes, they may function quite adequately. If, however, designation of underservice plays a more direct role either in allocating program funds or in determining reimbursement levels, then more work seems needed. The next section proposes and describes an effort in this direction.
IV. An Alternative Approach

The conceptual framework for the proposed alternative approach is the economic theory of production. Very briefly, this theory is a representation of how firms combine resources to produce final products. One result is a set of general rules which a firm can follow to minimize its cost of producing a given level of output. In effect, these rules guide the efficient allocation of inputs, given their prices (e.g., various wages, material costs, and interest rates) and the nature of the production technology (i.e., the set of technical factors which govern or limit the way in which the inputs can be combined).

In order to apply this theory to the problem under discussion, let us assume for now that the first criterion identified in Section II is satisfied, i.e., there is an acceptable measure, either positive or negative, of health. (This assumption will be relaxed in the discussion of research implications.) Let us also think of health as the final product which results from combining medical care with other relevant factors which affect health, such as behavior, heredity, and environment. While there is obviously no organized company or firm which consciously chooses health output levels and corresponding combinations of inputs, one can nevertheless conceive of a statistical relationship which could be referred to as a production function, i.e., a relationship between an output, health, and a set of inputs and technical constraints, medical care, behavior, etc.

The advantage of this analogy is that it suggests the concept of the marginal product, which is simply defined as the change in output for a small change in the quantity of one input when the quantities of the other inputs are held fixed. Using general notation to represent the statistical relationship, e.g.,
(1) \( D = f(M,B,H,E) \), where

- \( D \) = health measure
- \( M \) = medical care
- \( B \) = behavioral factors
- \( H \) = heredity factors
- \( E \) = environmental factors.

The mathematical definition of the marginal product is just the first partial derivative of \( D \) with respect to \( M \), or

(2) \( \frac{\partial D}{\partial M} = f'_M(M,B,H,E) \).

The exact value of the marginal product depends, of course, on the choice of the mathematical form to represent the function \( f \), the estimated coefficients, and, most importantly, the values of variables \( M, B, H \), and \( E \). When evaluated using values for a specific location and/or population group, this concept has two advantages. First, it relates the change in, say, the number of physicians to the change in health. Second, it takes account of the other resources and conditions of the area.

This approach also suggests possible criteria for assessing the adequacy of health manpower supply. For example, one might postulate that the area estimated to have the greatest need for physicians would be the one where additional physicians would have the greatest impact on the health indicator, given local conditions. This implies simply ranking areas on the basis of the computed marginal product of physicians. Note that such a ranking would be cardinal as well as ordinal, in the sense that both relative and absolute differences between areas would have meaningful interpretations.

A second possible criterion for defining adequacy might be based on asking what redistribution of physicians across areas would produce the greatest impact on health, given existing distributions of health manpower and facilities. Again referring to the analogy of the firm attempting to combine resources efficiently, the answer would be the distribution which
equalizes marginal products across areas. Note again that this would not necessarily be the same as equalizing health or equalizing the physician to population ratio across areas, essentially because of the influence of other factors. (This criterion also implicitly assumes that the cost of an additional physician of a given type is approximately equal across areas.)

A third possible criterion for defining adequacy could be based on some minimally acceptable level of health in an area or for a population group. For example, given a socially determined target, say, the average level for the U.S., statistical estimates of the production function's parameters and assumptions about the costs of the various inputs, it is a relatively simple calculation to determine what mix of manpower could reach the given target at the lowest possible cost [13]. In this allocation, resources would be distributed so as to satisfy the condition that the marginal product per dollar spent on each type of manpower would be equal across both areas and types of manpower. Areas which had fewer physicians, nurses, etc. than the quantities calculated would be those with inadequate supplies. Furthermore, this approach would simultaneously determine manpower targets or requirements for such areas.
V. Research Implications

The analytic approach described in the preceding section may appear, at first blush, both complex and mysterious. However, an initial approximation of the relationship represented by equation (1) can be estimated with readily available data. The most obvious candidate for the dependent variable is an area’s mortality rate, either adjusted for variations in age, sex, and race distributions, or defined for specific age-sex-race cohorts. Medical care resources could be measured by stocks of different types of health manpower and health care facilities available in an area. The model’s other variables could be approximated by a number of population and area characteristics variables. To date, a number of studies have demonstrated the promise of this approach at the state level [2, 4, 11, 18].

Further refinement, however, is clearly needed in several areas. First, more work is needed on defining the appropriate dependent variable. One approach, noted above, is to develop some type of health status index. Alternative and more intermediate approaches might focus on mortality rates disaggregated by cause, rates of disease prevalence, or morbidity measures such as restricted activity days or disability days. However, use of cause-specific mortality or disease prevalence rates requires much better input data on the quantities of medical care services or resources used to treat particular diseases and conditions. Morbidity measures are more general, in that they summarize the effects of essentially all diseases and conditions. Their shortcoming is that they are much more subjective than mortality or disease prevalence measures, since terms like restricted activity or disability require individual interpretation. In addition, each of these possible definitions shares the common problem of measuring only one part of the health spectrum.
Researchers obviously have little choice but to focus on each of these partial measures until an acceptable and easily implementable health status index is available. This does not invalidate, however, studies using mortality or morbidity as dependent variables. If findings regarding the distribution of medical care resources are similar, then policy implications will still be relatively clear. On the other hand, if results are inconsistent for the two measures (for example, making more physicians available may reduce mortality but increase morbidity), then this identifies an important policy dilemma which might be masked by an index measure. Resolving such a dilemma is primarily a social and political issue, rather than a research issue.

A second needed refinement relative to earlier health production function research is focusing on geographic areas smaller than the state. The state is generally too aggregated a unit to deal with current concerns over resource maldistribution. Disaggregating to the county level, however, is also inappropriate because of cross-county travel patterns. Two promising possibilities are the Census Bureau's designations of State Economic Areas and County Groups. Dividing states into SMSAs and non-SMSA county groupings is another approach, although some needed data for non-SMSA counties may be difficult to obtain. Alternatively, one could simply use the SMSA as the unit of analysis, although this clearly precludes investigating urban/rural distribution problems [9,15].

Third, data on stocks of available medical care providers should be replaced by information on the use of medical services. This, unfortunately, would require substantial expansion of existing data collection efforts. A possible alternative might be to use available data to explore the relationship...
between the stock of available providers and the supply of medical care services, i.e., the production function for medical care [9]. One might then extend inferences to areas for which direct observations on medical care use are not available.

Another possible source for medical care use data is insurance claims records. Medicare, Medicaid, and selected private insurance claims files are already being tapped for research purposes in some areas. Unfortunately, the fragmented nature of the private insurance sector probably precludes any use of such data on a comprehensive basis. This would be a very rich source of information under a more unified health insurance system.

Although the conceptual model underlying the analytic approach described in this paper is quite simple, it is unlikely that these methods could be applied successfully at the small area or local health planning level. There are generally too few data observations with probably too little variation to permit reliable estimation of the necessary statistical relationships. Thus, these methods are applicable primarily at the regional or national levels. The principal role of small areas should be to supply local data and information which could be used to supplement and modify data available from centralized, national sources, such as health manpower and health care facility professional associations.

If health planning is to become a meaningful component of the medical care system, then improvements in planning methods are needed. This paper has examined one part of the planning process, evaluating health manpower distributions. Existing methods have several major shortcomings. An alternative approach, based on the economic theory of production was outlined. While many difficulties still remain, an approximate form of this method can be implemented at the regional or national levels with existing data. Further refinements, however, will require additional investments in data collection activities.
References


Mr. GROESMAN. I want to thank all the witnesses who appeared here today. The committee will stand in adjournment. [Whereupon, at 12:46 p.m., the subcommittee was adjourned.]