TRAINING HEALTH SERVICE WORKERS--THE CRITICAL CHALLENGE,
PROCEEDINGS OF THE CONFERENCE ON JOB DEVELOPMENT AND TRAINING
FOR WORKERS IN HEALTH SERVICES (WASHINGTON, D.C., FEBRUARY
14-17, 1966).
BY- KRAMER, LUCY M.
DEPARTMENT OF LABOR, WASHINGTON, D.C.
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

THREE HUNDRED REPRESENTATIVES OF LABOR, MANAGEMENT,
EDUCATION, HEALTH ORGANIZATIONS, GOVERNMENT, PROFESSIONAL
ASSOCIATIONS, AND OTHER INTERESTED GROUPS ATTENDED A
CONFERENCE PLANNED AS A MEDIUM TO DISCUSS ISSUES, EXCHANGE
VIEWS, AND SHARE EXPERIENCES IN MATCHING PEOPLE AND JOBS.
SPEECHES INCLUDE--(1) "GREETINGS FROM THE DEPARTMENT OF
LABOR" BY W.W. WIRTZ, (2) "GREETINGS FROM THE DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE" BY W.J. COHEN, (3) "NATIONAL
RESPONSIBILITY FOR HEALTH MANPOWER" BY F. KEPPEL, (4)
MANPOWER IN A SERVICE ECONOMY BY E. GINZBERG, (5) "HEALTH
MANPOWER NEEDS AND REQUIREMENTS" BY P.D. BONNET, (6) "TRENDS
IN EDUCATION AND TRAINING OF HEALTH SERVICE WORKERS" P.E.
KINSINGER, (7) "THE COMMUNITY'S RESPONSIBILITY FOR HEALTH
MANPOWER DEVELOPMENT" BY C. NANIK, (8) "FEDERAL RESOURCES FOR
TRAINING WORKERS IN HEALTH SERVICES" BY J.P. WALSH, (9)
"MOBILIZING OUR RESOURCES FOR HEALTH SERVICES" BY W.H.
 STEWART, (10) "HEALTH MANPOWER--THE CHALLENGE OF THE NEXT
DECADE" BY W. COHEN, AND (11) "THE CHALLENGE OF MATCHING
PEOPLE AND JOBS IN HEALTH SERVICES" BY S.H. PUTTENBURG. A
PANEL DISCUSSION ON THE PRESENTATIONS BY ELI GINZBERG AND
PHILIP BONNET AND GROUP DISCUSSIONS ON EXPANDING THE SUPPLY
OF QUALIFIED AUXILIARY HEALTH WORKERS AND DEVELOPING PROGRAMS
FOR HEALTH WORKERS BELOW THE BACCALAUREATE LEVEL ARE
SUMMARIZED. SUGGESTIONS OF CONFEREES INCLUDE STRENGTHENING
THE HEALTH TEAM, DELINEATING FUNCTIONS, COORDINATING FEDERAL
PROGRAMS, UTILIZING FEDERAL RESOURCES FOR TRAINING AUXILIARY
WORKERS, INCREASING WAGES AND IMPROVING WORKING CONDITIONS,
STRENGTHENING TEACHING, IMPROVING TRAINEE AND EMPLOYEE
RECRUITMENT, AND DEVELOPING UNUSED RESOURCES IN THE MANPOWER
POOL. THIS DOCUMENT IS AVAILABLE AS FS1.2--H35/9 FOR 60 CENTS
FROM SUPERINTENDENT OF DOCUMENTS, U.S. GOVERNMENT PRINTING
OFFICE, WASHINGTON, D.C. 20402. (JK)
Training Health Service Workers:
The Critical Challenge

*Proceedings of the
Department of Labor-Department of Health, Education, and Welfare
Conference on Job Development and Training
For Workers in Health Services
Washington, D.C. February 14-17, 1966*
It gives me pleasure to extend my warmest greetings to those attending this Conference on Job Development and Training for Workers in Health Services.

One of the basic goals of the Great Society is to guarantee that our people receive the best possible health care.

But today we are faced with critical manpower shortages in the health services. These hinder our efforts to ensure a healthy America.

By focusing on these critical shortages, Conference participants are playing an important role in meeting this national challenge.

I am confident that these shortages will be met.

Your deliberations at this Conference are also vitally important in our national efforts to find meaningful employment for every citizen during this period of record prosperity.

May this Conference prove highly productive for each of you and the Americans and the government you so faithfully serve.

LYNDON B. JOHNSON

Read by Secretary of Labor Wirtz at opening session of Conference.
# FEDERAL RESOURCE AGENCIES AND PROGRAMS

<table>
<thead>
<tr>
<th>INTERIOR</th>
<th>HEW</th>
<th>LABOR</th>
<th>OEO</th>
<th>COMMERCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIA</td>
<td>OE</td>
<td>OMER</td>
<td>JC</td>
<td>EDA</td>
</tr>
<tr>
<td>AIVTA</td>
<td>VRA</td>
<td>BAT</td>
<td>PH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WA</td>
<td>BES</td>
<td>NYC</td>
<td></td>
</tr>
</tbody>
</table>

## AIVTA
- Technical Assistance and Training Support for the Vocational Training of Adult Indians

## MDTA
- Institutional Training and Basic Education
- Supplemental Instruction
- Experimental and Demonstration Projects
- Curriculum Planning
- Instructional Materials
- Vocational - Technical Education
- Area School Development
- Teacher Training
- Work-Study Program
- Guidance and Counseling
- Research, Experimental Demonstration and Pilot Project Support
- Adult Basic Education
- College-Work-Study
- Work Experience (WA)

## VEA
- Research and Training Support for the Handicapped

## EOA
- Jobs Corps
- Camps
- Training Centers
- Community Action Agency Support
  - Sec. 205 Program Grants and Contracts
  - Sec. 207 Demonstration Grants
- VISTA Volunteers in Service to America

## EOA
- Neighborhood Youth Corps
  - In-school Youth
  - Out-of-School Youth
- Employment Service Activities
  - Youth Opportunity Centers
  - Apprentice Information Centers
  - Selection, referral and placement following personnel evaluation

## PHS
- Health Manpower Studies
- Experimental and Demonstration Grants
- Nursing School Construction

---

DEPARTMENT OF LABOR, FEBRUARY 1966
Training Health Service Workers: The Critical Challenge

Proceedings of the Conference on Job Development and Training For Workers in Health Services
Sponsored by the U.S. Department of Labor
U.S. Department of Health, Education, and Welfare

Washington, D.C. February 14-17, 1966
LUCY M. KRAMER of the Manpower Resources Program, Division of Community Health Services in the Public Health Service, had the major responsibility for editing and preparing the Proceedings for publication. She was assisted by Marguerite Waxler and Nancy Lindsay.

This report is issued from the Office of the Assistant Secretary for Education in the Department of Health, Education, and Welfare and the Manpower Administration, Department of Labor.
FOREWORD

The decision by the U.S. Department of Labor and the U.S. Department of Health, Education, and Welfare to sponsor a Conference on Job Development and Training for Workers in Health Services was based on a number of compelling factors:

- There is a deep and growing concern about the shortage of trained workers in the health service industry, and employers of health manpower, unions, professional organizations, and educators are searching for ways to bring health manpower supply and demand into better balance.

- The President's Job Development Program, designed to "expand employment by the filling of those service and related needs which are not now being met because of lack of trained workers or other reasons affecting employment or opportunities for employment," had significant implications for the development of health manpower and services.

- Questions were and are being raised about changes in technology, occupational structure, and employment patterns in the health fields, and the relationship of these changes to the preparation and upgrading of personnel for technical, skilled, and semiskilled jobs in health and related service occupations.

These explorations and questions revealed:

1. That the unemployed and underemployed constitute a potential source of manpower for entry jobs in the health service industry.
2. That training programs for health and related service workers must be expanded.
3. That research and demonstration programs in the health occupations are needed.
4. That Federal resources for training and related manpower programs need to be utilized more extensively for programs in the health fields.

The Conference addressed itself to these and other trends, programs, and practices which affect the development and utilization of less-than-baccalaureate-degree trained workers in health and related service occupations.

Almost 300 representatives of labor, management, education, health organizations, government, professional associations, and other interested groups attended the 3-day meeting. They participated actively in the discussions, and offered many constructive suggestions for increasing the quantity and improving the quality of auxiliary health workers. Reports of the major presentations and the group sessions appear in these Proceedings.

The U.S. Department of Labor and the U.S. Department of Health, Education, and Welfare acknowledge, with appreciation, the many and significant contributions which the speakers and the participants made to the Conference and to the important task, which all of us share, of ensuring a healthy America. They opened new doors to understanding and action in meeting the health manpower challenge of our times.

W. Willard Wirtz  
SECRETARY OF LABOR

John W. Gardner  
SECRETARY OF HEALTH, EDUCATION, AND WELFARE
CONTENTS

FOREWORD ............................................................... iii

I. HIGHLIGHTS OF CONFERENCE DELIBERATIONS ...................... 1

II. GREETINGS FROM THE DEPARTMENT OF LABOR .................. 3

III. GREETINGS FROM THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ...... 5

IV. PROGRAM ........................................................... 7

V. MAJOR ADDRESSES ................................................. 11

VI. PANEL DISCUSSION—SUMMARY .................................. 45

VII. TABLE DISCUSSIONS—DIGEST .................................. 49

VIII. WORK GROUP DISCUSSIONS—SUMMARY ......................... 53

IX. CLOSING SESSION—ADDRESSES ................................ 61

X. APPENDIX .................................................................. 73
   A. Planning Committee, Consultants, Conference Staff ................ 73
   B. Roster of Participants ............................................. 75
   C. Discussion Leaders, Recorders, Resource Persons .................. 85
   D. President’s Message on Job Development Program .................. 86
   E. Paper—“The President’s Job Development Program: Its Implications for Health Manpower and Services” .................. 88
   F. Selected Reference Material, U.S. Government ................... 91
   G. Legislative Survey, 1956–1965 ..................................... 93
I. Highlights of Conference Deliberations

The Labor-HEW Conference on Job Development and Training for Workers in Health Services was planned and conducted as a medium for the discussion of issues, for the exchange of views, and for the sharing of experiences in matching people and jobs in the health service industry. In addition, it provided an opportunity to explore the various ways of meeting the health manpower needs of today and of the future, in terms of recruitment, training, and deployment of supportive health personnel.

During the discussion sessions, conferees offered many suggestions for increasing the quantity and quality of health service workers. These suggestions represented the individual opinions of participants, and did not constitute commitments on the part of their organizations or policy on the part of the two sponsoring Departments. However, the suggestions merit the attention of all the participating groups and agencies, both public and private.

Conferees suggested:

- Strengthening the health team, in concept and in practice.
- Delineating the duties and functions of health service workers.
- Coordinating Federal health manpower programs and resources.
- Utilizing Federal resources more extensively for training auxiliary health workers.
- Increasing wages and improving working conditions for health workers.
- Strengthening curricula, teaching methods, and instructional materials.
- Improving methods of recruiting trainees and employees for health and related service occupations.
- Developing the unused resources in our manpower pool for service in health and related occupations.
- Conducting regional and State conferences on training workers for health services.
- Developing qualified teachers, administrators, and supervisors for health service training programs.
- Providing refresher and reorientation training programs for inactive professional health workers.
- Improving communications between and among the diverse groups concerned with the supply and demand of health manpower.
- Establishing and effectively utilizing local advisory committees for health service training programs.
- Creating job ladders and providing upgrading opportunities for qualified workers in health services.
- Expanding sound training programs of all kinds for health and related service workers.
II. Greetings from the Department of Labor

W. WILLARD WIRTZ, Secretary

You run the risk which any audience encounters when they are faced by a group of people who know one another so well that they have spent the first part of the evening in friendly colloquy of one kind or another and find it difficult to make the shift to the more demanding formalities of the rostrum and microphone.

For my remarks I am going to be very informal. They proceed from the exercise of a privilege which is mine, to bring to this group a message from President Johnson*, and to extend the greetings of the Department of Labor to you. I mean not to trespass at all upon the real subject matter of the evening or upon the subject matter of this Conference as a whole, but to express again sincere appreciation for the opportunity to work with those from the Department of Health, Education, and Welfare in this particular enterprise.

I note only one point of any real substance as far as this meeting is concerned. It seems to me that what you are looking for involves a point of very difficult identification because it lies between extremes. It is also difficult to describe either extreme without risking an offense, and so I do it very shortly and in terms of points of views of others.

There have been conversations over the years between the Department of Labor and the American Nurses' Association about the matter of trying to train those who fall into the middle category to which you have referred as auxiliary, ancillary and paramedical. We have talked about developing supportive nursing personnel and at the same time not excluding the profession. Surely that is an important part of our task here—to see to it that we develop this particular area of occupational activity—but that we not trespass in doing so upon the responsibilities of those whose training has gone so much more beyond that which it would be possible for some of us to obtain. It is quite important that auxiliary health manpower be developed both with the realization that there are differences in level and that people have an opportunity to move up from one level or area to another—with due regard for the demands of the higher level or professional area.

The other extreme is one to which I would like to refer in terms of an article which was handed me just this evening as I came in. It was found in the current issue of The New Republic. The article was by Mr. James Ridgeway, on "The Girls in White." I hesitate to do anything except quote because I am concerned about the laws of libel and slander. "It's a story about the Career Academy, Inc., with which some of you may be familiar. According to Mr. Ridgeway, the Academy offers a training course for health service workers for $697.50. I think I could have stood the $697, but when I came to the 50 cents, my antennas began to vibrate. The article goes on to describe the contributions of organizations of this

* See inside cover for text of message.
As I understand it, there is the prospect of people taking training offered by the Career Academy and upon completion of their course identifying themselves, for a sum of $15, with the American Registry of Medical Assistants and Medical Secretaries, a self-constituted registry in Oklahoma.

The article relates to one experience which the authors, or someone, had in connection with the Registry, and I'm going to quote that paragraph in full.

Recently an application form and $15 were sent off in behalf of "Molly Bloom Conner" of Vienna, Virginia, who sought registration as a dental assistant. She "qualified" by way of her high school education in Texas and recently claimed to have worked for a doctor in Washington. Last week Molly Bloom got in the mail an impressive diploma with a large gold seal stuck in the left corner. It was from the American Registry and it read: "Know all men by these presents, By authority of the Board of Trustees, on recommendation of the Board of Examiners, in recognition of the fulfillment of its requirements, hereby confers upon Molly Bloom Conner, R.D.A., the title of Registered Dental Assistant, with all honors, rights, privileges, and immunities pertaining thereto here and elsewhere. In witness whereof, the Great Seal of the Registry and signatures of the duly authorized officers are hereunto affixed."

The editorial explanation is that actually the high school Molly Bloom said she attended is a boys' school, the doctor she worked for is a real estate agent, and Molly Bloom herself is a 3-year-old St. Bernard dog.

We embark upon an era in which the welfare—the happiness—and the meaning of life for a good many people depend upon those whose training will come from this Conference this week. To have gone during the last year through the horrible agony of trying to find nurses around the clock for a member of your family is to realize with a special poignancy the shortages which characterize this particular area. It is to realize that the whole Medicare program and all it stands for could be stunted by lack of personnel in this area just as the education program could be crippled by lack of adequate teachers. It is to feel no danger of exaggerating the importance of a meeting such as this. It is to realize that great numbers of health service workers will be needed in this country to do what we want to do by way of making life a little better for a great many people.

It is to realize again that it would be impossible to over emphasize the importance of why you are here. And yet I suppose that the danger in these 2½ days is that you will probably—or perhaps at least—be so shocked and saturated by the statistics and so overwhelmed with the impressiveness of your obligation—that it will seem hard to get down to the ways and means of seeing to it that enough people are trained, that they are given enough training, that they are moved easily and effectively into what is a profession in the finer sense of the word.

I would like to add only one other thing—just as some of us spent a good deal of our lives in teaching, a good many of you have spent a great deal of your lives in medical services of one kind or another. Both are areas in which the thanks of the beneficiaries are very rare—the thank-you's are hardly ever said—and the satisfactions are pretty much inner-satisfactions that make you go to bed at night thinking that today has been a pretty good day because there has been an opportunity to do something for somebody else.

The satisfactions of the professions—and I think particularly of the medical and the teaching and the clerical professions—lie in serving others. The rewards do not show any place at all except in your mind and in your own realization that some other person is happier tonight, and, therefore, you are. I don't understand the chemistry of life at all, but that makes more sense than any other of the compensations I know anything about.

I would like to express just a personal word that I hope is in the minds of all of you—the significance of service and of this particular opportunity to make service real in the lives of millions of troubled people.
III. Greetings from the Department of Health, Education, and Welfare

WILBUR J. COHEN, Under Secretary

I bring the greetings of the Department of Health, Education, and Welfare and those of Secretary Gardner to what, as Secretary Wirtz said, is an auspicious and momentous occasion—this joint Conference on training workers in health services.

1965 was a monumental landmark year in the history of health legislation of our country. More health legislation was enacted in 1965 than in any other year in the history of our Republic. And although this fact is of importance in itself, of even greater importance, as you meet here in the next 2½ days, is the fact that we have left behind a great plateau in this last year, and we are now on a new upward movement to a much higher plateau, an escalation if you want to call it that, in the whole field of health for our Nation.

For 30 years or so, there raged in this country one of the most bitter, ideological controversies in the whole history of health and social reform legislation. This issue has now been decided and reconciled in a truly democratic manner with the passage by Congress of recent legislation. We now go into a period in which there is a dialogue and a communication and a relationship that has not existed for many, many years, in which the American Medical Association and other associations in the professional field are sitting down together and discussing matters of health of joint concern. Six months ago, it would not have been possible to get these people into the same room, let alone to even talk in a gentlemanly way about issues that are now being discussed freely. So when you in the Conference meet here today, you meet in an atmosphere which could not have been reproduced earlier. In my opinion our Nation has really taken a new point of departure in the health field, a departure which Secretary Wirtz has already pointed out to you, that is increasingly important not—for just this year but for several decades to come.

At the University of Wisconsin, when I began the study of medical economics in the early thirties under Prof. John R. Commons and Prof. Edwin Witte, we as a Nation, were spending a little over 3½ percent of the gross national product on medical care. I think it actually came to 3.6 percent in 1929. Last year, in 1965, medical care expenditures in the United States reached a total of $40 billion from public and private sources, equivalent to about 5.9 percent of the gross national product. The amazing thing that has happened in these 35 years or so since I was a student, is the fact that the American people have increased their relative expenditures in the whole medical field by somewhere between 50 and 66½ percent, which is an indication of the great importance which they attach to the problem of medical care. I do not mean to imply that the American people are happy about this tremendous rate of expenditure or that they dance a little jig about spending more money, but what matters in the economic market
place is how willing you are to spend money for the product you think is important. The American consumer is putting nearly 6 percent of the gross national product into medical care, and there is every indication that the percent will go even higher—to 7 percent, with some estimates circulating that it will reach anywhere from 8 to 10 percent in the next 20 or 25 years. This gives some indication of what you might call one of the phenomenal growth industries in our country. The current estimate is that before the end of this decade, our Nation will be spending, instead of $40 billion, close to $50 billion in this particular industry.

The important point I want to make here is that the increase in health manpower requirements is a corollary of the growth in the health industry. There are about 3 million people employed in the total health industry at the present time. Despite that large number there is also a tremendous shortage of skilled and subprofessional and allied health personnel. And if the demand continues to go up along the line I have tried to portray, there will continue to be great manpower shortages if we are going to implement what I think is now a fundamental belief of our entire Nation—namely, that health services ought to be available to everyone, regardless of race, creed, color, national origin, sex, or even income.

With the passage of Medicare and the 15 or so other pieces of legislation last year, and with the general recognition of their importance by Congress and all the various groups, a new national policy appears to be emerging whereby medical care in the future will truly be available to all. This will be accomplished by a complex method of financing, organization and development which many people, 10 or 15 years ago, thought would not occur for generations to come. And yet, if adequate medical care is to be available to all, the vast shortages of physicians, dentists, nurses and all the various allied personnel must be met. This means that financial compensation will have to be increased in these areas if we are to recruit and retain the manpower and womanpower needed to provide the health services.

Hospital costs in this country have been going up about 6 or 7 percent per year; at present daily hospital costs over the Nation average about $41 per day. Yet we are not going to close our hospitals because the price of service goes up to a point greater than people can afford or are willing to pay in the market place. Health services are too important to be decided simply by economics alone. We are going into a period, it seems to me, when we not only must train more people and give more services, but when we also must develop a whole series of rationalizations in the health industry to be able to provide the kinds of services that I think the American people expect.

As a final point, I think we in this country are on the threshold not only of exciting changes in the direction of health services, but, as all who are familiar with this field know, we are also on the threshold of continued miracles—scientific and medical miracles. I think it would not be prophetic of me if I were to say that in our lifetime the artificial heart probably will be available to millions of people who today die prematurely because of heart disease and stroke. It would not be prophetic of me if I were to say that in the next 5 or 10 years the artificial kidney will very possibly be available to millions of people who today do not have that advantage. And diseases such as leukemia, and all types of communicable and other diseases that today cause death and disability will have been eliminated in the time that is still allotted to us.

These miracles of modern science and the vast potentialities that exist in the field of health make this an especially momentous time in which to meet and confer. All of you, all the organizations you represent as well as those of us in the Department of Labor and the Department of Health, Education, and Welfare are fortunate to be able to work together to develop more and better manpower and womanpower which is basic, as Secretary Wirtz has pointed out, to the provision of proper health service to our people. For the first time in our Nation's history the principle that medical care, and the highest quality of medical care (which heretofore was available only to a few), should be available to every man, woman, and child, may well become a reality. And so on behalf of the Department, I want to greet you and welcome you to a most challenging job, in which all of us, working together, can make a great contribution to the service of our people.
IV. Program

CONFERENCE ON JOB DEVELOPMENT AND TRAINING FOR WORKERS IN HEALTH SERVICES

SPONSORED BY
WASHINGTON, D. C.
FEBRUARY 14-17, 1966
Mayflower Hotel
Program

Monday, February 14

6:30 p.m.  Reception .................................................... East Room
7:30 p.m.  Dinner .......................................................... State Room

Chairman: Mr. Stanley H. Ruttenberg
Manpower Administrator
U. S. Department of Labor

Greetings
The Honorable John W. Gardner
Secretary of Health, Education, and Welfare
The Honorable W. Willard Wirtz
Secretary of Labor

Address
NATIONAL RESPONSIBILITY FOR HEALTH MANPOWER
Speaker: The Honorable Francis Keppel
Assistant Secretary for Education
Department of Health, Education, and Welfare

Tuesday, February 15  General Session .................................. Colonial Room
9:00 a.m. - 12 noon  Session 1

Chairman: Dr. George Silver
Consultant and Special Assistant to the Assistant Secretary for Health and Scientific Affairs
Department of Health, Education, and Welfare

Address
MANPOWER IN A SERVICE ECONOMY
Dr. Eli Ginzberg
Director of Human Resources
Columbia University; and
Chairman, National Manpower Advisory Committee

Address
HEALTH MANPOWER NEEDS AND REQUIREMENTS
Dr. Philip Bonnet, President
American Hospital Association

Panel Discussion
Moderator: Mr. Jack Konecny, Assistant Director
James Connally Technical Institute
Texas A&M University
Panelists: Mr. R. M. Laughry, Administrator
Washington Hospital Center
Mr. Peter Ottley, Director
Department of Civil Rights and Economic
Opportunity
Building Service Employees International Union
Dr. A. N. Taylor, Associate Secretary
Council on Medical Education
American Medical Association
Dr. Walter J. Pelton
Professor of Dentistry
University of Alabama
Miss Frances Purdy, Chairman
Nursing Administrators Section
American Nurses' Association
Mr. Norman Mitby, Director
Madison Vocational, Technical, and Adult Schools
Madison, Wisconsin
Dr. Kathryn Stone, Director
Program on Human Resources
Washington Center for Metropolitan Studies

12:30 - 2:45
Luncheon ........................................... State Room
Session 2
Chairman: Dr. Ellen Winston
Commissioner of Welfare
Department of Health, Education, and Welfare

Address
TRENDS IN EDUCATION AND TRAINING OF HEALTH
SERVICE WORKERS
Dr. Robert Kinsinger, Director, Health Careers Project,
The University of the State of New York

Address
THE COMMUNITY'S RESPONSIBILITY FOR HEALTH
MANPOWER DEVELOPMENT
The Honorable Charles Vanik
U. S. Representative from Ohio

2:45 - 4:30 p.m.
Table Discussion Sessions ..................... State Room
Session 3

Wednesday, February 16
General Session ................................. Colonial Room
9 a.m. - 10:15 a.m. ................................. Session 4
Chairman: Mr. James Clarke, Assistant to the Assistant
Secretary for Education
Department of Health, Education, and Welfare

Address
FEDERAL RESOURCES FOR TRAINING WORKERS IN
HEALTH SERVICES
Dr. John P. Walsh, Assistant Manpower Administrator
U. S. Department of Labor
10:30 a.m. - 12 noon  WORK GROUP SESSIONS
Group #1                                      Pan American Room
Group #2                                      Cabinet Room
Group #3                                      Potomac Room
Group #4                                      District Room
Group #5                                      Capitol A Room
Group #6                                      Capitol B Room
Group #7                                      Colonial Room

12:00 noon - 2:00 p.m.  RECESS

2:00 p.m. - 4:30 p.m.  Work Groups (Continued)  Session 5

Thursday, February 17  General Session  Colonial Room  Session 6
9 a.m. - 12 noon
Chairman:  Dr. Louis Levine
Assistant Manpower Administrator
U. S. Department of Labor

Reports of Work Group Sessions

General Discussion

Address

MOBILIZING OUR VAST RESOURCES FOR HEALTH SERVICES
Dr. William H. Stewart, Surgeon General
Public Health Service
Department of Health, Education, and Welfare

The Challenge

MATCHING PEOPLE AND JOBS IN THE HEALTH SERVICES
The Honorable Wilbur Cohen, Under Secretary
Department of Health, Education, and Welfare

Mr. Stanley H. Ruttenberg, Manpower Administrator
U. S. Department of Labor
I am grateful for the gracious introduction by Stanley Ruttenberg. If Stanley were speaking tonight—and I wish he were—I would find it a privilege to introduce him and return the compliment. Stanley has been the Manpower Administrator only a little more than the year that has passed since President Johnson announced his Job Development program. That announcement, just last February, said that the President expected 10,000 new jobs per month to be developed by July 1, of last year. There was some consternation around this city—even, I am told, in the Department of Labor. Yet by the year’s end, the goal had not only been reached—it has been exceeded by 25 percent. The goal had not been an exaggeration. Its announcement showed that the President shrewdly estimated what we could do, and had to do.

Nevertheless, this accomplishment took a Manpower Administrator with drive, ingenuity, and a dedication to produce. It took a Manpower Administrator who did not waste any time on reasons why the job could not be done, but who looked instead for ways in which 10,000 new jobs per month could be developed.

But if Stanley Ruttenberg has a reason tonight for some pardonable pride, I doubt if that is the source of his relaxed affability. I suspect him of looking at those of us who represent education and the health services, as one who anticipates having his misery relieved by company. He knows all too well that beginning very soon, there will have to be produced something like 10,000 new jobs per month in the health services alone!

Now there is an escalation for you—by 100 percent. I doubt, however, if there is anyone here tonight who did not know that this crunch was coming. It is for that reason that you were invited to this conference sponsored by the Departments of Labor, and of Health, Education, and Welfare. We are here, for the next 3 days, not to shrink from this challenge, but to tackle it.

Just what is the magnitude of our task in recruiting and training more health manpower? Let me summarize briefly at least the gross dimensions of our health manpower needs, before going on to why we have those needs, then to specify some of the problems that face us in meeting our demands, and leaving you finally, not frightened, I hope, but determined.

Among those responsible for making projections in the realm of our national requirements for health manpower up through 1975, it is estimated that we will need an increase of a million individuals, above present totals, in all the health occupations. Divide that by the 120 months of 10 years, and you derive that arresting demand upon us to develop an average of nearly 10,000
new jobs per month in the health services alone.

Our calculations are not as precise as we would like them to be. Nevertheless, we have more than just a ballpark estimate. Presently we come to our gross estimates in this fashion: On one hand we multiply the number of extra physicians needed, estimated at 60,000, by the 8 allied medical occupations which the American Medical Association says are already required to support each physician. This brings us to nearly half a million people needed. But the allied medical fields to which the AMA refers do not include dentists, and their support personnel, nor do they include registered or licensed practical nurses. If we also include needed technicians in radioisotopes, medical electronics, and similar fields recently identified, we get to a million easily.

Our second method breaks down all the categories we know about, and makes an estimation for each one, of the needs by 1975. It comes out about the same.

But we do not even have names yet, for some of the occupations which are emerging. There is every reason to believe that our estimations of need are conservative.

What is the sudden cause of this great demand for health services manpower? How did it creep up on us in these near-crisis proportions? In this turbulent century many things have exploded at once: A rapid expansion of knowledge, a sharp increase in population, and a volcanic shaking of world power relations bringing new problems and responsibilities to us. Over all, the issues of war and peace are pervasive and abrasive on our consciousness. Many issues nag us at the same time. Even the wisdom of hindsight, however, is not very useful, if it only causes us to grumble. The task is to take a calm measurement of what has happened and what we must do. We do have a number of reasons that define our problem of need for more resources in the health services. Let me just sketch a few of the major ones:

1. In the first place the American people have been accustomed to, and expect, the best in health services. In this country access to medical care is a right, not a privilege. In spite of our enviable record in this regard, we must admit that we have slipped behind the best of which we are capable. We no longer have the lowest infant mortality rate in the world. Life expectancy is greater in most of the other industrial countries of the world, exceeding ours in some places by as much as 5 years. The U.S. death rate from heart disease is the highest in the world. The mortality rate of males in the highest productivity bracket, from ages 40 to 54, is substantially higher in the United States than in other industrial countries, and is twice the rate of Sweden. These are telltale indicators. We are not doing our best. We are not doing what we should. Our knowledge is not lacking, but our service personnel and facilities are.

2. Second, there is a disproportion in our health services. Good figures do not lie, but they can be cruelly deceiving if not analyzed. Our gross infant mortality rates are not really bad, but they can conceal, if one is not careful, the fact that the rate is three times higher among Negroes than among whites. The medical services in Westchester County, N.Y., will show a commendable record, but what about Harlem?

Most of our cities have medical centers unsurpassed elsewhere in the world. But running from Pennsylvania to Alabama, in the vast region of Appalachia, we have not brought to many of our people many of even the most elementary health services.

And there are other equally deprived areas. Even in the glittering cities, we must remember that the poor are congregated in increasing numbers. Children do not get care for medically and unattended illness is another indignity of old age.

3. A partial reason for both the disproportion in our services and an overall decline in service, has been the load of a greatly increased population. In the third place, then, we must reckon medically, with this population explosion. Since World War II we have added more people than the entire population of Great Britain. By 1975 we shall have nearly 30 millions more, and will continue to grow. The birth rate in the United States has been declining slightly, but even the lower percentage, working on a broader base, will inexorably increase our numbers.

We are becoming a younger nation on the average. But we are getting more older people also. Nearly 1,000 persons reach the age of 65 every 24 hours in our nation. We have long known of the greater need for medical care in this portion of our citizenry and that they were not getting it. Just this last year, the Medicare legislation
was passed which will make it possible to give more adequate medical attention to our senior citizens. This was a deliberate—and may I say too long delayed—effort to bring a national health responsibility to active attention. The exact magnitude of that load on our health services can perhaps not yet be estimated, but it will demand significant increases of people and facilities.

The amendments to the Social Security Act of 1965, however, extend a commitment to health services for children of the poor and other needy groups. This, too, is a delayed obligation.

4. Fourthly, our success in health research has set higher standards for implementing its results. Our National Institutes of Health do magnificent work. Private medical research is brilliant. We know enough to be able to cut deaths from cancer in half. We can cut down greatly on our shocking heart disease fatality rate. Diphtheria, pneumonia, syphilis, and other serious diseases will yield radically if we can get enough human channels of our knowledge to bring it to bear on those afflicted. Medical practice without research would be blind. But research not supported in the field is impotent.

5. Fifth, we face the high cost of medical care. Since 1940, the cost of medical care in the private citizen's budget has outstripped all other categories of his spending in percent of increase. No small part of our disproportion in health services is due to the fact that medical care has been priced out of the market for many. We know that this sharp cost rise is heavily due to the high cost of personnel and facilities. Can we then cut costs by greatly increasing the number of personnel? The answer is yes, if there were the proper numbers and distribution of personnel for ambulatory care, home care, and hospital preadmission testing. There could be a greatly increased efficiency in the use of hospital beds. Some hospitalization could be avoided entirely. Other stays could be shortened, and more patients could be better and more economically treated. The cost for much of the personnel to do this is considerably less than that for acute inpatient service.

Even at the upper end of the skill spectrum, highly skilled physicians are performing duties of a routine nature that could be relieved by subprofessional aides without loss of standards and with increased efficiency.

Not only have I not been exhaustive of the reasons why we need more health manpower, I have stayed mainly within the confines of the need for more care of the kinds we are giving. But there is a spectrum of services we ought to have, and to which little attention is given at present. Let me give but one dramatic example here.

Dr. Kinsinger, who will address you tomorrow noon, has pointed out that only 162 cities and towns out of a nationwide sample of 900 require attendants, either trained or untrained, to accompany ambulance drivers. The American College of Surgeons has suggested that "casualties on the streets should get as good care as those on the battlefield." Many thousands are not getting this care, and what a magnitude our casualties here are!

Since World War II, we have killed many thousands more individuals on American highways, than those who died from all causes in World War II. Our total highway casualty list in just the last 5 years is higher than the World War II casualty list.

But let us just compare 3 years of the Korean war to 1 year, 1964, in respect to highway casualties. Total deaths suffered by our armed forces in the Korean war, were 54,246. Highway fatalities in America in 1964 alone were only slightly lower, at 47,700. But look at the injury rate. In 3 years of the Korean war there were a total of 103,284 nonmortal casualties. In 1964, highway accidents injured 1,700,000 Americans. But note: 140,000 of these suffered injuries of permanent impairment!

Our casualties in Korea shook the Nation politically. In any given year in traffic accidents we make the casualties in that war pale. Yet, for the most part, we send out to the scenes of accidents people who don’t know a tourniquet from a squash racquet, much less how to move a person with an injured back, or how to treat for shock—from which as many people die as from wounds.

It may be time for a teach-in on this subject. But in any case, along with whatever measures may be devised to improve traffic safety, much more trained medical service should be provided for the victims of traffic accidents.

I do not wish to overkill the subject of need. I do, however, wish to prevent the phrase "we need a million more persons in the health services in the next 10 years" from making a soft landing on our consciousness.
Ours is not the goal of a lunar landing. Ours is the goal of branding on our consciousness an urgent need, and of stimulating action to meet it—among all our professional associations, in all of our health and educational institutions, and in all of the local communities from which we come.

Remember, we are going to need an average of 10,000 new people per month, for 10 years, to meet minimum requirements in the health area of the Great Society. It can be done, and I am confident it will be done, but it will not be easy.

What are some of the problems to solve in meeting these needs in health service manpower, and what are the Government resources? I am sure it has been made clear to you, but let me emphasize that this Conference is concerned with those health workers and auxiliary personnel below the baccalaureate level in training need. It is not that we can be complacent about the numbers in professional training, but we have done a better job of joining the battle there. Of more immediate and crucial need is the development of the supportive health workers who must fill the chinks between professionals.

The discussion agenda provided for you lists a long roster of problems. Where are we going to recruit the people? Who is going to train them? Where are they going to be trained? Who will develop the appropriate curricula in new areas? Who will do the certification? How can we make many of the new positions as occupationally and physically attractive in a labor market which will demand this quality of personnel in many other places in industry?

Will physicians accept nonprofessional assistants? Will all professional associations take an enlightened view on opening subcategories for training? Can we devise career ladders to give people of talent an upward mobility to the limit of their capacities and break down some of today's artificial barriers in the health manpower pool?

At the lowest end of the skill spectrum how far can we go in developing some of the physically and educationally disadvantaged? And can we qualify the positions at all levels, at adequate standards of wages and working conditions?

These and other problems we have tried to anticipate. We expect you will find many more to add.

What are the resources which your Government is offering? These are in the areas of training support and in research money that can be directed to new and improved instructional materials and methods, job analysis in the health fields, and systems analysis of functions in health service institutions.

We know shamefully little about what today's health workers actually do, how they spend their time, how their functions mesh, and to what extent their training is fully used. The new Manpower Resources Program of the Public Health Service will be developing major projects of time and skill utilization studies which will tell us much about the concrete kinds of manpower we need and how to use them better.

The Division of Adult and Vocational Research has made a priority activity of developing para-medical training programs of sufficient scale to test how to improve instructional skill, curricula, identify job clusters in which a job ladder training base can be developed, and to improve the performance of facilities. There is a major source of funds here for creative, practical proposals.

More than 30 pieces of Federal legislation provide for some kind of occupational training. Not all of these can be used for training health service occupations. But some are well suited and ought to be used more than they have been, e.g., the manpower training program, the vocational education program, and the antipoverty program.

These resources will be carefully explained to you in these 3 days. In addition, resource staff from both Federal departments will assist every discussion session to explain from the ground up how any given resource can be used, or perhaps how a combination of them may be put together.

We hope this will be a working conference, getting into the most elementary nuts and bolts questions of how to get a specific training program going, for a specific kind of person, that a specific community needs.

The Federal resources will be no stronger than the links of local initiative and professional leadership. If we in Government are here to help to the best of our ability, we frankly expect to learn more from you about what the real nature of the problem is, and what more we must do to help you.

Let no stony problem remain unturned, but I beg of you—let us not lose sight of the goal of need and the demand that it be met. We must not
stop with asking ourselves what are the problems. We must go on to require of ourselves a solution.

We are not here to lower health services standards, but to elevate them sharply. A better calibration of the skills needed and a more precise relating of skill levels to more classes of workers is one practical way to do this.

We are not here to liquidate professional organizations. But integrity and independence need not be parochial. The spirit of that part of the Hippocratic Oath which commands the physician to "teach the art" can have a new birth of application throughout the range of associations that provide medical services and support.

We do not want job development in this area in just any old way that we can get it. We want job opportunities opened up that are attractive, rewarding economically, and self-fulfilling personally. We want careers opened up that embody the spontaneity of service that motivated the Good Samaritan. We want them for the many people who know what the answer is to Cain's question whether or not he was his brother's keeper.

The most practical realism and the highest idealism are combined in the task before us. If we are going to be creditors of the future, as we are debtors to the past, we must delay no longer in setting about it.
My job this morning is to lay out some of the links, some of the connections, between your special problems, about which you know much more than I do, and some of the larger dimensions of the manpower theme, about which I may know a little bit more than you.

One of the troubles of a highly specialized world is that we get to know our own bailiwick quite well and we lose a sensitivity for the other half. Now in manpower that is dangerous because the supply of people, their allocation, their rewards, are all linked to a market. For example, if you attempt to formulate policy about health manpower without an adequate perception of the economy and the problems it presents, you will make poor policy. Therefore, my job will be to try to call some things to your attention which you can reflect upon and put together with the experience and the knowledge which you have.

Let me begin by saying that in my opinion the word "crisis" has been bandied around a little too much. The United States is a rich country, although we are not as rich as we would like to be. That applies from the point of view of: money, people, skill, whims, whatever. One might say that we are in a perpetual crisis, in the sense that we are short or have deficiencies in all of these things. I would like to be a little bit more moderate when we talk about a crisis.

For example, if you say that by a crisis we mean spending more money and are therefore desirous of purchasing more and better services in the health field, I will understand that. But then I would point out to you that the market for health services has been reasonably responsive; that its capacity measured in manpower terms grew between 1950 and 1960 over 50 percent. It was the fastest growing large industry in the country, or at least one of the fastest. There is some basis for concern with the present balance of demand and supply, but we must be cautious about accepting certain categories which are easier to respond to emotionally than to appraise critically. Let me give you another illustration. I asked one of my associates to check some figures for me yesterday. I asked him to find out what proportion medical personnel represented of total nonagricultural employment. In 1940, this segment was just over 3 percent, and in 1960 it was just under 5 percent. These few figures should indicate again that the health services market does respond to a rapidly increasing demand. It may not respond as quickly as you would like it, but it does move.

I want to describe briefly some of the characteristics of the changing American manpower scene before I present a few specific parameters and make the linkages between the general scene and your own concern. We now have what is called in shorthand, a service economy: two out of every three workers in the United States work in services sector rather than in the goods producing sector. Agriculture, manufacturing, mining, and
construction, account for only one out of three workers. Two out of three workers are in the service sector.

These are some of the general dimensions of the service economy. First, the services tend to use more highly trained people. Secondly, the question of access to education and training therefore becomes a crucial matter. Education is the determinant, the path along which one acquires skills. Thirdly, because of rapid technological progress, there is rapid skill obsolescence, which in turn means that one can never train just for entry jobs.

The next proposition is that, other things being equal, the more education a person has initially the more likely he is to remain attached to the field in which he enters. However, this proposition must be handled with caution when it comes to professionals, such as engineers and lawyers, since considerable numbers of them do not remain in the practice of their profession, but move horizontally into general business or politics or administration.

The next point is that the service field has a high proportion of women, and women continue to have certain special characteristics. Among the most important of these characteristics is that they tend to be educated and trained at times different from men; their attachment to the labor force is different in that they prefer increasingly to work part-time or part-year; and they enter, leave and return to the labor force, differently from men.

My eighth point is that trade unions, until recently, tended to be underrepresented in the service sectors of the economy by and large. We now begin to see a shift. They still tend to be underrepresented when the employer is a nonprofit and/or governmental agency. There are some big changes looming on this particular front. My own guess is that the unions' future strength will lie in the not-for-profit sector; today, more and more governments find it essential to permit their employees to join unions if not to strike. In New York, we have had a few experiences in recent months with "service employees," first the teachers and then the subway workers.

The next point about the service fields is that some of the workers tend to have low wages, poor working conditions, and a limited range of fringe benefits. This is not unconnected with the earlier statement that the nonprofit sector and the governmental sector have been characterized by a lower degree of unionization, hence with lower wages and less desirable working conditions.

One additional point: Economies of scale which make it possible for people to be paid better, are more difficult to introduce in the service area. Management, the effective management of a service operation, is frequently much more difficult than the running of an automobile factory or any kind of manufacturing plant. As a professor, I know that there are university presidents and there are university deans, but the professors generally continue to do what they want to do. There are also, then, limitations in how much efficient management of professional groups can be instituted.

Now that I have listed some of the general background characteristics of our service economy, I want to focus more specifically on your problems.

A long time ago I used to know something about hospitals and medical problems, but recently I have been far away from them. I keep a continuing interest in them but I may be off base now and again. First, I think it's a great error to put all the emphasis, as this Conference would suggest, on supply and training. Supply and training is simply one aspect of a general manpower problem. If you move on the supply and training side only, you will have a bag with a hole in it—you keep putting water in the top of it and it keeps coming out the bottom. Wages and working conditions in a free society, in which people can decide what they want to do, become an absolutely essential part of a general attack on this problem. You must provide for meaningful jobs and meaningful careers. Turnover figures are strange and unreliable, but the turnover figures in your field are very high. They're high partly because you have a lot of women who inevitably tend to go in and out of the labor market, but they are high also because you have a lot of people who don't want to stay. That is proposition number one.

Proposition number two is that initial training can be important in helping you to recruit, but people are concerned about what happens to them after they get their first job. All first jobs have somewhat questionable quality and yield questionable satisfaction. Just think of the first job of a newly graduated physician who may get the munificent salary of $50 a week. Nobody is really interested in his first job. He is interested in what will happen over time. Unless you develop training systems that are geared to systems of promotion, that are geared to significant increases in wages and fringe benefits, you don't have a true training program. Your efforts will
be largely wasted. You will be going through the same system the Armed Services have followed, that is, every year they take in hundreds of thousands of people, they spend a tremendous amount of money training them, they get very little service out of them, and the people disappear. The Armed Services have strengthened their system slowly but surely only after they geared their training system to a promotion and reward system.

Third proposition: The Federal Government is now heavily committed to help alleviate the medical manpower shortage through the financial front. But don't overestimate what it can or will do. In the current issue of the Industrial Labor Relations Review, Mr. Yett does an analysis of the Nurse Training Act of 1964. His conclusion is that despite the large sums that the Federal Government is committed to spend for training of nurses, the net effect on the recruitment of additional nurses may be negative. This backs up my saying that unless the education and training structure of the health field is correctly rooted in the general occupation and training structure of the community at large, it will never do the job. Hospitals play a large part in the training of various types of medical personnel all the way from neurosurgeons to orderlies. We must work out an alignment between training of personnel all the way to the employment situation, to the professional needs of women. The further fact that, historically, leaders in the nursing profession were single women without the responsibility of family, made them additionally insensitive, additionally aggressive, about making adjustments. Under duress, I suppose that even leaders learn. However, as recently as 2 days ago, the New York Times said that the Board of Education in our great city has finally awakened to the fact that they could use teachers who can work only half a day. I just want to call your attention to the fact that lots of adjustments are needed with respect to women who represent such a large part of the total labor force potential.

My fifth proposition is even more difficult to do anything about, but I will call it to your attention. This has to do with the under-investment of capital. I am an economist and I see the question of manpower utilization very much as a function of the total economic situation. In your language this means, to what extent is the hospital unable to make efficient use of people? If it does not use people efficiently, you must have more people: and in order to have more people, you have to spread your dollars over a large number and pay each one less. This creates the serious situation of having to function with antiquated plants and equipment. That is another way of saying that the public is under-investing in hospitals, and this forces one to operate in a manner which results in poor manpower utilization. Yesterday's newspaper (Monday, February 14, 1966) reported that the Jacobi Hospital at the Einstein Medical Center in New York has moved toward substantial automation, with corresponding economies looked for in the use of manpower.

The sixth proposition is that any service for human beings must inevitably be concerned with quality, but it must not be concerned with quality in such a way that it blocks itself. Of course, we are interested in teachers and ministers and nurses and physicians who are capable. But there is no reason for a large industry to establish unnecessarily high standards. For example, despite the efforts nursing leaders, at least in some organizations, have been making to attract more nurses with baccalaureate and master's and even doctor's degrees into the system, the hospital administrators have been buying a different type of personnel on the market. They have apparently been interested in two practical nurses rather than one baccalaureate nurse. From this I conclude that they have made an assessment about manpower utilization different from that made by the heads of the profession.

I just want to call your attention to the fact that while quality is a consideration of importance, it can be an umbrella for many different kinds of machinations. Some years ago I visited the Menninger in Topeka. I asked them to give me their estimate of the qualifications of a good ward at-
tenant. They said that a man with an eighth grade education, with the right personality, the right spirit, and the right inclination, would be a better attendant than a college graduate with the wrong inclination; that the emotional determinants are much more important than the intellectual determinants. If you stop and think about it for a moment, it is clear that this should be so. A man with some education who can live in an environment made up of people who are mentally ill and find that satisfying is better qualified for this job than the individual with a lot of degrees.

So far, I have put forth easy propositions. The most serious barrier to effective manpower utilization in the health field that I see is the fact that each group is not strong enough to fight successfully against the group which is higher on the ladder and which spends most of its energy preventing those below from moving up. The struggle for social prestige and market power between physicians and nurses, and the nurses and the technicians, the technicians and the practical nurses or auxiliary nurses, etc., makes any rational, long-term policy for manpower utilization so difficult to realize. People are motivated to work by the possibility of advancement, of growth, of development, of progress. And until very recently, a nurse who had just received her diploma often received the same pay as a nurse who had had 40 years of experience. I know of no barrier more important to the sensible development of the health service field than this confrontation of professional and subprofessional groups, fighting it out with each other, for the dollar in the first instance and, secondly, for the prestige that follows the dollar.

Now, the health service field does not have enough leverage to remedy this situation alone. Obviously, the people at the top of the pile do not want to remedy anything; they want to leave it strictly alone. The people at the bottom of the pile are simply too weak to do anything. The way these kinds of problems get resolved in our type of free society is that if enough attention is given to the situation, it will eventually begin to give at the margin. If a woman finds out that if she takes a course in practical nursing for twelve months, she can earn almost as much as a registered nurse earns after a course of 3 years, that starts to muddy some water. Supplies begin to shift in accordance with relative wages.

In psychiatry, for example, they have gone to ridiculous lengths in controlling the training, so that a man may not finish his psychiatric training until he is 40 years of age. At that point there are all kinds of competition on the margin and people may decide that to get help it isn't important whether the practitioner studied anatomy, physiology, biochemistry. I do not suggest that these subjects are unimportant; and the medical schools may yet agree. I am just reporting how the public finally responds to these facts of life. There are tensions in the situation, and they are not all bad. Perhaps health manpower must live in a perpetual crisis; in that case it is important to think our way through long-term solutions that make sense rather than short-run solutions that will not pay off.

I will end with these comments. First, the inadequate financing of education and training in the health service field in general is still a major challenge to the public. Although the Federal Government's action is helpful, I do not think we have yet taken the basic steps to come to grips with this facet of the phenomenon.

Second, any good education and training is costly to the institution and society, and can be very costly to the individual who has to forego earning power and may have to pay a considerable amount of tuition. This implies the desirability of making sure that you have the kind of training system you need, dovetailed to insure that people do not get too much training at the wrong time or too little at the right time, since training is a prerequisite of personal advancement and progression.

Third, I will go out on a limb with regard to the training of nurses. By now, we should have moved to a basic 2-year registered nurse training program. However, many nurses have continued to insist on the 3-year program, partly because the hospitals need the nursing services which students provide. But this ignores the realities of the market place.

My fourth and final point is that this problem will never be solved, because the level of demand for medical services will be determined by the supply. Whatever the supply, the demand will always rise to a little bit beyond it. We have lived, and we will continue to live, with the problems of medical manpower shortages. We must reconcile
ourselves to it, just as we reconcile ourselves to living in a nuclear age. There are better ways to live with the nuclear bomb, and there are better ways to cope with the manpower shortages. But if at all possible, you must use what you call the “crisis,” and what I call the “chronic condition” to learn (1) more about the people whom you are trying to recruit and train; (2) more about your own values both with respect to medical service and training; (3) more about methods of training; and (4) more about the relationships of training to the whole wage and career structure.
HEALTH MANPOWER NEEDS AND REQUIREMENTS

PHILIP D. BONNET, M.D., President, American Hospital Association

A well-known columnist recently wrote two articles on the subject of health manpower, in which it was reported that one million additional workers in the health professions and occupations are needed now and even more millions will be needed in the years ahead. Among the reasons given for the shortages were: (1) Increased spending on health services—more than doubled in the past decade; (2) Increased sophistication of demand; (3) Medical advances; (4) Expansion of health insurance, welfare programs; (5) Increasing life span; (6) High costs of medical education and training. The writer estimated that there are now more than three million workers in the “health business,” and health business is one of the most rapidly growing businesses in the nation—out-ranking all but education in rate of growth—and exceeded in numbers only by the traditional giants—agriculture and construction. “Narrowing the career gap in the health services will be exceedingly costly. But what will be the cost to you and me of not ending the critical shortages? The cost easily could be our lives.”

These two articles clearly reflect the attitudes not only of this well-informed columnist but generally also that of the American public. Some of the facts are as follows:

*From Sylvia Porter's syndicated column Your Money's Worth. This quote appeared in the second of two articles in the Washington Evening Star, January 12, 1966, under the title "Careers in Health Services." The first article, entitled "Health Services in Need," appeared the day before, on January 11, 1966. [Ed. note.]

In 1950, there were 1.6 million workers in all health services of which 52 percent were professional or technical workers—that is those requiring special education and formal training. In 1960, this number had increased to 1.95 million workers, of which 71 percent were professional and technical. In 1965, the numbers had become about 3 million workers of which about 76 percent were professional and technical. These figures indicate two things: the rapid rate of increase in the number of health service workers and the continuous upgrading of qualifications required of them.

About two-thirds of all health workers work in hospitals or other patient care institutions. This proportion has increased from about one-half in 1945.

Concerning health manpower there seems to be quite universal agreement on just about one thing—that we need more. But how many more we need; and how many more of what; are just two of scores of questions for which the answers have not yet been found and for which the answers can only be educated guess work.

Isaiah Bowman, the great geographer, once said that Chesapeake Bay is a body of water surrounded by study commissions. I think that this is true of many of our health problems and we are often quick to respond to a question by saying that another study is needed. I think that more exact information on our needs at the present would be desirable, but perhaps we may be looking...
too much at the present instead of at the future. Perhaps our next efforts should be toward forecasts rather than precasts. Certainly we need to realize that facility planning without personnel planning can be wasteful. There is now an encouraging trend, however, toward a greater recognition of the need for orderly planning to encompass people as well as pillars.

The manpower problem has been viewed as four large sections: The physician, the dentist, the nurse, and all the other paramedical callings. How many doctors there are and what kind of a doctor he is and what he does, how many nurses there are, what kinds of nurses they are and what they do, and, for example, how many physical therapists and social workers and pharmacists there are among 20 or 30 different paramedical occupations—these are all interacting problems affected by a variety of social, economic and scientific forces. We cannot fully measure our manpower needs until we are able to measure the efficiency of utilization of the manpower we have, the manpower we say we need, and the manpower we get.

I, for one, do not claim that we are using our present manpower resources as well as we might. The nature of health services carries with it the necessity of providing an individualized service for each different sick person and this imposes definite limits on how far we can go in mechanization, depersonalization and reduction of personnel hours. Nevertheless, a way must be found to increase the direct patient service component of hospital staffs and at the same time to reduce the indirect service and administrative components of health care programs.

We are all fully aware of the rapidity of scientific advances and its enormous impact on and its transformation of the medical care system, especially that which revolves about the hospital. In addition, but as yet unmeasured, is the impact on health services and manpower needs of the steps just taken through legislation: the Social Security Amendments of 1965 and the Heart Disease, Cancer and Stroke Program of the same year.

Most of what I say today will be centered on hospitals. This stems from two sources. (1) I have spent most of my professional life in hospital administration and (2) the hospital as an institution has been a source of much measurable information as to resources and needs. All that is said here should be understood within this limitation and should recognize that the provision of health service outside of hospital programs will make whatever estimates are made here understatements rather than overstatements.

We all seem to be agreed that we need many more doctors just to keep abreast of our physician-population ratio currently about 133 per 100,000. We are moving rapidly and vigorously to build and expand medical schools in order to run as fast as we can to stay where we are. There is similar support for schools of dentistry, nursing and public health. Building buildings, however, isn’t enough and more substantial aid to students of all kinds will be required if we are to attract an increasing number of students to the health professions in competition with other career opportunities.

Numbers alone aren’t enough. How will the physicians and the other health workers be distributed? I do not mean just geographically. I am thinking more of the distribution of physicians between a specialty and general practice and among the various specialties. Have we enough general surgeons and not enough ophthalmologists? Similar questions arise with respect to nurses, technicians, social workers and therapists. As specialization increases with “know-how” people become less and less interchangeable without additional education or training.

The most significant influences on our need for health manpower will be the nature of the practice of medicine, the nature of medical technology and the organization of medical care services in the years immediately ahead. As specialty advances, teamwork in some form becomes more and more necessary. Up to now the hospital has been the focus of most efforts to develop teamwork among physicians and their coworkers. It appears likely that the hospital will continue to offer and to enlarge the opportunity for teamwork. Effective teamwork under expert physician leadership may in time offer a major part of the answer to the more effective use of scarce, skilled, educated personnel.

Full time personnel in all hospitals increased on the average 50 percent between 1953–62. In acute short-term hospitals, the increase was 68 percent. About half of these increases were due to increased numbers of patients. The other half was due to intensification of treatment, more rapid turnover, and improved techniques. Though it is unlikely that this rate of increase will continue, it is altogether likely that full time personnel in
hospitals will need to increase at least 20 percent every 10 years. This means that hospitals alone will require at least 20,000 additional workers each year and that there will be commensurate increases in all other health service programs.

Let us turn to the problem which occupies more of the attention of the administrators of our Nation's hospitals than any other of the many manpower problems—the availability of nurses. We hear occasionally of a few bright spots around the nation where hospitals have all the nurses they need, but here again one man's ease is another man's shortage. There are now budgeted vacancies for at least 75,000 registered nurses and 25,000 licensed practical nurses. The desirable ratio of nurses per patient varies sharply from the figure in the northeastern United States, where I live, downward in other areas of the country. The most recent national study of nursing was by the Surgeon General's group in 1962 which reported that there were approximately 550,000 registered nurses employed in United States hospitals and allied health institutions, 225,000 practical nurses, and 400,000 nursing aides. One must remember that no matter what the facts of the situation are right now, they would undoubtedly have been much worse had it not been for the vigorous efforts of nurses and hospitals to train and utilize a type of supportive nursing personnel, the nursing aide. Without the 400,000 of them in our hospitals, the situation would be worse than it is. The use of large numbers of practical nurses, 225,000, in addition to nursing aides, nearing half a million, underline response to changed requirements of the nursing profession. We hear pleas for a return to the good old days when the nurse was a bedside nurse and did everything for the patient and the physician. But those days have gone and will not return. The modern professional nurse not only does many complex procedures that were unknown a generation ago, but now from the moment of graduation is called upon to employ supervisory and managerial skills that often have not been taught nor has an opportunity to learn them been provided.

The Surgeon General's group reported that ideally by 1970 we should have in our hospitals and health facilities 850,000 registered nurses and 350,000 practical nurses and 300,000 nurses' aides. This compares with the actual figure in 1962 of 550,000 R.N.'s, 225,000 practical nurses, and 400,000 nurses' aides. The reduction in the 1970 estimate of the need for nursing aides is a reflection of the Surgeon General's group that too much of the nursing service in some of the hospitals is given by nonprofessional and inadequately trained nursing personnel. Realizing that the goals it had just set were unrealistic, the group scaled them down from 850,000 registered nurses to 680,000 by 1970 leaving the figures for practical nurses and nursing aides unchanged. But these are large goals and I do not think we have a chance of reaching them without some new and as yet unknown approaches to improve working conditions and social recognition of nurses. The greatest problems occur during the "off-hours"—the evening period, the night period and weekends.

The area of this burgeoning mixture of occupations about which we know the least and which like the submerged part of the iceberg is probably the largest of all, is the paramedical sector, that great diversity of activities ranging from such well known professional functions as pharmacy and dietetics to such newer personnel as cytotechnologists, nuclear medicine technologists, and inhalation therapists. The Department of Labor's recent revision of the excellent study by the National Health Council on Health Careers lists in its Health Careers Guidebook 200 health career occupations. This is an area where our knowledge is limited and where the impact of Medicare may be most important. It is to be expected that the hospital patient profile will be materially affected by the over-65 admissions, bringing additional need for rehabilitative services such as physical therapy. The home care programs will certainly accentuate the need for social workers so that the patient can be transferred from the acute hospital of the extended care facility to the home when proper care can be given in that home. The American Hospital Association and the Public Health Service are cooperating at the very moment in a survey of such manpower resources and needs in hospitals. We hope that the survey will help us do the kind of forecasting needed. We have modest hopes for it, but we trust that it will give us some reasonable guidelines as to our needs for a few years ahead, and what is required to meet those needs. In pharmacy, some 45 percent of our hospitals do not have a pharmacist on their staff, in spite of the fact that the number of full- and part-time pharmacists in hospitals has doubled from 3,000 in 1947 to 6,000 in 1962. A professional estimate is that 10,000
will be needed by 1975. The emphasis on hospital care and the provision of financing for out-of-hospital services in Public Law 89-97 may make even this too small a figure.

The American Association of Nurse Anesthetists has stated that it is hard to see how we can double, much less triple, the supply of nurse anesthetists, as we ought to.

With respect to qualified laboratory workers, who must cope with steadily increasing numbers and complexity of laboratory procedures, the head of the American Society of Clinical Pathologists believes that to achieve a proper ratio, the number of medical technologists in hospitals should be doubled. The American Association of Medical Record Librarians believes that we need almost twice as many medical record librarians as we now have. Thus while I have stated that complete reliable data are hard to come by, because of different methods of counting noses and different definitions in use, there is general agreement among informed and knowledgeable people that the number of health workers should be substantially increased.

I would like at this point to make a few general comments on the hospital as an educational institution and, as I put it, education with a big “E,” not on-the-job or in-service training programs, but as offering educational courses leading to some sort of formal certification. Dr. Crosby, the director of the American Hospital Association, estimated 2 years ago in his presidential address to the National Health Council, that approximately 300,000 health personnel are in formal educational programs in U.S. hospitals at any given moment. This makes the hospital a large and important educational institution, a responsibility that hospitals have not always understood properly, with imbalance between service experiences and educational quality, whether it be intern, resident, or nurse. Now we have many understandable but potentially disconcerting differences of opinion on the educational role of the hospital. There are some who argue that the hospital should have no responsibility for education, even though lending its facilities for field experience. There are others who argue that hospitals should acquire educational charters and specific funds to support education. In face of the large and growing demand for more educated manpower, it appears that all educational programs by whomever sponsored should be expanded, with upgrading where necessary to meet appropriate accreditation standards. As noted above, there are some 300,000 health personnel in training at any one time in all hospitals. In most cases each program is independent of every other even within a single hospital, in spite of substantial amounts of common subject matter. All deal with aspects of disease, human anatomy, physiology, and of management. A core curriculum and a common portal are perhaps useful devices for increasing the availability and effectiveness of faculty members. Programmed instruction too may extend the effectiveness and productivity of teachers.

There is an employment market in hospitals that might be used to meet several goals, simultaneously relieving manpower shortages and also providing economic assistance for some of the unskilled and unemployed. The American Hospital Association's Research and Educational Trust has entered into a contract with the Department of Labor for $1.6 million to provide financial assistance from Federal funds under the Manpower Development and Training Act for hospitals to train beginners for such jobs as nursing aids, orderlies, ward clerks, and housekeeping and dietary aids. This is a start but it must not be overlooked that hospital and health services require a high standard of performance and specific training for personnel in nearly all positions. Hospitals cannot safely use the unemployable, the incompetent, the undependable. There must be "no margin for error" in employee performance. It should be obvious by now that we are sorely pressed to meet our present demands for health services and must face the prospect of a further aggravation of this situation because of an increasing demand for health services, a demand that has been spurred on by recent health legislation. However, the prospect is not all bleak. The health services "industry" may become a mainstay of our employment market even more than it is today. As I told the American Hospital Association at its last annual meeting in San Francisco last year, investment in health and in reduction of sickness and liability can be among the most significant contributions to increasing productivity and continuing prosperity. More scholarly studies of the role of health services in our economy are urgently needed. The hospital is essential, and, though expensive, is economically productive. Expanded medical and hospital services, along with educational services can—and in my
opinion must—provide a large number of new opportunities for productive effort by those young people who will in the future not be needed for industrial and agricultural production of the material necessities of life.

There remain many problems to be faced:

1. How can health service occupations be made more attractive and satisfying to larger numbers of students and prospective employees? Among other obstacles are the emotional resistance of many people to work involving sick people and the necessity for staggered schedules to cover the 7-day week in a 5-day society.

2. Are we overtraining and overeducating some personnel with resulting frustration and disappointment?

3. Are the rising requirements for certification, registration and accreditation realistic, adaptable to changes, and justified or are they becoming rigid, unrealistic, and restrictive?

4. Can we enlist the public in a program to keep well, to prevent illnesses and accidents to the end that the additional health personnel needed can be held to a reasonable and feasible proportion of the work force?

5. Do public attitudes give sufficient support and recognition to all health service occupations appropriate to their importance?

In summary, the problems of Health Manpower require major attention to:

- Recruitment.
- Education and Training.
- Working Conditions and Job Satisfaction.
- Social and Economic Recognition.

More information through surveys and studies is desirable. The answers to current needs however cannot await the results of such studies. The problems are now and we must begin to solve them now by increased effort. Furthermore, surveys will only reveal what the situation is in the recent past and present. They do not decide or indicate what ought to be. Such value judgments—of what ought to be and what is desired—must come from the wisdom of professional, political, and public leaders.
Identification of a trend in any field is a hazardous activity as many a bankrupt businessman can testify. Efforts to anticipate trends are often compounded of wishful thinking and highly unscientific spot checks. Even if enough substantial information has been gathered to warrant a somewhat objective analysis, the vagaries of people may well upset a well-developed case just 1 month after the facts are in. In the health field, we frequently do not have even quantitative data. This is particularly true of education and training for health service workers.

In spite of these difficulties, it is possible to identify with fair certainty several trends in the training of health service workers; trends that are developing as a direct response to changes in social and educational patterns and health service practices. Some of the forces at work are:

1. The knowledge explosion.
2. Increasing use of medical services and expanding health services.
3. Changing roles of ancillary personnel in the health field.
4. Development of a multimedia approach to instruction.
5. New concepts in the use of auxiliary personnel by professionals.

These forces have, in turn, resulted in several educational trends:

1. A process analysis approach to curriculum planning.
2. Recognition of levels of health workers.
3. Identification of the unique and appropriate contribution of a variety of institutions to education and training for health workers.
4. Innovations in providing clinical experiences for college students.
5. New efforts at interorganization and regional planning for education and training.
7. Applications of multimedia to education for health workers.
8. Increased emphasis on counselor training for the health field.
9. Greater educational mobility for students between institutions and programs.

It is particularly important that these trends be identified early and guided in a constructive way to avoid an unfortunate duplication of efforts and a confused overlapping of official and semi-official “standards” as well as jurisdictional claims and counterclaims. Within the time limit available, I would like to discuss some of these trends as they are influencing and will continue to influence education and training for health workers.
First, we must recognize that the traditional health team of doctor, dentist, and nurse can no longer serve, without assistance, the health needs of patients. There is no need to labor the point; the evidence is on all sides. However, to bring the picture dramatically up to date in terms of the magnitude of change in the composition of the modern health team, let me quote from the recent Coggeshall Report, Planning for Medical Progress Through Education. “Once it took only one doctor to resign himself and the child’s parents to the inevitable death of a ‘blue baby.’ It now takes a team of medical specialists and auxiliary personnel to correct the congenital abnormality of a baby’s heart to insure the child a normal life span. At least 15 persons, including four surgeons, are needed in the operating room for the repair of a congenital lesion of the heart. More than 100 medical specialists, nurses, and skilled technicians are involved in preparations for, and performance of, the operation and in the post-surgical care of the patient.”

Simply stated, the knowledge explosion has overwhelmed the health field, as it has so many other areas of human endeavor. It takes many more skilled hands to apply modern medical knowledge. The physician increasingly must analyze, plan, and administer services which are provided by others, others to whom he delegates in large measure routines carried out under his direction. Originally “others” referred to the nurse who was responsible for all paramedical services to the patient. The total environment, after the departure of the physician, was her province. What has happened to her original responsibilities in the intervening years? Perhaps a short list of original nursing functions, indicating how these activities are currently shared or completely transferred to other workers, might serve to remind us of shifting health service responsibilities and the consequent changes in educational requirements.

<table>
<thead>
<tr>
<th>ORIGINAL RN FUNCTIONS AND ACTIVITIES</th>
<th>ALLIED HEALTH WORKER NOW PROVIDING THE SERVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet Therapy</td>
<td>Dietician</td>
</tr>
<tr>
<td>Social Service—related to disability, hardship, etc.</td>
<td>Medical Social Worker</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CENTRAL SUPPLY SERVICE</th>
<th>CENTRAL SUPPLY TECHNICIAN AND WORKER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning, wrapping supplies, sterilizing packs, etc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDICAL RECORDS</th>
<th>REGISTERED MEDICAL RECORD LIBRARIAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance of charts, records, discharges, abstracts, etc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RECREATION THERAPY</th>
<th>RECREATION THERAPIST AND VOLUNTEERS, CANDY-STRIPERS, etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities, games, amusements, reading materials, etc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REHABILITATION THERAPY</th>
<th>PHYSICAL THERAPIST, OCCUPATIONAL THERAPIST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Room, Delivery Room—scrub nurse, circulating nurse, etc.</td>
<td>Operating Room Technician</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BEDSIDE NURSING</th>
<th>LICENSED PRACTICAL NURSE, AIDE, ORDERLY, etc., VOLUNTEER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nursing Specialties: Recovery room, postoperative nursing care, monitoring devices, hypothermia techniques, use of pacemakers, etc., oxygen tents, cannulae, etc.</td>
<td>Inhilation Therapist and Biomedical Engineering Technician</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EMPLOYMENT INTERVIEWS</th>
<th>PERSONNEL DIRECTOR (FOR NURSING SERVICE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration (nursing unit)</td>
<td>Ward Manager</td>
</tr>
</tbody>
</table>

If other existing allied health professions are added to this list as well as those still emerging or anticipated, a vast and complex educational job is indicated. What approaches are being taken to expand the education and training for health workers? First, some of the most enlightened planners are undertaking a careful analysis of the skills and knowledge currently being demanded of a worker to function safely and effectively in each allied health profession. Constant review will be necessary because functions are wed to the art and science of medicine and these are continually changing. Not only must individual curriculums change as medical practice changes, but planners must be alert to demands for new cate-
categories of personnel. To help educators relate specific levels of preparation and service to the broad spectrum of health service personnel (professionals, technicians, and practical aides), the following chart has been prepared.

**THEORY/SKILL SPECTRUM IN THE HEALTH FIELDS**

<table>
<thead>
<tr>
<th>Theory</th>
<th>Research Scientist</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Physician and Dentist Practitioners</td>
</tr>
<tr>
<td></td>
<td>Paramedical-Paradental:</td>
</tr>
<tr>
<td></td>
<td>R.N. (B.S.) Dietician Pharmacist Medical Record Librarian Occupational Therapist Physiotherapist</td>
</tr>
<tr>
<td>Skill</td>
<td>Technical Assistant:</td>
</tr>
<tr>
<td></td>
<td>X-ray Technician R.N. (A.D.N.) Medical Record Technician Dispensing Optician Occupational Therapy Assistant Inhalation Therapy Technician</td>
</tr>
<tr>
<td></td>
<td>Practical Assistant:</td>
</tr>
<tr>
<td></td>
<td>Licensed Practical Nurse Psychiatric Aide</td>
</tr>
<tr>
<td>Aide:</td>
<td>Orderly-Nurse Aide Dietary Aide Housekeeping Aide</td>
</tr>
</tbody>
</table>

*This chart was accompanied by a projected slide which indicated that as the theory component increased, there was a corresponding decrease in emphasis on the skill component.

Can the hospital continue to carry the major responsibility for financing, administering, housing, staffing, and planning for such a broad and complex training responsibility? At one end of the occupational scale the answer is probably "yes." On-the-job education for aides, orderlies and others who are almost exclusively concerned with "how" and very little with "why," may continue to be the major responsibility of the hospital. The education of other diverse groups on the subprofessional level requiring formal education calls for large, professionally competent facilities, increasingly complex laboratory facilities, and massive financial support. In these instances, the education will probably move more and more into educational institutions; into the high schools on the assistant level, and into 2-year colleges on the technical level. The hospital will become an extension of the college campus—the clinical laboratory.

**Training Professionals To Utilize Technicians**

A trend toward recognition of the responsibility of professional practitioners to utilize more effectively the skills and knowledge of technical personnel has been spearheaded by the dental profession. With financial help from the Federal Government, dental schools have instituted programs specifically designed to teach graduates how they can serve public health needs better through a careful sharing of appropriate functions with dental auxiliary personnel.

The Surgeon General recently highlighted this important aspect of health service. At the 1965 White House Conference on Health he stated, "Year by year, our top professional personnel are being trained to perform still more complex tasks. How long can each profession afford to hang onto its simpler functions—the routine filling of a tooth, for example, or the several easily automated steps in a medical examination? How can we train the physician or dentist to make full use of the skills available in other people, freeing himself to perform only those duties for which he is uniquely qualified?"

**Innovations in Providing Clinical Experiences for Students**

The impetus for the recent trend to transfer training responsibilities from clinical agencies to educational institutions stems from economic considerations, the tendency of high school graduates to prefer the college setting for postsecondary education, and problems encountered by hospitals in recruiting and retaining qualified faculty. However, the specific innovation that has made the shift in educational responsibility possible is a
relatively new technique for utilizing clinical agencies as extended college campuses or clinical laboratories.

An earlier relationship between colleges and hospitals called for paramedical students to begin with courses in general education and to develop their background in the physical and biological sciences on the college campus. The student, subsequently, moved to the clinical agency where he came under the tutelage of agency personnel. Here he was exposed to the occupational setting, gained specific occupational know-how, and practiced clinical skills on-the-job. The inevitable conflict between education and service frequently plagued the process of student assignments for clinical practice. A more recent approach calls for occupational instructors (nurses, laboratory technologists, or whatever their field) to function as full-time members of the college faculty. These instructors integrate their teaching with the college humanities and science courses and accompany their students to the clinical agency to select appropriate clinical experiences for students.

The college instructor takes full responsibility for supervising the student's learning experiences during the time that the student works with patients in the clinical agency. This arrangement requires a carefully developed and continually evaluated plan based on a written contract between the clinical agency and the college. The contracts vary with the institutions and the circumstances, but they usually are built around one key responsibility of the clinical agency and another central responsibility of the college, namely:

A. The clinical agency agrees to provide opportunities for clinical practice and for observation on the wards and in the various departments of the agency.

B. The college agrees that its instructors will go through proper agency channels to make plans for observations and for clinical experience and that college instructors will provide all supervision and instruction required in the program.

**Movements Toward Interorganizational and Regional Planning**

Another trend, one of the most promising, is an increasing movement toward interagency and multidiscipline planning for education and training in the health field. There are a number of encouraging examples. I will not attempt to cite all of them or even suggest which are the most important. This Joint Conference on Job Development and Training for Workers in Health Services is a case in point. Plans are being formulated within the Department of Health, Education, and Welfare to convene interdisciplinary planning groups. A division of the U.S. Office of Education already has a standing Advisory Committee on Health Occupations Education. The work of the National Commission on Community Health Services generated 70 recommendations regarding health manpower. Also extremely promising are two newly formed interorganization committees on health technology education: one between the American Association of Junior Colleges (AAJC) and the National Health Council and another between the AAJC and the National Council on Medical Technology Education. The AAJC and the National League for Nursing have had a similar interorganization committee for many years. Writing on "The Increasing Role of Paramedical Personnel" in the September 1965 issues of the *Journal of Medical Education*, Dr. Robin Buerki states, "It would seem that junior colleges across the country offer the most appropriate and the most immediate solution to the problem of training in specialty areas where shortages exist. Technical education in many paramedical specialties could easily be accomplished in a two-year curriculum which would also provide an opportunity for \ldots\ liberal arts subjects." 

In the light of this statement it is important to note that the first task the AAJC-NHC committee has set for itself is that of writing guidelines for the development of sound educational programs for health technicians at the junior college level.

In a few areas, regional study and planning groups comprised of employers, practitioners, and educators are providing a framework for mutual planning regarding education for the allied health professions. As I suggested at a recent conference, "without such an Allied Health Professions Regional Education and Training Council, or some similar organization, health needs of our citizens will continue to be poorly served by the existing laissez-faire attitude which forces each health agency and educational institution to make a unilateral assessment of educational priorities..."
and educational practices. Hospitals will continue to establish training programs in desperation when forced by crises created by personnel shortages. Colleges will establish or expand programs only when government or philanthropic funds are offered for a particular program or when an unusually persuasive professional association gains the ear of a college administrator or college board member."

The "Core Curriculum" Concept

The development of a "core curriculum" at community colleges offering several occupational programs for health service technicians is a promising trend. Curriculum study groups have identified general areas of knowledge, skill, and understanding common to all health technologies. These commonalities constitute the basis for a beginning curriculum pattern for all students electing the health field. College instructors and facilities can be utilized with increased efficiency if such a health technology foundation program is offered to all entering students who think they are interested in the health service field. In addition to building a common scientific base for the technology they will study during subsequent semesters, students are introduced to a broad spectrum of career opportunities and assisted in selecting a specific career for which they have demonstrated interest, ability, personality, and character. "Core curriculum" students:

1. Become oriented to and gain understanding of health service resources.
2. Gain understanding of and experience with team relationships.
3. Become acquainted with health field ethics.
4. Gain beginning knowledge and understanding of pathophysiology and pathopsychology.
5. Gain an understanding of how diseases are treated.
6. Develop beginning skills in maintaining environments conducive to patient welfare.
7. Gain skills to achieve and maintain asepsis.

Recruitment is also simplified if students can be attracted to programs leading to careers in the health field generally, rather than requiring them to make a premature choice of a technical specialty based on a less than complete knowledge of the fields from which they may choose.

The Use of Multimedia

Promising ways to stretch instructional talent have burst upon the educational scene in great profusion during the past decade. Programmed instruction has been utilized in a number of ways for the education of health workers. At one extreme, programs have been developed for physicians on the diagnosis of myocardial infarction. At the other end of the scale, an elementary program for aides and orderlies teaches medical terminology by making extensive use of mnemonics.

Television has been employed imaginatively to provide for transportation, magnification, memory, transformation, associations, and image multiplication. New experiments in connection with clinical teaching promise dramatic instructional breakthroughs. Groups of hospitals, anxious to share master teachers in the process of upgrading supervisory skills of their personnel, are paving the way to more efficient use of the best teachers by using television for inservice education.

The most recent efforts to merge education and technology have called for applications of computer science to the problems of education for the health field.

An experience may be simulated and, through dialogue with the computer, the student can either be taught how to deal with the situation or be tested on his ability to cope with it. An example from an actual dialogue from a medical program will illustrate the point:

A hypothetical situation has been presented to the student and he must ask for various kinds of information in order to make his diagnosis. Note that he may ask for the information in the order that he deems correct. The following exchange occurs after a series of preliminary requests and responses. (The capitalized words are those of the student, the others are the computer's.)

COUGH?
Yes, developed yesterday.
BACKACHES?
No.
HEART EXAM?
Not enlarged to percussion but low-grade systolic murmur at apex. Otherwise normal.

ABDOMINAL EXAM?
Diffusely tender, splinting noticed in lower right quarter and occasionally radiating to right flank area.

THE GRIPPE?
There's insufficient information for any conclusive diagnosis at this time. You're not being careful!

MUSCULO-SKELETAL SYSTEM?
Essentially negative, except for generalized weakness and aching.

EXTREMITIES?
Normal, except nail beds are questionably cyanotic but difficult to determine because of patient's skin color.

RECTAL EXAM?
You're not being careful! The patient is too acutely ill for rectal examinations.

LABORATORY REPORTS?
Fine. Which lab tests would you like to have done?

RBC?
A red count will be done. Results will be sent to you as soon as possible.

Far out? Perhaps, but computers represent an important instructional trend. Computer terminals can be placed at convenient locations at any distance from the computer itself and be used at each location virtually at the convenience of the user.

Counselor Training for the Health Field

Brief note should be made of the need for continuing education for high school counselors and others who are influential in steering potential students into the most appropriate educational programs for health careers. The Health Manpower Source Book divides the spectrum of health occupations into approximately 40 categories, and the newly released Health Careers Guide Book subdivides these into more than 200 separate health occupations, including specialties and sub-specialties. Even to keep moderately well informed regarding these fields and the educational opportunities leading to these careers is a monumental task. There is a trend, only in its infancy, to provide regular inservice education for counselors regarding health careers. A specific example of this trend is the 2-week summer institute being planned by the Health Careers Committee of the United Hospital Fund of New York for this summer. Counselors from the greater New York area will be offered an opportunity to bring their knowledge up to date by working with leading educators and employers of workers in the health field.

The College Proficiency Examination Program

Several educational groups are hard at work on plans for a program which will permit students, by means of examinations, to acquire college credit without regular college attendance. This new approach may help overcome deterrents to ambitious individuals who wish to advance themselves on the vocational ladder. In the past, colleges have found it difficult to grant advanced standing to health and related workers who have received their initial training in other than collegiate institutions. A solution to this serious transfer problem may be in the offing.

The essence of collegiate education is the learning that takes place. It ought not to matter when or how the competence, knowledge or skill is obtained if it is comparable to achievement ordinarily developed by individuals who complete college courses in the field. To help colleges determine credit allocation for off-campus or out-of-course learning, a College Proficiency Examination program has been established by the New York State Board of Regents. The College Entrance Examination Board has recently created a Council on College-Level Examinations to develop a similar program on the national level. The examining groups will not give credit—this is solely a matter for the colleges—but they will certify that, within the limitations of the examination, a level of performance above the minimum required for earning credit in courses has been demonstrated.

The complexities involved in these new college proficiency programs should not be minimized, but they offer at least a ray of hope to those now caught in the web of academic bookkeeping.

An even more important trend for promoting student mobility and institutional articulation is the development of programs in pre-technical edu-
The comprehensive high school, Cooperative Education Centers, and similar institutions are developing a unique role in the field of education and training for health service workers. In addition to establishing programs leading directly to employment at the aide and practical assistant level, they are becoming more and more interested in pre-technical education leading to college technical programs. Under this program, students enroll during their 11th and 12th year in a course of study which assures that they will have adequate prerequisite courses in physical and biological sciences and general education courses required for community junior college entrance to a health service technology program. During the last 2 years of high school, they learn beginning technical skills in the health field. The students are exposed to a wide range of health technologies through field visits to health agencies. In some instances, they are afforded opportunities to perform tasks at an aide level in these agencies. The pretechnical program coupled with intensive student counseling should provide a much needed feeder mechanism for health service technology programs.

Health Agency Inservice Education

There seems to be a trend away from the uncoordinated establishment of on-the-job training programs. Clinical agencies, forced by critical personnel shortages to prepare workers for needed agency health services, are tending to utilize common guidelines and teachers' manuals prepared by their own associations and by governmental bodies. Many hospitals have long used the standards provided by the American Medical Association's Council on Medical Education and Hospitals and by the National League for Nursing. They are now receiving additional guidance from materials and consultants concerned with inservice education.

Federal funds recently made available for these programs are sometimes tied to curriculum guideline stipulations. These directives have also provided in many instances for consultants who have in turn influenced the programs. An even greater influence in this direction may result from the recently launched American Hospital Association project to develop a broad national program of continuing education for personnel in the hospital field. This project is being carried out by the Hospital Research and Educational Trust.

A Distinction Between Patient-Contact and Nonpatient-Contact Occupations

The Bureau of the Census identified 2.6 million individuals employed in the "Health Services industry" in 1960. This was a 54-percent increase in the decade between 1950 and 1960. Recent trends indicate even more dramatic expansion in the near future. However, it is clear that various categories of health workers are subject to differential growth rates. From the standpoint of education and training, it seems important to draw a distinction between two broad classifications of workers in the health service field: (a) occupations that require the worker to provide a direct service to an individual, i.e. patient contact, and (b) occupations that support the operation of health agencies and individual practitioners, i.e., institution and staff support. The emotional stability, maturity, and native sensitivity of candidates for patient contact jobs is of a different variety than that demanded of those engaged in housekeeping, business, laboratory, and supply functions for institution and staff support. Both categories are vital to the growth of the Nation's health service capability. However, the distinction is important when planning for job development and training in the health field. The ill and otherwise handicapped are least able to defend themselves from inept service. Adequate education for those who will be entrusted with the health of their fellowmen, on whatever level, is seldom accomplished through short-term, cookbook, training activities.

Teacher Preparation

The final trend I would like to discuss, is the keystone of the entire educational arch and yet, sadly, it seems to have the least momentum of all. As Thomas Huxley observed, "It is much better to want a teacher than to want the desire to learn," but, even assuming motivation and intellectual curiosity on the part of students (a dangerous assumption), the heart of any educational effort is its corps of teachers. A wealth of clinical experiences, ready access to a fine library, and even exposure to practitioners worthy of emulation are only important aids to the central ingredient: the competent teacher.
Ambitious plans for a broad expansion of educational programs for health service workers have dealt with curriculum organization, financing, student recruitment, laboratory facilities, arrangements for clinical practice, and textbooks. Very little is being planned to build a trained corps of instructors. A few universities have undertaken programs, particularly in nursing, to enable an individual to shift his vocation from paramedical practitioner to accomplished teacher in the health service field. Objectives for these teacher training programs are based on the assumption that the trainee is a competent experienced paramedical practitioner. The composite goals of these programs are to enable the teacher trainee:

1. To become familiar with the underlying philosophy and operating procedures of the educational institution in which he will teach.

2. To learn to use a variety of instructional techniques, i.e., lecture-discussion, demonstration, independent study assignments, audio-visual media, directed clinical practice, etc.

3. To organize a curriculum in his field using all tools of instruction such as tests and measurements, library resources, a variety of health agencies for practice and observation, etc.

4. To bring his knowledge up to date in his technical field and add to his depth of understanding in this field.

5. To supplement, as appropriate, his general background in the physical and biological sciences and the humanities.

I end my discussion of trends under the rubric of teacher training, because it is central to all. Programs for identifying outstanding health service workers and preparing them as instructors must have top priority in any plan for job development and training. Without such a corps of teachers, energy expended on curriculum development, facilities planning, student recruitment and planning for financial support is misdirected. When the teachers are available, the other facets of the problem tend to fall much more easily into place as we work toward the ultimate goal: a trained manpower pool to serve the health needs of all our citizens.

FOOTNOTES


6. Adapted from College Credit for Off-Campus Learning, an unpublished paper by Norman D. Kurland, Director, Center on Innovation in Education, New York State Education Department, Albany, N.Y.

7. An American Hospital Association project to develop a broad national program of continuing education for personnel in the hospital field carried out by the Hospital Research and Educational Trust.
I appreciate very much this opportunity to discuss with you the problems of community responsibility for health manpower development. During the Floor debates on the Social Security Amendments of 1965, many of my colleagues expressed concern on the adequate staffing of medical facilities as the medical insurance program came into reality.

I hope to be able to describe, at this time, the process by which the Cleveland community has begun to move in this area of providing a great number of training opportunities for the unemployed and underemployed people in the city of Cleveland in the area of health occupations. While I do not claim that the manner in which we carried forward our community action program is the only way to solve the critical shortage of medical occupations personnel, it might serve as an indication of how a community might go about fulfilling this important need.

On the 15th of October, my office sponsored an all-day seminar on the new medical insurance program, attended by representatives of all areas of community health in Cleveland, from the President-elect of the National American Medical Association to members of the Senior Citizens Council and Golden Age Clubs. For those of you who are interested in looking at the results, I have brought four copies of the verbatim transcript of the day's proceedings which will be available at the back of the room for you to leaf through.

All of the groups represented officially at the Conference had an opportunity to air publicly their point of view with respect to the implementation of this new law. The meetings were ably key-noted by Robert M. Ball, the capable Administrator of Social Security, and Wilbur Cohen, the Under Secretary of Health, Education, and Welfare who was so instrumental in the development of this new law, during the long executive sessions of our committee.

The panels were devoted to specific topics. The last panel in the day was devoted to medical and health occupational training and lasted for 1 1/2 hours. The panel members represented the State Vocational-Education Office, the Cleveland Board of Education Vocational-Education Office, the National Coordinator of Training for the Economic Development Administration, the Training Director for the Cleveland Hospital Council, and the Director of Training for Medical Occupation for Cuyahoga Community College and a member of my staff.

It became clear, as this discussion progressed, that it would be necessary for this panel to include others involved in training to form a working committee to carry the discussions about techniques for training in this area beyond the limitations of the 1-day Conference. Such a committee was formed and announced at the close of the Conference and met shortly thereafter in my offices in Cleveland.

My interest in the health occupations program was twofold. My community included most of the...
24,000 unemployed people of Cleveland. A health occupations training program would help reduce unemployment while, at the same time, produce a critically needed supply of trained workers.

My next task was to find available Federal funds to initiate this program. Since Cleveland was a labor-supply area, I rushed over to Eugene Foley of the Economic Development Administration and pointed out the high ratio of jobs created to Federal dollars invested in this program. He was enthusiastic in response and immediately assigned two staff members, William Batt and Ann Gould, to work with my local committee to create a Cleveland program.

Thereafter came weeks of conferences and preparation. I was personally involved in eight long conference meetings where I struggled to bring the varied groups into a composite presentation. One of our first requirements was to conduct a census of medical employment needs by the administrators of each of the hospitals in the Cleveland metropolitan area to determine how many people could be trained or retrained to meet their existing needs. This duty fell squarely on the shoulders of the Cleveland Hospital Council, since it already had the machinery to make such inquiries rapidly. The Hospital Council of Cleveland represents 42 metropolitan-area hospitals with almost 12,000 beds.

Since we were breaking new ground in making such determinations, it became necessary for my office to make available to each of the administrators copies of the Federal laws dealing with training to make the administrators aware of the Federal resources currently available for their use in the area of training personnel.

I found understandable hesitancy on the part of some hospital people about getting involved in utilizing Federal funds for this purpose. Frankly, the administrators were concerned that they would lose control over the high standards of training and ultimate level of competency which had been established. After much discussion between the representatives of the Federal offices responsible for training within the Economic Development Administration and discussions in which I personally was involved, the hospital administrators submitted requests for over 1,300 training positions. It, then, became the duty of the Ohio State Employment Service, working with Federal funds, to make applications in conjunction with the local school board as contractor for funds available under Section 241 of the Manpower Development and Training Act, as it relates to the Economic Development Administration, since our city qualifies as a labor-surplus area under that act.

It has taken us from the date of our Conference in the middle of October, to the present time to reach the application stage. We have only until July 1, 1966, until Medicare goes into effect. My grave concern is that we will underestimate the net effect of the activation of Medicare upon the medical personnel shortages which might well result after July 1.

We hope, in Cleveland, to submit our applications tomorrow to the proper Federal officials and begin recruiting trainees in a very short time, so that 6 or 9 months from now, we can begin fitting adequately trained personnel into hospitals of greatest need.

From these experiences, it can be observed that a minimum of 5 months lead time must be contemplated in preparing a community for health occupations training program. The time required may be longer if an area is not qualified to participate in the special benefits of the Economic Development program. As far as I can determine, every large city has extraordinary unemployment at its core, a great portion of which is not reported under available systems or census. These are the people who appear nowhere as a statistic. They are the unemployed who have given up and no longer report at the State Employment Service office. They are supported by their parents, their brothers and sisters, their children and public welfare. Present programs do not seek them out.

Ironically, these people, once found and trained, may prove to be your best resource for health occupations. Once trained, they may develop into the core of permanent employees which is needed to make your institutions run smoothly and meet the demands of the Medicare program.

One of the great areas of resistance we had to meet in the Cleveland program was the availability of suitable trainees. The local Ohio State Employment Service reported that they were at the bottom of the well.

They confronted me with this statement while I was suffering the pressure of thousands of unemployed who seemed to be searching for any kind of employment hope. They simply did not fit the skill demands of Ohio State Employment Service jobs.
In my office, I use the case study approach to unemployment problems. I find people anxious to work. I have service case records of mothers with children eligible for Aid for Dependent Children who work and earn $7 per month more than they would get by simply staying home. Employable persons on ADC and ADCU would make good candidates for work in the health occupations. They must be encouraged to work and must receive a family settlement which they can recognize as a worthwhile differential.

Manpower benefits must equal or better the public welfare payments for subsistence so that we can induce capable workers to move from dependency to self-sufficiency. If we can succeed in making capable health occupations workers out of the dependent unemployed, the Federal investment in training will produce benefits a thousand times the training cost.

It is imperative for every community to anticipate the full impact of the Medicare program and its critical need for added trained personnel. The success of this vital program demands it.

The role of experts and the leadership of local community groups in the development programs is the key to assuring adequate staffing for our hospitals and nursing homes, medical laboratories, and extended-care facilities. It cannot and should not be the responsibility of the Federal government to initiate such programs, since only the local people, like yourselves, know the personnel who will be required to provide adequate, high standard medical care.

The use of Federal training resources should never result in the lowering of your standards of training or placement of personnel.

Under the circumstances, it is vitally important that hospital administrators and health occupational employees in any local area use these Federal training resources for this important work.

In this partnership of efforts, we will help each other. You will receive trained personnel and the community will combat unemployment.

The Cleveland program provides for the training of 1,315 health service workers in the following categories:

1. HOUSEKEEPING SERVICES
   a. Housekeeping Supervisor; 20 trainees, 10 weeks; maintenance of sanitary conditions.
   b. Custodial Workers; 125 trainees, 14 weeks.
   c. Laboratory Helper; 40 trainees, 10 weeks; keep materials in order.

2. FOOD AREA SUPPORTIVE SERVICES
   a. Food Service Supervisor; 40 trainees, 40 or 50 weeks.
   b. Main Course Cook; 40 trainees, 20 weeks.
   c. Dietary Aid, Counter Worker, Special Bar Help Cook; 150 trainees, 12 weeks.

3. BUSINESS ORIENTED SERVICES
   a. Medical Transcriber; 100 trainees, 36 weeks; general dictation, clerical and medical terms.
   b. Clerk Typist; 150 trainees, 24 weeks.
   c. Nursing Unit Clerk; 100 Trainees; general clerical and work on medical records-admissions.

4. PATIENT-CARE SUPPORTIVE SERVICES
   a. Orderly; 125 trainees, 10 weeks; work in wards.
   b. Nurse Aid; 200 trainees, 10-week course.
   c. Psychiatric Attendant Aid (male); care of male patients, physical work.

5. LAUNDRY ROOM SUPPORTIVE SERVICES
   a. Laundry Workers; 75 trainees, 10 weeks; sorting, washing, shaking, pressing.

6. HOMEMAKER SERVICES
   a. Homemaker; 75 trainees, 16-week course.
The need to structure pathways for the development of the multitude of health service workers required to man the emerging health programs in a variety of agencies has been made clear for all to see in the preliminary presentations and discussions of the Conference. To deny that the need exists or to assume that the supply of workers in all categories is now in the wings waiting for their entry would be futile in the light of the demand factors displayed before the group.

Therefore, it is our purpose in this session to review the array of Federal resources available to assist in the orderly development of programs designed to meet the determined needs. Such a delineation of resources can best be achieved through a systematic review of the several resource areas, legislation, agencies, and programs coupled with an assessment of their interrelationships and possible integration in providing pathways to effective employment and manpower utilization of our available human resources.

Federal Resources Areas

The resources of the Federal Government which contribute to the generation of adequate quantities of qualified health service workers running the gamut of employment needs can best be described in three basic areas—(1) Technical Assistance Support, (2) Research, Experimental and Demonstration Support, and (3) Training Support. A definite interrelationship exists between the three areas, resulting in an interplay that provides for effective overall assistance in program development.

In effect, two basic areas undergird and supply the base for the education and training action area.

Technical Assistance Support

The area of technical assistance support is a multifaceted one. It involves the application of the professional competence of an array of technicians representing the several agencies of government utilizing an abundance of government-
tal data and know-how in a wide variety of activities. These activities are cogently related to the tasks involved in manpower planning, program development, and in mounting the important program actions so necessary to generate a posture of job readiness on the part of individuals in the process of matching men and women with evolving job requirements.

Specific examples of the wide variety of such technical assistance activities are:

- Requirements—Resources Analysis
- Needs Evaluation
- Job Development
  - Systems Analysis
  - Occupational Engineering
  - Programming Manpower Utilization
- Program Planning
  - Education and Training Analysis (Basic Education, Remediation, Skill Development, Worker Attitudes)
  - Developing Training Plans
- Program Development
  - Structuring the Pathways to Employment
  - Developing Program Linkages
  - Developing Instructional Competence
  - Programming Training Resources
- Developing Program Materials
  - Curriculum Development
  - Instructional Area Guidelines
  - Instructional Materials
  - Utilizing Instructional Technology
- Human Resources Development
  - Personal Evaluation
  - Matching Potential Workers With Jobs
- Program Evaluation and Adjustment

For each of the activities enumerated, there exists in the Federal Government a group of dedicated technicians, equipped with supporting materials, available to work with individuals and groups in the generation of actions required to move into a positive posture for programming the development of health service workers.

1In the actual presentation, each of the activities was delineated.

**Research, Experimental and Demonstration Support (R,E&D)**

In a period highlighted by change and identified as one of shifting parameters in the arenas of technology and socioeconomic conditions, it is imperative that we have a willingness to explore and seek out more efficient and effective ways of assisting not only the business-industry-health community in providing services demanded by the people, but also in reaching the disadvantaged sector of our population which has been denied by society the opportunities to participate in the fruits of our economic growth. Because traditional methods seem to have failed in this respect, we are being constantly challenged to innovate in the generation of programmatic activities in such a manner that will bring the disadvantaged back into the fold of the employed, contributing citizenship.

To accomplish this objective, the “Great Society” legislation makes possible the support of research and studies of a socioeconomic nature and also stimulates and financially supports experimental, demonstration and pilot projects designed to provide insight into new and exciting ways of meeting the needs of the more disadvantaged members of our society. It is the purpose of such R, E, and D efforts to discover, document, and disseminate workable techniques that expand our capabilities to do the job that is required if we are to achieve full employment in the range of occupations needed to support our expanding economy and to provide the goods and services that our people need.

A few examples of such R, E and D support are:

- Research and Studies in the Paramedical Arena
  - Linkages and Interrelationships
  - Identification and Implementation of Career Patterns
- Exploring New Techniques and Methodology in Health Services Manpower Development and Utilization
- Developing New Mechanisms to Close the Requirements-Resources Gap
- Facilitating Interdisciplinary and Interagency Participation in Human Resources Development and Utilization
Launching of Pilot Projects and Demonstrations of New Approaches to the Development of Qualified Manpower

**Training Support**

The area of training support as used in this discussion includes all those activities that come into play when an effort is mounted to recruit, select, train, and place an individual in a specific area of employment. In short—providing assistance to bridge the gap between unemployment and contributing citizenship through employment.

It can be seen quite clearly that both technical assistance and R, E and D support contribute to this area. However, our emphasis here is on the actual Federal dollar support for action programs involving the people who require the program services.

The range of services includes the following:

- Providing Outreach and Recruiting Services
- Supporting Programs of Personal Evaluation to Identify Potential Manpower
  - Counseling
  - Testing
  - Selection
  - Referral
- Supporting the Development of Counseling and Instructional Personnel
- Supporting Job Development and Placement Activities
- Supporting Traineeships, Internships, and Apprenticeships
- Supporting Training Efforts in the Public and Private Sectors
  - Basic Education
  - Remediation
  - Technical Knowledge
  - Skill Development
  - Attitude Development
  - Personality Development
- Supporting Both Institutional and On-the-Job Training
  - Job Entry
  - Skill Improvement
- Supporting Individuals in Training
  - Providing Direct Employment in the Public Sector

**Federal Resource Legislation**

A considerable range of Federal legislation having impact in the manpower arena has been generated over the years. However, it remained for the decade of the sixties for us to experience a quantum gain that is now being reflected in program expansion in geometric progression. The Great Society legislation has produced explosive gains in the arena of manpower education and training of an order never before envisioned. These legislative actions set the stage for program activities required in the health service worker field. To assist you in reviewing the various pieces of legislation and their impact in this program area, our colleagues in the Public Health Service have prepared an effective document. Section III of the Background Data Book presents Federal Legislation Affecting the Supply and Demand of Health Manpower. Included is legislation dealing with professional manpower as well as manpower below the professional level.

**Legislation Having Impact Below the Professional Level**

For the purpose of the discussion of preparing health service workers, in the context of this Conference, our focus shifts to that legislation having impact on programing for the development of workers below the professional level. Specific legislation identified in this category includes the following:

- Vocational Education Act of 1963 (Smith-Hughes Act of 1917, George-Barden Act of 1946)
  - Health Amendments Act of 1956
  - National Defense Education Act of 1958
  - Social Security Act
  - Vocational Rehabilitation Act
  - Adult Indian Vocational Training Act
  - Economic Opportunity Act
  - Economic Development Act

1 Conference Background Data Book, Sec III, "Federal Legislation Affecting the Supply and Demand of Health Manpower, 1956-65."
2 The several pieces of legislation were reviewed for the Conference participants.
• Manpower Act of 1965 (Area Redevelopment Act of 1961, Manpower Development and Training Act of 1962, as Amended)

**Fed. 1 Resource Agencies and Programs**

Specific programs designed to reach particular segments of the population have been structured within agencies responsible for carrying out legislative intent. Interdepartmental delegations and cooperative agreements pertinent to program development under various sections and titles of the acts utilize the capability and expertise of the several agencies. To assist in understanding the alphabetize of the Federal structure, a glossary of alphabetical designations is provided.4

**Agencies Involved**

One could, with comparative ease, identify a contribution to the overall manpower program stemming from any one of the complex of Federal agencies. However, in the context of this discussion of resources for the support of health service manpower development efforts our focus turns to five major agencies—the Departments of Labor; Commerce; Interior; Health, Education, and Welfare; and the Office of Economic Opportunity.

Each of the five agencies is charged with responsibility for the development of policy, program planning, and program funding of one or more phases of the manpower development effort through the legislation previously reviewed. Operating Bureaus of the Departments thus become the action points for program initiation. In order to identify the agency structures and to relate legislation and program areas to the departments, the following chart on “Federal Resource Agencies and Programs” has been prepared. Reference to the “Glossary of Alphabetic Designations” which follows the chart will assist in identifying the agency components.

**Resource Programs**

Rather than discuss at length each of the program elements that emerges from the several acts, it would seem to be more appropriate to view the several elements in relation to the agency having program responsibility and the legislation from which it stems. The chart, “Federal Resource Agencies and Programs,” does just this. Full descriptive information on specific program areas can be obtained through the departmental channels identified.

It is to be noted that considerable interdepartment linkage has been achieved. Thus the range of competence available has been increased and the range of resources multiplied. Most notable linkages exist between the Labor, HEW, and the Office of Economic Opportunity. Indeed, program elements stemming from the Economic Opportunity Act are to be found in all three agencies linked to specific agency and staff expertise.

In building the chart, only those programs having identifiable impact in the development and utilization of health service workers below the professional level were considered. Dissecting the supporting legislation for the several program elements produced the resultant distribution.

---

4 See “Glossary of Alphabetic Designations” below.
<table>
<thead>
<tr>
<th>FEDERAL RESOURCE AGENCIES AND PROGRAMS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTERIOR</strong> BIA</td>
</tr>
<tr>
<td><strong>HEW</strong> OE VRA WA</td>
</tr>
<tr>
<td><strong>LABOR</strong> OMER BAT BES NYC</td>
</tr>
<tr>
<td><strong>OEO</strong> JC</td>
</tr>
<tr>
<td><strong>COMMERCe EDA</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AIVTA</th>
<th>MDTA</th>
<th>EOA</th>
<th>COMMERCE EDA</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Technical Assistance and Training Support for the Vocational Training of Adult Indians</td>
<td>• Determining Training Needs</td>
<td>• Jobs Corps Camps Training Centers</td>
<td>• Technical Assistance in Training Program Planning and Development for Designated Redevelopment Areas</td>
</tr>
<tr>
<td></td>
<td>• Institutional Training and Training Allowances</td>
<td>• On-the-Job Training</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Basic Education</td>
<td>• Recruiting, Testing, Selection and Referral</td>
<td>• Community Action Agency Support</td>
</tr>
<tr>
<td></td>
<td>• Supplemental Instruction</td>
<td>• Job Development</td>
<td>Sec. 205 Program Grants and Contracts</td>
</tr>
<tr>
<td></td>
<td>• Experimental and Demonstration Projects</td>
<td>• Manpower Research</td>
<td>Sec. 207 Demonstration Grants</td>
</tr>
<tr>
<td></td>
<td>• Curriculum Planning</td>
<td>• Program Evaluation</td>
<td>• VISTA—Volunteers in Service to America</td>
</tr>
<tr>
<td></td>
<td>• Instructional Materials</td>
<td>• Research Grants and Contracts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VEA</td>
<td>EOA</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Vocational - Technical Education</td>
<td>• Neighborhood Youth Corps</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Area School Development</td>
<td>• In-School Youth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Teacher Training</td>
<td>• Out-of-School Youth</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Work-Study Program</td>
<td>• Employment Service Activities</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Guidance and Counseling</td>
<td>• Youth Opportunity Centers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Research, Experimental Demonstration and Pilot Project Support</td>
<td>• Apprentice Information Centers</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EOA</td>
<td></td>
<td>Selection, referral and placement following personnel evaluation</td>
</tr>
<tr>
<td></td>
<td>• Adult Basic Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• College-Work-Study</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Work Experience (WA)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>VRA</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Research and Training Support for the Handicapped</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PHS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Health Manpower Studies</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Experimental and Demonstration Grants</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Nursing School Construction</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DEPARTMENT OF LABOR, FEBRUARY 1966
GLOSSARY OF ALPHABETICAL DESIGNATIONS

AIWA—Adult Indian Vocational Training Act
BAT—Bureau of Apprenticeship and Training
BES—Bureau of Employment Security
BIA—Bureau of Indian Affairs
CAP—Community Action Program
EDA—Economic Development Administration
EOA—Economic Opportunity Act
HEW—Department of Health, Education, and Welfare
JC—Job Corps
MA—Manpower Administration
MDTA—Manpower Development and Training Act
NDEA—National Defense Education Act
NYC—Neighborhood Youth Corps
OE—Office of Education
OEO—Office of Economic Opportunity
OJT—On-the-Job Training
OMPER—Office of Manpower Policy, Evaluation and Research
PHS—Public Health Service
PWEDA—Public Works and Economic Development Act
VEA—Vocational Education Acts
VRA—Vocational Rehabilitation Administration
WA—Welfare Administration

MDTA Programs

Programs stemming from the Manpower Development and Training Act (MDTA), as amended, produced one of the great interdepartmental and interbureau relationships involving several bureaus within the Departments of Labor and Health, Education, and Welfare. Both Departments are involved in action elements of the programs—indeed both Departments utilize a common National Manpower Advisory Committee as the sounding board in policy matters and for program planning advice.

Each Department carries out specific responsibilities as indicated and participates jointly in others. Major program elements are:

- Experimental and Demonstration Projects (D/L & D/HEW)
- Institutional Training Programs and Training Allowances (D/HEW & D/L)
- Development of Manpower Centers and Multioccupation Projects (D/L & D/HEW)
- Determining Training Needs; Recruiting, Testing, Selection, and Referral to Training; Job Development (D/L)
- Basic Education, Institutional Training, Supplementary Instruction, Curriculum Planning, Instructional Materials Development (D/HEW)
- Manpower Research, Program Evaluation, Research Grants (D/L)
- On-the-Job Training (D/L)

Prior to the enactment of the MDTA, the Area Redevelopment Act of 1961 was active in supporting programs of training in areas of persistent unemployment. With the passage of the Manpower Act of 1965 (the Manpower Development and Training Act, as Amended), the training phases of the ARA were assimilated. However, the passage of the Public Works and Economic Development Act placed a responsibility with the Economic Development Administration of the Department of Commerce for the promotion of economic development activities, including training in areas identified as economically depressed or suffering severe and persistent unemployment. Thus, a linkage has been established between the Departments of Labor; Health, Education, and Welfare; and Commerce in the planning, development and approval of such projects to be funded under section 241 of the MDTA.

EOA Programs

Programs stemming from the various titles of the Economic Opportunity Act (EOA) are implemented through HEW, Labor and the Office of Economic Opportunity as indicated on the chart. Specific delegations have been made to carry out certain activities as follows:

- Title II—Neighborhood Youth Corps—Department of Labor
Title IIB Adult Basic Education Department of Health, Education, and Welfare, Office of Education

Title V Work Experience Program Department of Health, Education, and Welfare, Welfare Administration

The Neighborhood Youth Corps' Out-of-School Youth Program provides for the direct employment of NYC enrollees in the public or not-for-profit sector, thus making hospitals eligible as employers, with the Federal support provided for the payment of salaries and provision of supervision.

The Adult Basic Education Title provides for a program resource for the development of basic literacy and three-R competence to assist individuals to enter training programs to develop the job competence needed for jobs in the health service field.

The Work Experience Program serviced by the Welfare Administration of HEW gives direct employment and training to heads of public assistance families and provides such work experience activities in public and not-for-profit settings as health institutions and others.

Of course, the Office of Economic Opportunity has full operational responsibility for other major elements of the "War on Poverty." Most notable, in the context of this discussion, are the Community Action Program and the Job Corps Program, especially that phase of Job Corps activity dealing with residential training centers having training capability for occupational categories meeting health manpower needs.

The Community Action Program is also of considerable concern to you because of the manpower components involved. Section 205 grants provide for the establishment of Community Action Agencies in the cities and also support a variety of program activities aimed at improving the posture of the disadvantaged population and moving them into the mainstream of program actions leading to employability and employment. Section 207 grants provide for demonstration activities to try out innovative ideas of accomplishing movement of people from the grip of poverty into employment.

Vocational Education Act Programs

One of the major sources of support for training programs in the health service worker arena is the Vocational Education Act of 1963. The operating programs, falling under the purview of the Department of Health, Education, and Welfare, include:

- Programs for Practical Nursing and Other Health Occupations
- Teacher Training
- Work Study Programs for Vocational Students
- Research, Experimental, Demonstration and Pilot Projects
- Area Vocational School Development

Programs generated under the Vocational Education Act conform with State Plans generated by State Vocational Education authorities and approved by the Office of Education. Thus, the potential of these programs should be explored with State and local directors of Vocational Education.

Vocational Rehabilitation Act Program

Too often we neglect consideration of employment of the handicapped to meet the burgeoning job requirements. However, through the Vocational Rehabilitation Administration of HEW there exists an area of program support for research and training of the handicapped that should not be overlooked.

Adult Indian Vocational Training Act

The Bureau of Indian Affairs of the Department of Interior has responsibility for the program of vocational training of Indians. Thus, another manpower resource can be tapped and future health service workers developed through training programs on or near Indian reservations.

Public Health Service Programs

Our chart includes only a few of the PHS program areas. While the major portion of program activities deals for the most part with professional development, it is important to note the elements that have impact in the development of health service workers.
Whenever one talks about programs for the development of occupational competence, the tendency exists to equate such training activity to one's own experience. Thus, for the most part, our thoughts turn to the traditional practice of directing recruits to institutional or school programs. However, if we are to utilize all of the Federal resources available for the development of qualified health service workers, consideration must be given to the multifaceted network of pathways that are now emerging. In addition, our consideration must be directed to the fact that for many of the occupations in the health service field the training can take place either in the school or on the job or through a combination of the two.

In a period of economic progress and technological growth characterized by increasing employment and emerging skill shortages, the remaining pool of untapped manpower resources can be found in the concentrations of disadvantaged people who, for the most part, lack the education and training to match the requirements of existing or emerging jobs. Our challenge then is to motivate and recruit the disadvantaged and deprived into program activities and pathways to employment. The program elements exist and can be woven, in many combinations, into the necessary pattern to develop needed attitudes, knowledge, skills, and readiness that spell employability.

Because we must tap the unemployed and disadvantaged population by reaching out to them where they are concentrated, we are observing the growth of a new establishment—the neighborhood center—which is becoming the focal point of community action activity. Through such centers located in “ghetto” areas of our metropolitan areas, the combined efforts of agencies can be directed to carry out such activities as: outreach with indigenous workers; counseling for health, welfare, and employment services; motivation for basic education, remedial education, skill training, and retraining for upgrading; and referral to schools, rehabilitation service, Job Corps, MDTA training, Neighborhood Youth Corps, and other developmental activities.

All this is accomplished by bringing the services of traditionally “uptown” agencies to the people through the outstationing of qualified personnel to the neighborhood centers. Experience is proving that the concept works.

The following chart on “Employment and In-service Development” diagrams the variety of pathways to employment and also indicates various linkages that now exist to fashion programs geared to the needs of the individual on the one hand and to the world of work on the other. The variety of program elements are arrayed in such a manner as to avoid overlap and to provide specificity to deal with special characteristics of the various segments of the population making up the unemployed and disadvantaged group.

Through such coordination and integration of Federal program efforts, pathways now exist for the development of qualified health service workers to meet the expanding needs of a health conscious population.
VI. Panel Discussion—Summary

Following the address on “Manpower in a Service Economy” by Dr. Eli Ginzberg of Columbia University, and the address on “Health Manpower Needs and Requirements” by Dr. Philip Bonnet, president of the American Hospital Association, a panel composed of experts in their respective fields and representing a broad spectrum of professional and community interests discussed the two presentations in the light of their own experiences and special competence. The panel moderator was Mr. Jack Konecny, Assistant Director, James Connally Technical Institute, Texas A&M University.

The panelists’ contributions are summarized below:

Mr. R. M. Loughery, Administrator
Washington Hospital Center

MDTA funds are not always available in a community to organize or expand health service training.

School counselors need more realistic occupational information about the health service fields in order to provide effective guidance.

The cost of hospital training programs is borne largely by the patient. Research is needed on where and by whom training should be given and how it should be financed.

Workers are interested in future earnings as well as in beginning wages. Salary limitations affect recruitment for training and employment.

Each job must be made worthwhile so that the employee feels the service he contributes is important, regardless at what level he is working.

Hospitals could operate more economically if manpower and facilities were programed on a 7-day week basis.

Upgrading of employed workers in health service occupations is important.
Counseling for health service careers should be available in all high schools.

Better utilization should be made of part-time workers in health services. Hours should be staggered so that more women could be recruited.

Community colleges and technical institutes should offer more paramedical training curriculums.

More emphasis should be placed on the "middle level" health service worker. Mental health workers in this level are needed, too.

Salaries must be raised. Six months' training in stenotyping pays off better than 3 or 4 years of nurse training.

Health and related councils offer a good community approach to developing manpower and services.

Recruitment of high school trainees should not be based solely on I.Q.

Active advisory committees are essential to health occupations training.

In order to insure quality training programs, it is necessary to have qualified teachers. There is a shortage of health teachers with baccalaureate degrees.

Health service training programs should have adequate facilities and modern equipment.

The core curriculum seems to break down at a certain point. More research is needed in this area.

Greater use should be made of multimedia teaching aids (closed circuit television, programed instruction, etc.).

Education and training of health service workers belongs in educational institutions, with clinical facilities supplied by hospitals and other health care facilities. Close coordination by the academic and clinical facility is very important.

Selection of highly qualified applicants for health service training is important. This does not mean Phi Beta Kappas but the trainees should be qualified.

Manpower needs in the community must be identified before training programs are developed. More workers should not be trained than needed.

Some graduates of health service training programs have been underutilized, others have been overutilized. Research is needed on health manpower utilization.

Active advisory committees are essential to health occupations training.

In order to insure quality training programs, it is necessary to have qualified teachers. There is a shortage of health teachers with baccalaureate degrees.

Health service training programs should have adequate facilities and modern equipment.

The core curriculum seems to break down at a certain point. More research is needed in this area.

Greater use should be made of multimedia teaching aids (closed circuit television, programed instruction, etc.).

Education and training of health service workers belongs in educational institutions, with clinical facilities supplied by hospitals and other health care facilities. Close coordination by the academic and clinical facility is very important.

Selection of highly qualified applicants for health service training is important. This does not mean Phi Beta Kappas but the trainees should be qualified.

Manpower needs in the community must be identified before training programs are developed. More workers should not be trained than needed.

Some graduates of health service training programs have been underutilized, others have been overutilized. Research is needed on health manpower utilization.

Active advisory committees are essential to health occupations training.

In order to insure quality training programs, it is necessary to have qualified teachers. There is a shortage of health teachers with baccalaureate degrees.

Health service training programs should have adequate facilities and modern equipment.

The core curriculum seems to break down at a certain point. More research is needed in this area.

Greater use should be made of multimedia teaching aids (closed circuit television, programed instruction, etc.).

Education and training of health service workers belongs in educational institutions, with clinical facilities supplied by hospitals and other health care facilities. Close coordination by the academic and clinical facility is very important.

Selection of highly qualified applicants for health service training is important. This does not mean Phi Beta Kappas but the trainees should be qualified.

Manpower needs in the community must be identified before training programs are developed. More workers should not be trained than needed.

Some graduates of health service training programs have been underutilized, others have been overutilized. Research is needed on health manpower utilization.

Active advisory committees are essential to health occupations training.

In order to insure quality training programs, it is necessary to have qualified teachers. There is a shortage of health teachers with baccalaureate degrees.

Health service training programs should have adequate facilities and modern equipment.

The core curriculum seems to break down at a certain point. More research is needed in this area.

Greater use should be made of multimedia teaching aids (closed circuit television, programed instruction, etc.).

Education and training of health service workers belongs in educational institutions, with clinical facilities supplied by hospitals and other health care facilities. Close coordination by the academic and clinical facility is very important.

Selection of highly qualified applicants for health service training is important. This does not mean Phi Beta Kappas but the trainees should be qualified.

Manpower needs in the community must be identified before training programs are developed. More workers should not be trained than needed.

Some graduates of health service training programs have been underutilized, others have been overutilized. Research is needed on health manpower utilization.

Active advisory committees are essential to health occupations training.

In order to insure quality training programs, it is necessary to have qualified teachers. There is a shortage of health teachers with baccalaureate degrees.

Health service training programs should have adequate facilities and modern equipment.

The core curriculum seems to break down at a certain point. More research is needed in this area.

Greater use should be made of multimedia teaching aids (closed circuit television, programed instruction, etc.).

Education and training of health service workers belongs in educational institutions, with clinical facilities supplied by hospitals and other health care facilities. Close coordination by the academic and clinical facility is very important.

Selection of highly qualified applicants for health service training is important. This does not mean Phi Beta Kappas but the trainees should be qualified.

Manpower needs in the community must be identified before training programs are developed. More workers should not be trained than needed.

Some graduates of health service training programs have been underutilized, others have been overutilized. Research is needed on health manpower utilization.

Active advisory committees are essential to health occupations training.

In order to insure quality training programs, it is necessary to have qualified teachers. There is a shortage of health teachers with baccalaureate degrees.

Health service training programs should have adequate facilities and modern equipment.

The core curriculum seems to break down at a certain point. More research is needed in this area.

Greater use should be made of multimedia teaching aids (closed circuit television, programed instruction, etc.).

Education and training of health service workers belongs in educational institutions, with clinical facilities supplied by hospitals and other health care facilities. Close coordination by the academic and clinical facility is very important.

Selection of highly qualified applicants for health service training is important. This does not mean Phi Beta Kappas but the trainees should be qualified.

Manpower needs in the community must be identified before training programs are developed. More workers should not be trained than needed.

Some graduates of health service training programs have been underutilized, others have been overutilized. Research is needed on health manpower utilization.

Active advisory committees are essential to health occupations training.

In order to insure quality training programs, it is necessary to have qualified teachers. There is a shortage of health teachers with baccalaureate degrees.

Health service training programs should have adequate facilities and modern equipment.

The core curriculum seems to break down at a certain point. More research is needed in this area.

Greater use should be made of multimedia teaching aids (closed circuit television, programed instruction, etc.).

Education and training of health service workers belongs in educational institutions, with clinical facilities supplied by hospitals and other health care facilities. Close coordination by the academic and clinical facility is very important.

Selection of highly qualified applicants for health service training is important. This does not mean Phi Beta Kappas but the trainees should be qualified.

Manpower needs in the community must be identified before training programs are developed. More workers should not be trained than needed.

Some graduates of health service training programs have been underutilized, others have been overutilized. Research is needed on health manpower utilization.
sources can be a disservice to the community if they are channeled into the wrong program.

Working conditions and the social and economic status of health service workers must be improved. Employee dissatisfaction will not help recruitment.

Training programs in the nursing field should take into account changes in organizational structures, shifts in nursing functions, etc.

Training programs in economically depressed areas have many problems stemming from poor facilities, poor student selection, poor faculty, etc. The nursing profession is particularly concerned about training programs in areas where placement is not available; programs which do not adequately prepare trainees for employment; and the imbalance of auxiliary workers, licensed practical nurses, and registered nurses.

Dr. Walter J. Pelton
Professor of Dentistry
University of Alabama

Accreditation of paramedical training programs should be the responsibility of the peer groups. However, these groups should organize and coordinate their accrediting activities so that the respective programs in an educational institution can be evaluated for accreditation at the same time.

Upward mobility might be increased by encouraging accrediting agencies and educational institutions to allow some credit for training on one level toward requirements of a higher level program, e.g., credit for dental assistant training toward completion requirements of dental hygiene training or even toward a 4-year course in dentistry.

Not enough is being done to train professionals to use subprofessionals. Experience in the dental field has shown that such use of subprofessionals actually improves the quality of dental care. In 1956 the Division of Dental Manpower Resources in the U.S. Public Health Service began a program to encourage and assist dental schools to train dental students in the utilization of dental assistants, and all but one dental school is now providing such training with the help of a Federal granting program. Unfortunately, however, funds have not been available to expand this professional training program as it should be expanded.

The foregoing program to stretch professional manpower through the greater use of auxiliaries has created a demand for more training programs for dental assistants, especially, as well as for dental hygienists and dental laboratory technicians. Financing construction of training facilities for such people seems to exist in current post-high school and junior college planning and construction programs. The void seems to be in the leadership of the dental profession on the local level to get the job done.

Hospital employees at all levels ought to have medical and dental services readily available to them. More complete health services, including dentistry, for trainees and employees of medical centers could be provided as a fringe benefit. Indeed, few dental schools and probably no medical schools require a healthy mouth as a condition for enrollment or departure from those respective institutions.

The program for the construction of medical and dental schools is not adequate and is not moving fast enough.

Dr. A. X. Taylor, Associate Secretary
Council on Medical Education
American Medical Association

The problems of health manpower are chronic in nature. The demand most always outstrips the supply.

Many military corpsmen return to civilian life each year but most of them go into other areas of work and are lost to the health field. Government and the health service industry should find a way to tap this valuable source of trained health manpower.

The primary problem is not to create 10,000 jobs a month (the jobs are already available) but to train people to fill these jobs. The time lag in training is a critical factor in meeting health manpower needs.

The supply of health service workers must not be expanded willy-nilly. Workers must be able to perform competently and safely. The public must be assured that those involved in direct health care are qualified.

Before a training program for a particular occupation can be developed, it is necessary to know what the workers in that occupation will have to do. Duties and functions must be analyzed in
terms of present and projected job requirements. People should not be locked into jobs without an opportunity for advancement. Workers in lower level jobs who are willing to learn should have a chance to move up.

Health service training should be a joint responsibility of educational institutions (community colleges and vocational high schools) and health care facilities. The logical accreditors of education and training programs for health fields are the professions most directly concerned and knowledgeable about the respective fields.
VII. Table Discussions—Digest

The Conference, which opened with broad presentations on health manpower, moved rapidly to areas of concern at the local level in developing jobs and training for workers in health services. Twenty-two simultaneous discussion groups considered seven questions pertaining to some of the practical aspects of expanding the supply of qualified auxiliary health workers. The following is a digest of the varied responses to the questions, and indicates the broad range of participant opinion:

QUESTION 1: How can a determination or estimate be made of the number of people who should be trained for health and related occupations, by category, within a community? Within a geographical area?

1. Use resources of the public employment office.
2. Make a survey of employers (hospitals, nursing homes, practitioners, etc.) to determine needs.
3. Consult professional planners.
4. Conduct needs survey based on 5-year projections.
5. Contact supervisors for information about personnel needs.
6. Establish an advisory committee whose duties would include the planning and execution of a continuing study of training needs.
7. Request local and/or State hospital associations, hospital councils, medical society, dental society, laboratory groups, and other organizations to estimate the number of people who should be trained for their respective fields.
8. Design surveys that take into account the utilization of health service workers—the changing functions of workers in each category.
9. Develop standard nomenclature and job analyses in order to make realistic determinations of training needs.
10. Make and maintain a continuing inventory of shortages.
11. Include new and emerging health occupations in surveys of manpower and training needs.
12. Use available data from studies conducted by various health organizations in community or area.
13. Enlist cooperation of local public health officer in determining needs.

QUESTION 2: What are the different target populations from which recruits can be sought to fill skilled and semiskilled jobs in health and related service occupations?

1. Total population.
2. Unemployed and underemployed workers.
3. Disadvantaged persons.
4. The handicapped.
5. Former armed forces personnel.
TABLE DISCUSSION GROUPS IN SESSION

Married women who are planning to reenter the job market.
School dropouts or potential dropouts.
High school graduates.
Currently employed hospital workers to train for higher level jobs.
Minority group members.
Inactive health workers, for full- or part-time work.
Men for positions traditionally held by women.
Disemployed workers—those displaced by automation.
Noncollege bound youth.
Socially oriented people on all levels.
Retired workers.

QUESTION 3: How can the image of personal and custodial service positions in the health service field be improved?

- Raise wages.

- Adopt attractive uniforms for each category of worker.
- Improve fringe benefits, working conditions.
- Provide opportunities for advanced training and promotion.
- Develop a respect for the role of each employee.
- Stress dignity of each job and importance of each worker.
- Discontinue use of term, "personal and custodial service position."
- Institute programs of rewards, recognizing all levels of work.
- Develop job titles that carry status.
- Use appropriate title (Mr., Mrs., Miss) for all workers, regardless of level of work.
- Provide continuing in-service training programs for auxiliary health and supportive workers.
- Create job ladders and opportunities for open end progression.
- Provide better job satisfaction and security.
through the development of written job descriptions for all workers. Develop a greater acceptance, by higher level workers, of lower level personnel. Improve supervision.

Promote the “team” concept.

Stimulate the organization of membership societies for auxiliary workers.

Require formal training.

QUESTION 4: How can training programs be kept current with the changing functions and responsibilities of health service workers?

Evaluate training programs continuously, including followup of trainees (utilization, performance, etc.).

Revise training courses to reflect changing functions and responsibilities.

Organize new courses to meet changing needs.

Utilize advisory committees to determine necessary changes in training programs (employing agencies, educational institutions, practitioners, community leaders).

Recognize trends in job dilution and effect on job and training requirements.

Facilitate the initiation of curriculum changes.

Consult workers to determine what they see as changes in function, in addition to consulting employers, professional groups, etc.

Develop flexible attitudes toward change on part of instructional staff.

Consider new or changing functions and responsibilities of auxiliary health workers in all inservice training programs.

Promote and maintain good communications between and among employers, educators, professional organizations, employee groups.

Conduct continuing research on changing functions and responsibilities of health service workers and use findings to strengthen training.

Encourage instructors of health occupations training programs to work in the occupation periodi-
cally (summer or part-time) in order to keep up with the latest advances.

Develop job descriptions for each level and classification.

QUESTION 5: How can professional integrity be maintained along with a flexibility to create new positions?

Analyze new positions according to the standards of the profession, regardless of current legislation.

Set up safeguards to prevent lowering of standards.

Recognize that adaptation to change is a professional responsibility.

Analyze the job to determine which parts are essentially "professional" and can not be delegated; and which are "nonprofessional" and can be used to formulate new positions.

Strengthen skills of upper level workers by escalating the duties of less technical personnel.

Create new jobs only after careful planning.

Make provision in professional curricula for training in the development and utilization of new groups of supportive personnel.

Define the role of the professional and its implications for development of new positions.

Delineate the various levels involved in the profession.

Extend professional pride to all levels so that new positions can be created without the feeling of being "crowded out" or standards being "watered down."

Define and evaluate the job to be done, on a continuing basis.

Establish and maintain good communications between all groups concerned.

QUESTION 6: How can training and employment opportunities for health and related service workers be expanded for older persons (mature women, retired workers, etc.)?

Change employers' attitudes and hiring practices in relation to older workers.

Recognize value of previous employment and life experience.

Identify positions which are suitable for older workers.

Provide part-time job opportunities for older workers whose earnings are limited under Social Security.

Arrange flexible hours and schedules to meet training and employment needs of older workers.

Orient employers and educators to the benefits of training and utilizing older workers.

Recruit and screen older workers on the basis of individual abilities and potential, not as a group.

Reexamine the generally accepted economic deterrents to employing older workers (insurance costs, pension plans, accident and absenteeism rates) to see if they are completely valid and/or insurmountable.

Provide refresher courses for workers who have been out of the field for some time.

Establish standards for employment of older workers as a safeguard.

Provide scholarships for training.

QUESTION 7: What is the responsibility of professional associations and unions in developing jobs and training opportunities for workers in health and related service occupations?

Establish standards for training.

Conduct surveys.

Improve wages and working conditions.

Determine functions of workers in health and related service occupations.

Provide scholarships for upgrading skills of low-paid, low-skill workers.

Take leadership in developing job and training opportunities.

Undertake joint research studies.

Develop and conduct upgrading programs.

Develop job descriptions.

Maintain close liaison between professional associations and unions.

Work closely with employers and educators.
VIII. Work Group Discussions—Summary

SUMMARY OF COMMUNITY TRAINING EXPERIENCES

ELEANOR N. McGUIRE, Coordinator, Health Careers Program,
National Health Council

In yesterday morning's eight work groups, we discussed our various experiences in developing programs for training health workers—what approaches have been used in communities for the training of health workers at less than the baccalaureate level.

One of the techniques most commonly found in the development of such programs in the community begins with the appointment of an advisory committee. Advisory committees are of two types. One type is broadly representative of all the community agencies involved, including the consumer, employers, professional supervisors, and, where possible, representatives of the technical level itself. This committee does the broad area planning necessary prior to the determination of where health workers are needed, how they are to be taught, and how many. A second type of advisory committee may include faculty representatives of the profession responsible for the supervision of the curriculum content so that the program will be acceptable in other communities on a national basis. There may be representatives on this second type of advisory committee of all the community facilities that will either utilize the employee or be utilized by the employee as part of the training program. Representatives of types of future employers may also be found on this committee.

The advantages of such advisory committees are not only to prepare the public and the facility to produce needed health workers, but to educate the professional in the proper supervision and utilization of such workers supporting health workers. Thus the professional worker may be educated to delegate some of the chores that cut into his efficiency. It was pointed out that not only through the local advisory committees is this educating of professionals carried on, but that a responsibility rested in the national professional health organizations to do an “intraprofessional” education program which would make the practitioners in the field aware of the new supporting members and of their role and responsibilities in helping to meet the health needs of the public.

In addition to the establishment of advisory committees as a method for community development of programs to train needed health workers, there is a second approach which may originate with the professional himself who is completely snowed under with work, and who recognizes and pleads for assistance of supporting, less-professionally-trained personnel. Because of his recognition of the need for such health workers by the professional, the training possibility is brought to the attention of the employer. The employer and the professional together may thereupon identify what level of training is needed, and then may as a team approach the educational area. Frequently, it is the employer himself who
recognizes that his program could be more effectively and efficiently conducted if he had some less-than-baccalaureate-level workers on his staff. A third approach to the recognition of the need to train health workers may come from a community planning group which is charged with the responsibility for specifically identifying community needs. And one of these needs may be for the less-than-baccalaureate-level health worker. Still another beginning for training programs for health workers may come from educational institutions because of the interest of parents or counselors or students themselves in a specific health area. The school may then take the initiative, go to the employer or the professional group, try to ascertain whether there may not be an employment market for such supporting of health personnel, and if there is, set up a proper training program for the students.

The problems and successes were indicated as generalities throughout the eight group reports. I will try to give you the highlights, although the task is difficult, since in the time allotted we were very humanly and typically delighted to have somebody share and listen to our problems, even if not to find solutions.

I think the one problem that was most universally mentioned in the eight work groups was the problem of selection of candidates for training. It was often the problem not only of not having candidates available, but of not having the right candidates referred for training. This was particularly true in those areas which received MDTA financial support.

There was a strong feeling that there needed to be a closer working relationship between those involved in training at the local level, and the staffs of the State Employment Service. The selection of the student must be the responsibility of those conducting the program. However, we at the local level cannot maintain such an adamantly positive attitude. We have not in many cases been quite fair to the Employment Service. We often have not given the USES job descriptions or job outlines. We have often neglected to analyze or transmit to the Service the personality traits we thought desirable, or other basic requirements in the worker who is to be admitted to the health training programs under MDTA.

There has to be, on the other hand, a recognition by the U.S. Employment Service that although we at the local level and in health organizations are sympathetic to programs to reduce unemployment, and to educate the uneducated, it is not within health services that all of these people will find their future. It was felt that those of us in the health field must maintain set standards for trained personnel and for educational programs. We must explain this stand and gain the cooperation of persons knowledgeable and of influence in the community since they can frequently help us obtain the proper candidates for our programs.

The second problem that seemed quite common was the absence of specific job standards, job descriptions, and job requirements identified and published prior to any project description. Frequently, there is duplication of testing of the candidates who are referred and accepted into a training program. This goes back to the first problem—the selection of candidates.

The third problem mentioned frequently was the lack of qualified instructors at the technological level in the training programs. Often such instructors have neither the educational background, the certification, or the licensure required of those who teach in a regular school system.

There is a need for all of us involved in such training of health personnel at the pre-baccalaureate level to sit down with those contacts in a specific field at our own State education level concerned and involved in these problems, and discuss their possible solution. It will not be a question of asking them to lower standards any more than we would lower ours, but rather how we can meet the educational requirements of the projects we are proposing and still meet the requirements for certification and licensure.

One of the major points made here was that we must begin to think of methods to elevate the standards for those people going into technical and vocational education so that they may meet the high standards set by general school educators.

The recruitment of health workers was another problem discussed. Recruitment is frequently influenced by the tremendous turnover problem. Some of the factors that increase the turnover rate include: (1) the wage scales offered in competition with other areas of the community; (2) lack of job satisfaction (which the work group members felt stems from lack of good supervision, lack of good guidance, and lack of reasonable expectation of job performance); (3) lack of a feeling of security in their job role.
There was a great deal of discussion of the need to do something about educational opportunities for those technical and vocational personnel who are going to have even the most minor responsibilities for supervision. Supervision at the technical level of training is equally as important as at the professional level.

Another common problem identified was the frequent lack of coordinated community planning, with the resultant duplication of programs, unnecessary competition for students, poor utilization of staff, and poor utilization of existing teachers and supervisors. It was believed that much needs to be done on a community level to coordinate programs and to work jointly not only to meet the needs of specific projects in schools or organizations but to meet the demands of the public.

The need for more information about Federally supported training programs was expressed, largely the result of the enlightenment of the conference by Dr. Walsh's presentation on Wednesday, of the intricacies of Federal financial support and programs.

Although the complexity of Federal financing frequently causes frustration and delay, it is generally the result of lack of understanding or misinterpretation of the Federal programs. This was found not only by us poor non-Federal workers in the field, but frequently it was found in our contacts at State levels. Often the department in a State was aware of the specific programs within its Federal counterpart, but was not aware of the implication for itself in other departments in the State or in other Federal agencies. Therefore we think what we are looking for is somebody we can call and say "Big Brother, where can we go to find money we need for a project we've got?" And have somebody say, "Well, you write to Jo Blow and this is his address."

This ignorance is the real problem as far as our State relationships are concerned. However, it was found in the work groups that the lack of "clearing house" information channels was true also of the regional representatives of the Federal offices who visit our local communities. They are pounced on by people who are sure the representative knows the answer; he generally knows only that "there is something back in Washington" but he too is not quite sure to whom one writes for definitive information.

It is really a serious problem for those of us in the field who are trying to utilize the resources available to us at the regional and the State and the Federal levels. There was in addition to lack of information on sources of support, a great lack of understanding of the procedures to be followed. Procedures varied from Federal Department to Federal Department, and the variations were not always made clear in advance of application, thus causing confusion and delay.

The lack of communication among the various groups at the State and local level when it comes to regional planning, was identified also as a problem that has been haunting us in our efforts to plan local programs. Frequently there may be a regional setup within a geographic area in which a local program is planned. Just at the point where they are applying for Federal or State funds and where both are recruiting for the program, it is discovered that just 20 miles away there is another community that already has an ongoing program, is in dire need of students and has the staff. There was no interrelationship between these two communities.

Another question we were asked to discuss was what type of agencies were involved in the development of training programs. This area of discussion did not identify any standards for agencies represented in training programs, nor in the preplanning, operation, or follow-through on any project, except to emphasize that the broadest possible representation was necessary, and that organization must be flexible. In the preplanning of a project, and in the conduct of the project itself, only those agencies which had a direct responsibility for the project from its development to its completion should be included, according to the work groups.

The next question discussed at great length was recruitment. It was the consensus that students should be sought in all areas which offered potential personnel who could meet the criteria established and the demands of the job performance. Facilities available in the community should be utilized which meet the objectives of an educational program geared to produce workers capable of performing the duties outlined in a given job description. Close cooperation is necessary between interested agencies and their staff and the staff and the program in educational training courses. As most of you know, funds are available for the rental of facilities if and where necessary. However, in at least one of the
groups, the problem of no available facilities for rent was brought up, a lack which hampered the training project.

The question of funding was then discussed. Many programs presented by the discussants had been funded by various Federal agencies. Problems encountered in the initial grant were generally worked out in the succeeding years, or in the second or third parts of the project. A problem met in all the projects was the funding for development phases of the projects, and the preplanning stage prior to approval. One aspect of the problem that should be considered by the Federal Government was the lack of money; and a second thing was the hidden cost of developing these programs in the education of the professional personnel to provide the necessary services and to assure the proper utilization of these supporting groups.

It was made clear in discussion that prior to submission of a plan to the Federal Government, an evaluation process should be built into the project, as well as a clear, realistic and well supported presentation.

I will mention here a few of the unique ongoing programs reported by discussion leaders. If I omit some that deserve mentioning, I hope I will be forgiven.

In various discussion leaders' reports, mention was made of a program for the certification of the occupational therapy assistants—a 20-week program. There are 11 such programs of training in operation in the United States, I assume under Federal funding. I believe it is under the VRA. There was a report on a homemaker and nursing aides program in one city. Unfortunately in this city there are three separate agencies under three separate Federal Government grants which are training the same level of health worker. The agencies do cooperate, but they do not coordinate their programs. Another new program reported was in training medical assistants. It was a demonstration project with four students at present. Several cooperative programs in several groups were reported—cooperative programs between groups and boards of education at a high school level, usually at the 11th- or 12th-grade level. The local health community facilities are used. These projects provide an introduction for health career opportunities to young high school students and attempt to educate the students toward any type of employment after high school. In several groups there was discussion of programs being developed in junior colleges in the health field, on a cooperative basis between the professions and educators. These projects at junior college level help to set standards for content, facilities for affiliation, and educational and other requirements for the students in order for them to be accepted into the health training programs.
SUMMARY OF ANSWERS TO NINE SPECIFIC QUESTIONS

MATTHEW McNULTY, Jr., General Director of the University of Alabama Hospitals and Clinics

This morning anything either Eleanor McGuire or I missed and may miss in the work group reports, results from our own concentration on our own areas of interest and exposure in education. As an operating hospital official in the area of health, I would say the obvious—that central to the delivery of health services is the urgent and critical need (and any other adjectives or adverbs one would have) for manpower. Among the institutions concerned with the delivery of health services I would include hospitals, extended health care institutions, long-term health care institutions, and other special health-care institutions. "Manpower" covers every type of discipline that works in the delivery of health services, which in turn means all sorts of educational activities. Coming from a hospital background, I may say "hospital" and "hospital personnel" when actually I mean all types of institutions and all types of persons involved in the delivery of health services.

I will present the results of the work group discussions according to the nine specific questions asked of the conferees and discussed by them. This method of presentation is based on the consensus of the eight work groups.

Two ideas which were pertinent to every discussion I shall merely mention here, since they were presented so forcefully yesterday; namely remuneration (by Dr. Ginzberg) and quality (by Dr. Bonnet). Dr. Ginzberg indicated that recruitment is fine, education is fine, all other elements are fine, but when you get the workers in the vineyard they’re going to work there only if the pennies they receive, to use the Biblical analogy, equate to the pennies that are appropriate to that type of work in various areas of the country. I shall say nothing about quality first, because we all take for granted the fact of quality, and second, Dr. Bonnet highlighted that aspect of health services so well that anything more would be redundant. But these two themes—remuneration and quality—run through all the discussions. It was agreed that there was need for an adequate, or if you will, effective personnel management program in every area involving health workers. This personnel program would go all the way from remuneration, to counseling, retirement, and all the other important elements of life.

QUESTION 1: Where does the initiative lie in the local community for promoting effective training programs?

The conclusion seems to be that the initiative could lie anywhere with anybody, but that it was more likely to be exercised by vested interest groups. I use the words “vested interest” here in the finest sense, meaning those groups such as hospitals and nursing homes that have a responsibility for the delivery of health services; groups such as the chamber of commerce, that have commercial and economic interests; and those groups in the community, similar to health councils, that have a conscience, a specific concern, for the health care of the community. What is required is good
hard work of local committees, with participation by the many diverse people who have a “vested” interest in starting necessary training programs for health workers, and insuring that they are sustained.

The likely flow of action is from employers, to educators, to establishment of new training programs. In any case, however, planning should arrive, ultimately, at comprehensive community participation. In this connection, note was taken of the fact that local Manpower Advisory Councils are developing in many communities. Such already exist at regional levels, and there is a National Manpower Advisory Committee. In view of the importance of the need for developing health service manpower, it was suggested that the growing number of advisory committees at all levels include representation from the health service industry. There was general agreement that the role of the Federal Government as stimulator was being recognized and welcomed, and the Federal assistance was useful in planning. Federal support would be more effective, however, if it could work with a representative local group, planning comprehensively for a given community.

**QUESTION 2:** What can be done to move auxiliary health workers into higher level jobs in their respective occupations?

One of the words that has become common in the corridors and in our meetings here is the word “ladder”—meaning the ladder of progression for employment and education. There was general agreement that there should be available to every health worker specific rungs in the ladder of his occupation that he or she can climb to better remuneration and more rewarding work. The realisms were faced that constant upward mobility was not possible for everybody. But individuals should have the opportunity, in the best American tradition, to move upward if they were so motivated and able. There is a too frequent loss of health personnel who come to believe that they are locked in dead-end positions.

A variety of suggestions were given in the discussion on how upward mobility might be accomplished. Some participants suggested the development of equivalency examinations to permit people to move up to the next rung, without taking course work. Another suggestion was to develop “core curricula” to span several different occupations. Within this there could be provided various stopping-off places. If a person wished to advance further at a later time, he would not have to start over at the beginning.

It was acknowledged that getting credit for associate arts degrees toward more advanced work was sometimes hard to do. Certification and licensing boards were sometimes refractory on this. Much coordination will have to be done between such boards and educational institutions.

In order to get more ease and convenience in training for upgrading those already employed, courses would have to be geared to the changing work schedules and work shifts of people, particularly of hospital personnel.

It was suggested that scholarships or other financial aid be made available at all levels, to aid individuals who wished to advance in skill and position.

Some participants believed that supervisory groups needed to be stabilized in order to stimulate upward mobility and carry it through. There was alleged to be too much turnover at the supervisory level. In this connection, it was noted that the time had come to restructure jobs, and that for this, it was necessary to have some fundamental time-and-skill-utilization studies done.

**QUESTION 3:** What are some effective methods of selecting trainees for health occupations?

It was acknowledged that there is a necessity to recruit actively, in order to get sufficient manpower for the health occupations. Such recruitment should begin in the high school, with a strengthening of the guidance and counseling programs for the health services. Employers might also expand the development of work experience projects in the health services for youth, and become more acquainted with the resources of the U.S. Employment Service.

Fundamental to all recruitment and selection, however, is the establishment of clear job analysis, a specific job content, and a determination of the minimum standards for any given job. From that, one can devise all kinds of psychological testing, dexterity testing, language testing—both reception and articulation—and so on through whatever else is required.

Participants also noted that at present the professional positions in the health field tend to be overstructured, and the supportive or less than professional positions understructured. Also, in
the supportive areas particularly, the generally low wage-scales are a major hindrance to recruitment.

QUESTION 4: What can be done to train workers in areas which do not have junior colleges and community colleges?

A variety of suggestions were offered in answer to this question. These included: the establishment of technical training institutes attached to the vocational sections of high schools or of area technical schools; the transportation of trainees from outlying areas to the centrally located schools; and the greater use of either open or closed circuit television.

It was also suggested that, in areas of need, multioccupational skill centers for health occupations only, be developed under MDTA.

To the conferees, all these suggestions seemed to entail more regional planning in those areas not well served by existing educational institutions in the health service fields.

QUESTION 5: How may inactive professional nurses and other workers be attracted in greater numbers to re-entry into health service through MDTA refresher and reorientation courses?

Basic to an answer to this question is the identification of the “inactive” people. Just who are they, how many are there, where are they, and how many want to come back into the health services? What needs of the “inactives” have to be met to get them back? Some women might well come back into the field if their family needs could be accommodated. It was suggested that some system of part-time training and part-time work, particularly, would attract a greater number of returnees, especially women.

Again the subject of low salary scales and inadequate working conditions were cited as hurdles to overcome in recruitment.

Nevertheless, some successful efforts to reach such persons were reported in the group discussions. Employers were to be encouraged to do more to develop techniques for reaching out to such former workers in health occupations, and to accommodate to their needs.

QUESTION 6: What are the elements of a good on-the-job training program for health service workers?

The usual elements of education were explored—qualified faculty, quality curricula, good facilities, and proper supervision. Most emphasis was given to a qualified faculty. The American Hospital Association, under Federal grant, has developed guides for training instructors and for qualifying supervisors. It may be necessary to establish special manpower courses and training for such supervisors and instructors. That is, some individuals may be good workers or technicians in their personal work, but lack a teaching expertise in communicating their knowledge to others.

Also emphasized were good clinical facilities, adequate compensation during training, and a well-defined job analysis so that trainees know for what they are training.

It was pointed out that theory should be integrated with work, whenever the need for theory arises. Theory should not be given abstractly or in a situation unrelated to, or before, on-the-job training.

QUESTION 7: How can more instructors and supervisors be trained now and in the future?

This question was a real challenge, and generous discussion surrounded each item of a grocery list of elements that conferees thought were necessary to attract an adequate faculty.

The list starts with sympathy and interest. It includes identification of where one can find prospective teacher material. There must be the recruitment of such persons into a healthy ongoing educational environment which is rewarding and productive. There may be a necessity to give scholarships, fellowships, or other incentives to individuals who may have been away from teaching for some time. Again the subject came up of instituting manpower training courses for instructors and supervisors.

A controversy over the certification of instructors arose. Some conferees believed it would be possible to contract for educational services and get around certification requirements in that fashion. Some questioned whether all technical instructors needed degrees from institutions of higher learning. Many present believed that from a practical point of view, not all instructors needed a degree, but that from the standpoint of status in their fields, it might be necessary.

It is safe to conclude that this is a particularly knotty and challenging problem in the development of health service manpower.
QUESTION 8: What do we need in the way of research in meeting needs of job development in health occupations?

One type of research need that was identified was the pragmatic, empirical, get-on-with-the-job-of educating- and training-more-health-workers type of research. It is largely one of research into presentation, into educational techniques, materials, and methods.

A second research need that was identified might be called more theoretical. For what, for how many, for what different elements of quality, and for what knowledges, are we to train and educate health workers? And where should this education and training be done? Is this a junior college function, a community college function, a hospital function, a vocational or secondary education function in a school system, or a separate institutional function? What elements of society are best equipped to do this, not in terms of jurisdiction, but in terms of preparation? Can we concentrate on those training elements, not to the exclusion of others, but in order to emphasize certain institutions because of their greater potential for productivity?

Another important area of investigation cited was just how this training should be financed. Is the expense of training health personnel in a hospital situation a fair charge to the patient, or should it be spread over a broad base of taxation?

More evaluation of on-going programs and of research should be done. Evaluation should be more than a narrative of what took place. It should note what took place and why, in the various models that can be set up, tested, and expanded.

QUESTION 9: What can be done to implement this Conference—by the Government, by the participants, by others?

The Government can try to disseminate information more widely, and to elaborate, elucidate, and clarify even more than it does now, the opportunities that are available for job training and development of health workers as a result of Congressional action and executive implementation. The Government can also be helpful in initiating regional and State conferences similar to this National Conference.

The participants in this Conference might both stimulate their own organizations to consider the suggestions of the Conference for opening more training and job opportunities, and assume a leadership role in their local communities in job development and training activities for health service workers.

The aid of many other persons and organizations, in addition to those represented in this Conference, must be enlisted. The average citizen, if you will, does not understand the manpower shortage in the health occupations. Various voluntary fund agencies, civic clubs, ladies' groups, churches—all of the elements of our society who help mount campaigns and arrive at effective objectives in any community—must be enlisted in the effort to implement the purposes of this Conference, namely, job development and training for workers in health services and related occupations.

Let me conclude on this note. If there is a discipline, or an organization that entered into the discussion which I omitted to mention, that is my error only. If I omitted any particular subject matter which was reported by some work group, it was not intentional. Let me suggest that if there is any point that was not touched upon, which a conferee thinks needs to be brought into the open and discussed at a later time, or on which he or she may have some cogent recommendations, a written statement on the matter to the Conference Coordinator is a very effective mechanism open to all of us.
IX. Closing Session—Addresses

MOBILIZING OUR RESOURCES FOR HEALTH SERVICES


This Conference is the latest in an impressive series of events recognizing the importance of health manpower. Other meetings, publications, legislative actions and administrative decisions have preceded it. And more will surely follow. Each one moves us forward as it adds to our understanding and consolidates our efforts.

In considering what I might be able to contribute on this fourth day of your intensive sessions, I decided that I could most appropriately talk to you as a member of the rather small group which administers the enormous health services industry—in short, as a physician.

More and more, the physician is functioning as a manager—a job for which he is not specifically prepared, either by training or by tradition. Typically, he used to be a soloist. At most he was the director of a small, compact team in which each individual’s role was clearly delineated. Today he must direct the efforts and energies of a growing number and variety of health workers.

The pivotal role of the physician is easily demonstrated. If he does not send samples to the laboratory, there is no need for the technician. His prescriptions set the pharmacist in motion, his directives send nurses and aides on their appointed rounds, his decisions open hospital doors to the patient. The surgeon performing a complicated operation may have 100 people representing literally dozens of special skills under his direct or indirect command.

But it is not my purpose here to glorify the role of the physician. One point I wish to emphasize is that as the managerial function of the physician increases, so does his dependence upon others. If he is to succeed in his task, for which he has spent a quarter of a century in educational preparation, each member of his corps of supporters must perform to specifications. Their skills must interlock in the right way at the right time. And the highest possible wager—human life—is riding on the outcome.

Thus the training of supportive health workers is of much more than academic interest to the physician. He stakes his professional life on their competence every day. As medicine advances in complexity, his dependence cannot possibly diminish; it can only increase.

The magnitude of the training challenge is enormous in quantitative terms. Today in medicine, dentistry, nursing, and the other health professions there are perceived needs for over 500,000 additional workers—numbers far greater than the national training capacity. This means that two things must be done. First, we must augment and make the best possible use of programs and facilities for training professional health workers. Second, we must give greatly increased effort to
the analysis of health service functions, to the development of meaningful technician and assistant groups, and to the development and support of training programs which will prepare people to work together much more effectively.

The number of workers in the health occupations increased at a rate of 3 percent a year between the 1950 and the 1960 census. If this rate is continuing, the totals will increase from about 2.4 million this year to some 3.3 million 10 years from now.

The health service industry, as you know, has many workers other than those in the health occupations. The number of these has grown even faster. Thus, while those in the health occupations have been increasing at an annual rate of 3 percent, the number in the health service industry has been increasing at a rate of about 4 percent. If growth should continue at between 3 and 4 percent we would add between 1 and 1.5 million health service workers in the next 10 years.

But there is also a qualitative component to the training problem. In meeting the overwhelming challenge of numbers we cannot neglect quality of preparation. The cost of carelessness or error is too great. The price of ineptitude is not only the loss of somebody's job but perhaps the loss of somebody else's life. We must do more than turn out a million health workers in 10 years. We must turn out a million good ones.

Moreover, almost none of these people can be successfully trained in isolation from the health complex of which they will become a part. Teamwork in medicine is not an assembly-line kind of teamwork where each man tightens his particular bolt, more or less irrespective of what happens before and after. Skills don't just touch each other; they are interwoven. A good nurse's aide is constantly growing in her understanding of the nurse's job. A good nurse develops many of the capabilities of the physician.

In fact, many of the barriers that now exist at strategic locations along the many roads of health service are arbitrary. They were placed by the traditions of another era. They are maintained by a kind of thinking more appropriate to a guild of the middle ages than to a modern profession. I have spoken before about the need for career ladders in the health professions. I think this need extends through the subprofessional levels as well, and crosses that no-man's-land where the prefix "sub" is tacked onto the word "professional." I might add parenthetically that we ought to find a better word than that patronizing term "subprofessional"—a word that is used only by professionals.

Our aim, clearly, is not just to recruit and retain bodies. We want to challenge the people with promise, at every entrance level. For many bright young men and women who might join the health enterprise after leaving high school, the road to a medical degree would seem impossibly long. But there is no reason for us to train them in such a way that we put a heavy lid on their aspirations.

Today, in order to advance upward in the health disciplines, it is generally necessary to go back to the beginning and start over. Academic credits acquired in pursuit of one occupational goal rarely count toward a higher goal, and work experience is generally undervalued. This is extremely discouraging to the individual. It is also extremely wasteful of talent that will always be in short supply. The guild system is a luxury we cannot afford.

Obviously there is no single answer to the problem of providing health manpower to meet the demand of the future. You have been discussing many courses of action already underway, under many sponsorships, designed to meet many separate needs. This is a healthy condition. It would become unhealthy only if each separate course of action should become, in turn, a new self-contained compartment to be buttressed and defended, building a new set of rigidities into a system that is desperately in need of the fluid and flexible.

This will not happen if the schools and institutions carrying out the training, and the agencies to which they turn for support, keep their eyes firmly fixed on the purpose of the whole endeavor—the provision of better health services for more people. All these separate channels must converge upon health care. By the same token someone must keep track of the changing and growing manpower resource. Someone needs to be able to say, authoritatively, which channels are overflowing and what new courses must be developed.

And here, of course, the primary burden rests squarely upon the health professions themselves. We must furnish the answers to the basic questions: What kinds of training? For how many? And finally, after training, what? How shall we make use of the outpouring of human talent and energy that these training programs will generate?
How can we best mobilize this growing resource and direct it toward the health needs of the people we serve?

These are sticky questions. At the outset we have to admit that we have not been overwhelmingly successful in using the talent we already have. Medical research has been quick to catch the accelerating tempo of our times. By comparison, medical practice has been slow. We are barely beginning to exploit the potential of automation. The organizational patterns of health service are not yet generally adapted to the widespread delivery of the right care to the right patient at the right time. We have not yet mastered the effective employment of specialization. We are just starting to pass through the managerial revolution that has reshaped industry and science.

There are, however, many hopeful signs. Routine chores are increasingly delegated to assistants. Computers are being allowed to do the things they can do faster and better than people. I believe the day is rapidly approaching when health professionals and their associates will be using their highest skills far more efficiently in behalf of their patients.

And yet, even when that day arrives, some questions will remain to be answered. The abstract problem of applying health manpower to health need is at root a human problem and must be considered in human terms. I should like to conclude by tossing out to you a couple of these human problems for which I have no handy solution. The problems are cast in terms of health professionals—nurses and physicians—but they are similarly applicable to other health disciplines.

Consider, first, the classic dilemma of the nursing profession. It is axiomatic that for every professional nurse actually in practice, several have fallen by the wayside—either because they did not finish school or because they entered the profession and subsequently left it for marriage and a family. The mystery is not why the nurses leave, but why the profession has not accommodated itself to the natural and inevitable.

As I said, I have no pat solution. But it seems to me that there must be ways whereby a nurse can be married and raise a family without being irrevocably lost to her profession.

I have the impression, for example, that maternity leave provisions in most health enterprises are far less liberal than those in industry and government. I am not aware of any systematic provision of refresher courses for nurses who would like to return to the profession after a few years’ absence. I don’t know of many institutions in which a nurse can practice a few hours a day, or a couple of days a week, to contribute her much-needed skills at times which do not conflict with her family responsibilities.

I have heard one serious proposal to build a large and attractive apartment house next to a hospital, specifically designed for nurses and their families, with day nursery services for young children and other features that would help overcome the many minor hardships that now discourage the married woman from practicing her profession. Whether or not this becomes a reality, it represents creative thinking in the right direction. We need more of it.

My second problem in search of a solution concerns a young physician who, after about 25 years of education, is ready to finish the last year of his internal medicine residency and set up practice. What are the chances that he will locate where his skills are needed most, and how can those chances be influenced in favor of applying talent to need?

We talk glibly about equal access to health services as a major goal for the future. But health professionals are human beings. They want to locate where the money is—or where they think it is. They want to locate where they can continue the stimulating professional associations to which they have become accustomed. They want their children to go to the best schools. And already the deck is heavily stacked against equal access to their services for rural Americans, for slum-dwelling Americans, for small-town Americans.

Here again I have no all-inclusive answers to propose. The idea of locating physicians by fiat would be totally unacceptable in our society. Certain strictly economic incentives, such as forgiveness features in loan programs, have been tried with inconclusive results. We know that physicians who choose to practice in small towns and rural areas are usually those with rural or small-town origins; but we know also that a very small proportion of medical students come from such areas, and that many of them are won over by the advantages of the metropolitan environment.

Somehow, the conditions of practice in areas of special need must be made attractive and challenging. In terms of one important factor—the stimulating professional association—I believe we are making a significant start in the regional
medical programs for heart disease, cancer, and stroke. Under this concept, the health services of an entire region will be linked to a central focal point of medical excellence, with built-in provisions for continuing professional education, interchange of personnel and systematic consultation and referral on individual cases.

But we still have a long way to go to counteract the unfortunate tendency for the rich to get richer and the poor to get poorer in terms of available health services. As with our other problems, we shall need all the creative thinking we can find in the days ahead.

It may appear that I have strayed rather far from the central concern of this Conference. I think, however, that the necessity for thinking in large numbers—hundreds of occupations and millions of workers—carries with it an implicit danger. We are dealing with health care. Health care is perhaps the most compellingly human of all occupations.

Therefore, in mobilizing our army of health workers, let us remember that it is not an army. We have no battalions and regiments to be pressed into service and ordered wherever the need is greatest.

Rather, we are dealing with individual human beings who, we hope, will choose to enlist in the health enterprise and serve it to the height of their capacity. Their free choice can be our greatest asset. If we perform our training functions well, and if we design our health resources so as to encourage full individual development, we will achieve the kind of competence and dedication we need to advance the health of our people.
I think the Conference now drawing to a close has been a most important Conference in that it demonstrates a relationship between the Department of Labor and the Department of Health, Education, and Welfare based on a community of interest in the whole broad field of manpower and training. This particular Conference is but one manifestation of that very pervasive interest.

Last year I established in the Department of Health, Education, and Welfare a task force on manpower requirements and training programs for our entire Department, and a subcommittee of that task force on health. The reason that I did so was that during the last 5 years, as I worked on legislation in the fields of health, education, and social welfare, I became more and more convinced that the overriding limitation on development and escalation in these fields was manpower requirements and not money or facilities. I think that, as difficult as it is always to get money out of appropriating bodies and as much time as it takes to build the mortar of facilities, those are achievements that can be worked out successfully. But you can not produce an additional man or woman, trained to do a job, simply by saying, “Here is a certain amount of money. Here is a piece of legislation. Now see if you can not put these programs in operation tomorrow morning.”

We are finding the problem of manpower recruitment a key one every day now, in our effort to implement the tremendous landmark pieces of legislation that were passed last year—e.g., the education legislation, and the Medicare legislation. We’re working hard at it, but you would be surprised at the shortage of qualified experienced people we find when we want to recruit in these fields. There are lots of difficulties. I might say parenthetically that I have become an expert on some of these problems. Two or three of the people we particularly wanted asked whether I would take their wives to dinner and try to persuade them to come to Washington. I found myself for the first time in a difficult position. A wife would say, “Well, I’ve just bought new drapes, or I’ve just put in a new kitchen, or the children have just been enrolled in a new school.” You would be surprised at the manifold human personal and emotional problems that are involved, besides problems like fringe benefits and retirement plans, that must be considered in pulling up stakes and accepting Federal employment in Washington. Quite frankly, the scale of pay is the last point that seems to present any difficulty.

What I am trying to say is that as we go forward in the development of the Great Society programs so essential to the quality of American life, I think that we are going to find implementation of these programs more and more a problem. And so we must begin to build in at an early stage, and at the earliest possible stage, the thinking about training and manpower requirements. I always add “womanpower” requirements because in the programs about which I am talking, there is a very high concentration of women workers,
and even a greater potential for further employment of women.

This brings us to the whole question of continuing education, of bringing women back into their fields of early training after they have reared their families. I think this is one area that our universities, colleges, junior colleges, and technical institutes will have to go into even more intensively in the future. I see a tremendous role here for refresher, continuing, or retraining higher education courses to bring women back into the employment market. This would hold true not only for those women who have raised their families but for those who are still raising them. Their family experience is particularly helpful and particularly pertinent to the whole field of health, education, and social welfare which is our prime concern.

I hope the Task Force which was appointed last year will help us in our Department, and in other Government agencies that are attempting to deal with the manpower problem, to see where we can go in the next decade to meet our requirements. I hope also that our Special Task Force on Health Requirements, under Assistant Secretary Philip Lee, will have the results of your thinking at this Conference to build into its future program developments, because despite the tremendous landmark legislation of last year there still is a great and imminent need. I hope, and I go so far as to predict, that the Congress this year will enact at least 7 to 10 more pieces of health legislation of importance. Some will have significant training elements in them, but all will put additional responsibilities and additional burdens upon the whole health field to recruit and train personnel. This is going to bring, as it has already brought, a lot of rethinking into the field—of how we utilize the personnel we have, how we train more personnel, how we rationalize our services, and how we create the economies and efficiencies in the whole program as it evolves.

As I said on the opening night of this Conference, 3 million people employed in health services, $40 billion of expenditures for health, 6 percent of the gross national product, represent an area of our national life so important that it cannot even be measured by statistics. It is essential to the well being not only of the individual and the family, but of the Nation itself.

I would like to close by pointing out what I see ahead, in the next 10 to 15 years or so. Significant changes will be taking place in the whole field of health and welfare which will give a basis for the utilization of the new types of personnel, and the employment of additional persons in the field with a whole new role of creativity and innovation. I would not want you to leave this Conference thinking that the health professions field of 1976 is going to be the same as that of 1965. I think that we all are working in a field of very exciting change. And out of the ferment that is taking place, now that there has been a reconciliation in ideological controversy, as I mentioned the other night, you are going to find emerging in the entire health field a host of new concepts and new arrangements and new answers. And as the medical sciences advance, and as they become more complex, as many cooperative forces are unleashed, there will be new steps taken in the organization, financing, and delivery of medical care throughout the country.

This Conference has brought together a wide variety of experts who are the extensions of the arms and legs of the trained professional manpower. I think that we are going to find a tremendous growth in all of these fields.

The new education assistance programs which have been enacted in the past few years offer a wide variety of Federal financial support of training in the health field. Quite frankly, however, what has been done in the past is clearly inadequate, and I predict that in the Congress this year we are going to see new legislation that will extend Federal financial aid to support the allied health professions personnel.

Effective community planning, active cooperation between the educational systems, the hospital and health facilities, and the professional organizations are essential ingredients in implementing the new programs at the local level. And I see, as I look ahead, a new era of cooperation among these institutional bodies such as we have not had before.

There still are many unanswered questions in the health field which we will have to tackle in the years ahead.

The salary level in the allied health fields, it has been pointed out, is still so low that recruitment and retention of personnel are a recurring headache to administrators of hospitals and nursing homes and other health facilities. I think the public has to be educated, if you will, has to be persuaded to the concept that good health care has to be paid for in terms of relative opportunities in other fields in our economy, in terms of adequate
payment to all workers in the health field, if we are going to get the supply of trained manpower and womanpower that is required for the future expansion of health programs.

A second question relates to the problem of how education for health professions, subprofessions, and health supportive personnel is to be provided and financed. We should be working toward the result that nursing education, for example, will be an educational cost to be funded through the educational system rather than being absorbed by the hospital and passed on further to the patient or third party payee.

A third question that needs consideration is the cost of hospital care. With hospital costs rising about 6 or 7 percent a year or about $2.50 per day per year—the average patient cost now is $41.58 per day—we must begin to think about financing hospital costs in a different way so that the total cost is not put entirely on the paying patient at the time he needs medical care. That is one of the great advantages of hospital insurance. However, not all hospital costs are insured at the present time, and even to the extent they are, there is a serious question whether items like nursing education and emergency rooms and other aspects of hospital costs should be borne by those who are insured or by the patient. I think that this is going to result in a whole reexamination not only of how hospital costs are financed, but how hospitals are operated and how they are organized. The efficiency of hospital operation as well as the method of financing in the future are questions that await scrutiny and answer.

As I said, I foresee a new working relationship in the health professions among schools, colleges, hospitals, and health facilities in order to explore fundamentally new and effective ways of organizing medical and paramedical functions, and to give a greater emphasis to preventive health care, home health services, and a whole host of new types of out-of-hospital, out-of-institution care. I think you will find that as these functions are organized and coordinated more effectively, the result will be better care for more people, higher levels of health, which are still attainable in this country, economic gain in terms of productivity, lower morbidity and mortality, and of course a justification for paying those employed in the allied health professions higher incomes.

The organization and delivery of medical services in this country, even at the high level they are today, will also be changed in my opinion as we go along. We will have to make better use of health manpower by delegating certain of the responsibilities to subprofessional aides. This will create, of course, a certain amount of tension in the health field between those in the professional areas and those in the supporting nonprofessional roles. As Dr. Louis Levine said, "Sometimes the professional thinks of the nonprofessional as being of a lower echelon that need not be consulted or worked with in a cooperative spirit." As a result of this evolution of changing roles and division of responsibility, which may well bring with it greater tensions, government as well as nongovernment organizations will have to work together more effectively to meet this problem. And I think it can be done if we look at the whole picture, at total health services as a joint public-private cooperative effort.

I think that we are going to see, as our metropolitan areas develop, a greater degree of out-of-hospital, out-of-institution neighborhood services, neighborhood health services that will be allied perhaps with hospitals or State health departments, home health services, extended care facilities, and skilled nursing homes that will be related to the hospitals which will bring many services closer to the individual than ever before.

I was quite impressed, as I worked some months ago on the problem in the Watts area in Los Angeles, to learn what a tremendous amount of time the low income people had to take in order to get to the available health services—clear across the vast expanse of Los Angeles. It was not only a burden to them financially which they could not bear, but for many of the mothers with young children it was a tremendous waste of time. Furthermore, they had to get somebody to take care of the children while they were gone. In general, it was inefficient and unsatisfactory both from the standpoint of the patients and the kind of medical care that they got. I think that the Watts situation indicates the need, as is the case in many areas, to bring health services closer to mothers, to children, to old people, and to people who can't travel, as well as to cut down on the time wasted by the physician and the health personnel, and by the patient. I think that we are going to see a whole new effort to bring the health services right into the neighborhood, particularly for the lower income group, the less educated, and the poor. Of
course, this also should be done in the suburban areas for the very well-to-do.

I think, as we look ahead, that we shall see State health and welfare departments working much more closely with voluntary agencies in providing access to family planning services on a voluntary basis. I think that this is one of the areas in which there is a great potential for development on the America scene. I think there is a need for it, and a willingness to accept it. I think that many of the problems in family planning that were present in past years have now been worked out, perhaps not completely, but with the cooperation of the public and private areas I think they can be worked out satisfactorily. I think we will see close cooperation between a whole host of personnel, not only in the medical subprofessional or allied medical fields, but in many different fields that are important in bringing family planning information to all of our people. That means making information and services available not only to the well-to-do, not only to the poor, but to everyone in our society who chooses to have them.

These same agencies in the community are going to reduce the differential morbidity and mortality rate between negroes and whites that exist in this country, which is truly a blot on our total health services in this country. I think that we are going to find cures for leukemia and other forms of cancer through the heart disease, cancer, and stroke program. We are going to retard deaths due to these three major killers. As I said the other night, through the artificial heart and artificial kidney, I think that we are going to prolong life. Life expectancy at birth is now hovering about 70 years. I think that we are going to increase that about 1 year every 5 years. It may not sound like much—to increase life expectancy from the level of 70 years now to 71 years by 1970, 72 by 1975, and 73 by 1980—but in my opinion it represents a feasible goal based on what is happening now in medical science and in medical organization.

All these developments, all these changes, of course, will bring with them tremendous new responsibilities not only to the health field and to the health professions but to our society as a whole—in terms of programs for the aged, programs for the poor, programs in urban and suburban areas, and programs that relate to the leisure activities for our aged and middle-aged people.

As you look ahead you can see that the 86 medical schools that we have now in this country are going to have to be increased in number. Ten years from now, I think we may have something in the neighborhood of 125 medical schools. As I said before, building the bricks and mortar is not so difficult, but neither is it easy, especially if we are going to add 40 new medical schools, expand the number of nursing schools at the same time, and enlarge our whole higher education program. I think that we have to expand similarly in all of the health fields.

In my opinion what we have started to talk about today is one of the most important goals of the Great Society: bringing the exciting miracles of modern medicine, the continuing miracles of modern medicine, the future miracles of modern medicine and science that are yet undreamed of, to everyone of the 200 million people in our society regardless of any factor other than the need for medical care. I think that goal is going to be a great challenge, and it is a challenge that we will meet in our own way. It will be a way that is strikingly different from that to be found in any other country in the world. It is not going to be a system of free enterprise medical care in the Adam Smith tradition, and it is not going to be a system of socialized medicine in terms of the European or foreign system. We are going to develop, as we have been developing for 175 years but particularly for the last 30 years in this country, a pluralistic system utilizing many different kinds of institutions and arrangements, using both the private sector and the public sector in a relationship that no other country in the world has experimented with.

And I think, cliches apart, we are going to find that the American system of organized medical care will be a vital one, a changing one, one that will be able to deliver more medical care to more people, and to improve the quality of medical care in a way that will surprise all of us 10 or 20 years from now.

In helping to close this Conference I want to say that all of you here have contributed immeasurably, step by step, to one of the most interesting, one of the most challenging, and one of the most important ventures in improving the quality of American life.
THE CHALLENGE: MATCHING PEOPLE AND JOBS IN HEALTH SERVICES

STANLEY H. RUTTENBERG, Manpower Administrator, U.S. Department of Labor

When I was Research Director of the CIO, I had the privilege of serving as a member of a commission appointed by the American Hospital Association, to study the cost of hospital care. I learned a little bit about health manpower problems then, and as I listened to some of the speakers and discussions during this Conference I discovered that the problems we talked about in that Commission some 15 or 16 years ago were really not much different than they are today, except that their magnitude is considerably greater.

Wilbur Cohen certainly made this crystal clear when he outlined the great expansion in health services that will take place over the coming decade and the impact of this expansion on health manpower needs. As he pointed out, we will not be able to meet the increasing demands for health care nor will we be able to utilize all the advances in scientific and medical knowledge, unless we really come forward with the manpower.

It will take not one kind or level of health manpower, but many, to do the job. We are going to have to come forward with semiprofessional health manpower as well as professional; workers who can provide direct services as well as supportive services; personnel for nursing homes and home care as well as personnel for hospitals.

This Conference has addressed itself to job development and training for paramedical and auxiliary health service workers, and the more I have heard during the past 21/2 days the more I am convinced that it has been an exceedingly useful Conference. It has given us in the Department of Labor and the Department of Health, Education, and Welfare the opportunity and the climate to concentrate and coordinate our thoughts, attentions, and energies upon a central problem—the manpower shortage in the health services area. And it has brought together the employers, unions, educators, professional groups, and others who are interested in trying to resolve the problem that confronts us all.

Certainly the Conference has given us direction—helpful suggestions about the kinds of things that need to be done in order for us to better meet the health manpower needs of today and the future. The whole notion of coordinating Government resources and programs is of vital importance—you need to know where to go to get overall information about available programs, funds, and assistance for training workers in health service, and we need to see that Federal manpower services and assistance are coordinated in a way that will expedite the development of training programs.

There has been great stress in some of your discussions, and rightly so, upon professional standards in the development of auxiliary health manpower, as well as on the growing need for technical and supportive personnel. Certainly the whole area of worker competency and the maintenance of quality in health services is essential. To try to meet health manpower needs with incompetent workers would be futile. When we talked
about developing 10,000 jobs a month in the health field, some of you pointed out that the jobs are going to be there and what we need to do is develop 10,000 workers to fill the jobs. We need to develop competent people for these jobs—people who are capable of performing their required tasks—workers who are adequately trained to provide health and related services. This means that we have to develop training; we have to develop upgrading programs; we have to develop and utilize our manpower properly.

My central theme this morning is that we must involve in these paramedical and ancillary occupations and training programs those individuals in our society who are disadvantaged—disadvantaged because they are school dropouts or have had limited opportunity for education and training. Many of these individuals must be prepared, but properly and adequately prepared, to fill jobs in the health service industry. What bothers me is that we sometimes equate lack of opportunity with lack of potential—we equate low levels of education and training with inadequacy, with incompetence, and with discourtesy—and nothing could be further from the truth.

I had a very interesting experience the other day of talking to some people who had returned from one of our southern States where there is large-scale nonwhite unemployment. Many of the nonwhite people had been unemployed because they had not had the opportunity for education, or had dropped out of school, or had attended schools which did not provide them with the kinds of education they had to have or needed. They are at the low end of the education and training ladder, but yet these individuals after several weeks or a month or two of refresher education, after being reoriented to the problems of today and given help and assistance, are sometimes just as smart, just as bright, just as competent, and just as courteous as others who have had the fortunate opportunity of going through high school.

I am reminded of an experience I had in World War II. I was an officer in a quartermaster salvaging company stationed in one of the Pacific Islands. We had 225 nonwhite troops and 4 white officers. These nonwhite troops had received low scores on what was called the Army General Classification Test. They had had very little education and two of my fellow officers were very much discouraged and felt that they could not do much with this kind of an outfit. But fortunately the company commander was a good man who really didn’t feel this way toward the troops. After the two officers were replaced and we began to work with the troops, we found that this unit—individuals who had a score of 80 or less on the Army Classification Test—individuals who had not gone very far in school—all nonwhite—turned out to be one of the best outfits on the whole island. So much depends on the kind of training that is given, the kind of sympathy that is provided.

When I was in Newark early this week to announce the establishment of some training projects and Neighborhood Youth Corps programs, I visited the city hospital and saw there a great number of Youth Corps trainees. This is that part of the Poverty Program which provides work opportunity and experience for 16 to 21 year old youth. These young people were engaged in all kinds of aide and assistant services, and in addition to their lectures relating to health services and medical occupations, they were taking such courses as grooming, communications, getting along with people, and the like.

I sat through some of the lectures given by nurses and doctors to the young people who had been assigned to the hospital 6 or 7 months before as nurses aides or laboratory aides or to perform other types of work. It was interesting to compare this group with the new group of Neighborhood Youth Corps trainees who had come in just that day. The incoming trainees were not very well groomed; they were afraid to talk up; they didn't have any knowledge or understanding of what they were doing. I was told that the trainees who impressed me so much when I went through the wards and laboratories earlier in the day were no different when I went through the wards and laboratories earlier in the day were no different when they entered the hospital 7 or 8 months ago. They had been given an opportunity to develop their potential and had proved to be useful citizens.

If we use this approach to the problem of unemployment in this country and give the disadvantaged the right opportunities and the right kind of assistance, even though they have been school dropouts, whether they are white or nonwhite, they can become exceedingly useful citizens and make a great contribution to the health service industry.

How do we develop these kinds of people? How do we help them? We need to develop the cooperation, the ingenuity, the initiative of educators, of Employment Service counselors, of
people who are involved in stimulating, motivating, and activating people in our population; the people who are involved in curriculum development and in devising teaching techniques that will help these people so that they can become productive and fill many, not all, but many of the jobs in the health service industry that must be filled now and during the next 10 years.

Now let me make one further point that relates to a professional problem that bothers me. Yesterday it was my good fortune to appear before a House Congressional Committee on Education to talk about the professional manpower needs of this country, not only in the health service field but in the social science field, in the natural science field, and the field of science and engineering, and to review for the Committee what the manpower demand and supply might be over the coming year. I made a point at that hearing based on a study by Dr. Earl McGrath, the former Commissioner of the U.S. Office of Education, a point which was that our Negro institutions, our Negro colleges in the United States that train more than 60 percent of the Negro graduates in this country, are not really training these people for the kinds of occupations in the business and professional fields that they ought to be training them for. I made another point that these colleges do not really have adequate facilities to train their students in the fields for which they ought to be trained. That is the fault of the Negro institutions of higher learning; it is our fault, it is society's fault for refusing to provide the professional openings and opportunities for the nonwhite population. We have a tremendous reservoir of highly competent people. If they were given the opportunity to move through universities that are well prepared to train them, they could be prepared to move into the health professions and to other professions as well. But financial help would be necessary to enable nonwhite institutions to improve their curriculums, the kinds and types of offerings, and opportunities for graduate study.

We must also provide adequate facilities for training in the less than professional area. There have been frank and candid discussions about this throughout this Conference and I am glad to know that nobody has pulled any punches. Some concern has been expressed about using disadvantaged people in the health and related service occupations—that it is essential to preserve the integrity of patient care. Some fear has been expressed about upward mobility of people who might not meet the standards for higher level training or employment. I think that this is a legitimate fear on the part of the professions. Employers are concerned about financing training programs and increasing wages of health service workers, not because they want to deprive or depress the wage levels but because the increased costs would have to be passed on to the patient.

Labor unions are deeply concerned about turnover and opportunities for upgrading. Like hospital administrators, they want to attract into the industry the best possible workers and workers with good potential. Labor's interest, naturally, is in maintaining a living wage for the people that are working—and people just don't work because of their love for the particular job. I think some of us who come into Government service do so because we are willing to make the sacrifices. But when one is at the low, poverty wage level paid in hospitals and nursing homes, we no longer can think in terms of that individual's willingness to make sacrifices because the job is so important or satisfying. We have decided, therefore, in the Department of Labor that approval of any Federally financed training program for which we have responsibility, whether it is a regular institutional training program or an on-the-job training program, will require that the prospective job entry wage rates for the occupation shall be at least the equivalent of a $1.25 or the prevailing wage in the community, whichever is higher. While this might cause some problems to employers, it is fundamentally and essentially important if we are going to develop the kind of personnel we need.

Many educators, of course, have been concerned about the kinds of people who are being selected for health occupations training. They have raised questions about whether or not the tests used by the Employment Service are really the tests that find and select the kinds of personnel that are needed for health services. They are worried that the Employment Service isn't really selecting the right people. Now that may be true in certain areas, but there is a lot of work being done by the Employment Service to improve testing, to improve referral, to get at the problem of duplication.

Now, having said all of this in terms of some of your concerns, I would just like to pose for you,
if I might, our concern that we not equate low levels of education and low levels of training with incompetency and inability; we should equate opportunities for disadvantaged people with the competencies they could have, if properly developed. I would say, as one concerned with manpower development and utilization, that we must look to our educators, to our vocational institutions, to develop the kinds of training techniques, the kinds of curriculum, the kind of technical information that is so essential, in order that these people will be trained for health service occupations.

I don't know much about curriculum for a health occupations training program, but I have had some experience around the country with disadvantaged folk and have found that it is difficult in many communities to even locate some of the disadvantaged—they are so afraid, they are afraid to come out, they are afraid to come to the Employment Service to say they need help or are looking for a job. New methods have to be developed to reach out and find these people, motivate them, stimulate them, counsel with them, and work with them while they are being trained so they do not become dropouts from training just as some of them were dropouts from school. But just as we have the tremendous responsibility in the U.S. Employment Service to say they need help or are looking for a job. New methods have to be developed to reach out and find these people, motivate them, stimulate them, counsel with them, and work with them while they are being trained so they do not become dropouts from training just as some of them were dropouts from school. But just as we have the tremendous responsibility in the U.S. Employment Service to develop new techniques of outreach and motivation, so must the vocational educator face the fact that if some of the disadvantaged are hard to reach, they are also going to be hard to teach. But because they are hard to teach is no reason to abandon them and not teach them, any more than we should abandon them when we find they were hard to reach. We are working very closely with the vocational educators and with the research and curriculum people in the Office of Education to see that there are techniques developed in terms of teaching the hard to reach. I am confident that similar kinds of activities can be and will be conducted in this area.

Let me say in conclusion that the implementation that flows from this Conference will involve a number of things. We need to have a report of this Conference and it ought to be disseminated widely. It has been suggested that similar conferences be held on regional and State levels, and that we sponsor a regional or area conference that could be used as a model by States and local communities throughout the country. We need, of course, as has come out from this Conference, a greater degree of coordination of Federal manpower program information and services. We should add to our manpower advisory committees, and we have one in every State of the Union, some people who understand and appreciate the problems of health manpower training and utilization. And this also applies to the some 900 local manpower advisory committees throughout the United States. You folks with your background and experience ought to be involved in these activities.

Now I have not touched on all the proposals that have been made. I have only touched on a limited number but there are many suggestions that have come from your discussions which need to be implemented and which will receive our close attention and consideration. I pledge to you the continued interest of the Department of Labor and the best efforts of the Manpower Administration in meeting one of the great challenges of our time—matching jobs and workers in health services.
APPENDIX A
Conference on Job Development and Training for Workers in Health Services

CONFERENCE COORDINATOR
MARY S. RESH, Deputy Assistant Manpower Administrator, U.S. Department of Labor

PLANNING COMMITTEE

VLADIMIR D. CHAVRID, Director

JOHN B. EISCHEN, National Representative for Trade and Service Industry
Office of Industry Promotion, Bureau of Apprenticeship and Training, U.S. Department of Labor

VELMA KINSEY, Manpower Development Specialist
Neighborhood Youth Corps, U.S. Department of Labor

MORTON LEVINE, Labor Economist
Office of Manpower Policy, Evaluation and Research, U.S. Department of Labor

LILLIAN PETERSEN, Manpower Development Specialist
Office of Manpower Policy, Evaluation and Research, U.S. Department of Labor

CHARLES W. PHILLIPS, Staff Assistant to the Assistant Secretary for Education and HEW Coordinator for Conference
U.S. Department of Health, Education, and Welfare

HELEN POWERS, Chief, Health Occupations Unit

HARVEY I. SCUDDER, Manpower Resources Consultant and HEW Coordinator for Conference
Division of Community Health Services, U.S. Department of Health, Education, and Welfare

MARGARET WEST, Assistant Chief
Division of Public Methods, Public Health Service, U.S. Department of Health, Education, and Welfare

CONSULTANTS TO COMMITTEE

CARL A. HEINE, Chief

CARYL HOLIBER, Supervisory Labor Economist
Bureau of Employment Security, U.S. Department of Labor

THOMAS F. ROYALS, Manpower Development Specialist
Office of Manpower Policy, Evaluation and Research, U.S. Department of Labor

WILLIAM L. KISSICK, Deputy Chief

CORNELIA KNIGHT, Representative of Commissioner of Education's National Advisory Committee on Health Occupations Education
U.S. Department of Health, Education, and Welfare
CONFERENCE STAFF

Department of Labor

MARY S. RESH

AGNES M. DOUTT
FRANCES PUGH

PHYLLIS MULLINS

Department of Health, Education, and Welfare

CHARLES W. PHILLIPS

LUCY M. KRAMER

ROBERT A. BURTON
NEWEL B. KNIGHT
NANCY E. LINDSAY

LILLIAN PETERSEN
MARJORIE FREEMAN

HARVEY I. SCUDDER

RICHARD P. LOVETT
SHIRLEY J. MARTIN
JON RASMUSSEN
APPENDIX B

ROSTER OF PARTICIPANTS

WALTER BRATTLE
National Committee on Community Health Services
7815 Old Georgetown Road
Bethesda, Md.

OLGA C. BINDEROFF
Chairman
Committee on Nursing Service
American Nurses' Association
University Hospitals of Cleveland
Cleveland, Ohio

NELLE' MAY BERING
Education and Research Fund, Inc.
Suite 1000, 915 19th Street NW.
Washington, D.C.

MARK BERKE
Executive Director
Mount Zion Hospital and Medical Center
San Francisco, Calif.

LAURA ANNE BIGNOW
Chief
Education Programs
American Association of Medical Record Librarians
840 North Lake Shore Drive
Chicago, Ill.

JOAN BIRCHENALL
Supervisor
Health Occupations Education
State of New Jersey
Department of Education
Trenton, N.J.

SARAH BIZZELL
Education Committee
American Dental Assistants Association
108 Magnolia Avenue
Fayetteville, N.C.

LUCY BLAIR
Executive Director
American Physical Therapy Association
1790 Broadway
New York, N.Y.

JOHN BLANCHETTE
Bureau of Apprenticeship and Training
U.S. Department of Labor
Washington, D.C.

C. B. BLANKENSHIP
Legislative Director
Communications Workers of America, AFL-CIO
1925 K Street NW.
Washington, D.C.

BERTHA H. BOLDEN
D.C. Public Schools
Worumley Administration Annex
3381 Prospect Street NW.
Washington, D.C.

DONALD BONE
Division of Public Health Methods
U.S. Department of Health, Education, and Welfare
Washington, D.C.

PHILIP D. BONNET
President
American Hospital Association
750 Harrison Avenue
Boston, Mass.

JENNIFER BOODAS
Division of Medical Care Administration
Public Health Service
U.S. Department of Health, Education, and Welfare
Washington, D.C.

SCOTT BOWMAN
Bureau of Apprenticeship and Training
U.S. Department of Labor
Washington, D.C.

MARILYN BOYD
Chairman
Department of Nursing
Northern Virginia Technical College
3445 South Carlyle Spring Road
Bailey's Crossroads, Va.

MONTAGUE BROWN
Hospital Research and Educational Trust
Princeton, N.J.
PETER OTTELEY  
Director  
Department of Civil Rights and Economic Opportunity  
Building Service  
Employees' International Union  
New York, N.Y.

JACK OWENS  
Director of Curriculum  
Greenville Technical Education Center  
Greenville, S.C.

DAVID A. PEARSON  
Division of Medical Care Administration  
Public Health Service  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

DAVID K. PECHMANN  
Assistant Executive Director  
Hospital Council of the National Capital Area, Inc.  
Washington, D.C.

WALTER J. PELTON  
Professor of Dentistry  
University of Alabama  
Birmingham, Ala.

BLANCHE PENN  
Director  
David Hale Fanning Trade School  

MARYLAND Y. PENNELL  
National Center for Health Statistics  
Public Health Service  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

PAUL PENNINGROTH  
Assistant Director  
Mental Health Training and Research  
Southern Regional Education Board  
Atlanta, Ga.

FREDERICK C. PFISTERER  
President  
Westchester Nursing Home Association  
Mount Vernon, N.Y.

ARNULF M. PINS  
Associate Director  
Council on Social Work Education  
New York, N.Y.

CHARLES W. PHILLIPS  
Office of Assistant Secretary for Education  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

MARTHA PHILLIPS  
Division of Chronic Diseases Public Health Service  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

KEN E. POHLMANN  
United Mine Workers Welfare and Retirement Fund  
Washington, D.C.

HELEN K. POWERS  
Chief, Health Occupations Division of Vocational and Technical Education Office of Education  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

HENRY PRZELOMSKI  
Bureau of Apprenticeship and Training  
U.S. Department of Labor  
Washington, D.C.

FRANCES PURDY  
American Nurses' Association  
330 East 33d Street  
New York, N.Y.

LOUIS RAVIN  
Specialist on Aging Administration on Aging  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

WILLIAM A. ROTHMAN  
Associate Administrator Metropolitan Hospital  
Detroit, Mich.

JACK REES  
American Nursing Home Association  
Cheswick, Pa.

WILLIAM G. RUDY  
Editor  
Bulletin of Association of American Medical Colleges  
1501 Massachusetts Ave. NW.  
Washington, D.C.

MARY S. RUSH  
Deputy Assistant Manpower Administrator  
U.S. Department of Labor  
Washington, D.C.

ETTA B. SCHMIDT  
Executive Director  
National Institute on Rehabilitation and Health Services  
1714 Massachusetts Avenue NW.  
Washington, D.C.

Arnulph M. Pins  
Associate Director  
Council on Social Work Education  
New York, N.Y.
Mildred Schwagmayer  
Assistant Director of Education  
American Occupational Therapy Association  
250 West 57th Street  
New York, N.Y.

Louis Schwartz  
Local 144, Building Service Employees' International Union  
New York, N.Y.

M. K. Schwartz  
Memorial Sloan-Kettering Cancer Center  
410 East 68th Street  
New York, N.Y.

Harvey I. Scudder  
Manpower Resources Consultant  
Division of Community Health Services  
Public Health Service  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

Phil Seagren  
Director  
Adult Vocational Education  
1410 NE. 2nd Avenue  
Miami, Fla.

Desmond H. Sealy  
Associate Director  
National Urban League  
Washington, D.C.

Marian Seifert  
Assistant Training Director  
Lincoln Hospital  
Bronx, N.Y.

David Sharmar  
American Optometric Association  
1026 17th Street, NW.  
Washington, D.C.

Ross S. Shearer  
Manpower Administration  
U.S. Department of Labor  
Washington, D.C.

Margaret Shiehman  
Division of Nursing  
Public Health Service  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

Richard Shemekne  
Assistant Director  
Department of Social Services, AFL-CIO  
815 16th Street, NW.  
Washington, D.C.

Ralph Showalter  
Executive Director  
Social Development Corp.  
1126 16th Street NW.  
Washington, D.C.

Kenneth G. Skaggs  
American Association of Junior Colleges  
1315 16th Street NW.  
Washington, D.C.

Paul Sloane  
National Association of Dental Laboratories, Inc.  
Washington, D.C.

Charlotte E. Smith  
Nutrition Consultant and Physical Therapy Consultant  
Division of Medical Care Administration  
Public Health Service  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

George J. Smith  
Bureau of Employment Security  
U.S. Department of Labor  
Washington, D.C.

Lester Smith  
Executive Director  
American Orthotics and Prosthetic Association  
919 18th Street NW.  
Washington, D.C.

Ann R. Somers  
Research Associate  
Industrial Relations Section  
Princeton University  
Princeton, N.J.

Esther Spencer  
Director  
Home Health Aide Program  
Office of Economic Opportunity  
Washington, D.C.

Pearl Spindler  
Chief  
Branch of Special Projects  
Women's Bureau  
U.S. Department of Labor  
Washington, D.C.

George Stephenson  
National Committee for Careers in Medical Technology  
1780 Massachusetts Ave., NW.  
Washington, D.C.

Kathryn Stone  
Director  
Program on Human Resources  
Washington Center for Metropolitan Studies  
1726 Pennsylvania Ave., NW.  
Washington, D.C.

John Straumfjord  
University of Alabama Medical Center  
Birmingham, Ala.

Thomas W. Strickland  
State Supervisor for Technical Education  
Tallahassee, Fla.

Merle E. Strong  
Assistant Director  
Program Services Branch  
Office of Education  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

Herman Sturm  
Bureau of Labor Statistics  
U.S. Department of Labor  
Washington, D.C.

Patricia Submann  
Director  
Health Careers Program  
American Hospital Association  
Chicago, Ill.

Jean Szalocz  
Task Force on Social Work Education and Manpower  
Office of the Secretary  
U.S. Department of Health, Education, and Welfare  
Washington, D.C.

A. N. Taylor  
Associate Secretary  
Council on Medical Education  
American Medical Association  
535 North Dearborn Street  
Chicago, Ill.

Richard C. Thompson  
Public Information Officer  
D.C. Department of Public Health  
Washington, D.C.

Teresina B. Thompson  
Assistant Principal  
Springfield Trade High School  
Springfield, Mass.
ROBERT M. TOMLINSON
Assistant Professor
University of Illinois
Urbana, Ill.

PHYLLIS I. TOWNSEND
Consultant
Practical Nurse Education
Michigan Board of Nursing
Lansing, Mich.

BRAHNA TRAGER
Executive Director
San Francisco Homemaker Service
San Francisco, Calif.

JAMES L. TROUPIN
Director
Professional Education
American Public Health Association
1790 Broadway
New York, N.Y.

MERLIN TRUMBULL
National Committee for Careers in Medical Technology
1780 Massachusetts Ave., NW.
Washington, D.C.

LEON TUNKEL
Program Director
Operation Manpower Program
New York State Department of Labor
Albany, N.Y.

MARY McCALL TYRIE
Director of Education
Visiting Nurse Service of New York
New York, N.Y.

CONGRESSMAN CHARLES A. VANIK
House of Representatives
Washington, D.C.

SHAHA VON HEIN
Bureau of Apprenticeship and Training
U.S. Department of Labor
Washington, D.C.

ROBERT VAN HOOK
Special Assistant to Assistant Chief
Division of Hospitals
Public Health Service
U.S. Department of Health, Education, and Welfare
Washington, D.C.

ELLWYNNE M. VREELAND
Nurse Consultant
Division of Nursing
Public Health Service
U.S. Department of Health, Education, and Welfare
Washington, D.C.

LILLIAN M. WAGNER
Coordinator
Practical Nursing
Jane Addams Vocational High School
Cleveland, Ohio

JOHN P. WALSH
Assistant Administrator
U.S. Department of Labor
Washington, D.C.

BETTINA WEARY
Specialist
Career Development
Guidance and Personnel Services Branch
Office of Education
U.S. Department of Health, Education and Welfare
Washington, D.C.

G. ANTHONY WEINLEIN
Director
Department of Research and Education
Building Service Employees' International Union
Washington, D.C.

HERBERT E. WELLAND
Supervisor
MDTA Practical Nursing Program
Henry Ford Community College
Dearborn, Mich.

MAX WENK
Bureau of Family Services
Welfare Administration
U.S. Department of Health, Education, and Welfare
Washington, D.C.

BRANDON WHITELAW
Administrator
Randolph Hills Nursing Home
American Nursing Home Association
Wheaton, Md.

ELEANOR F. WESOLOWSKI
Division of Community Health Services
Public Health Service
U.S. Department of Health, Education, and Welfare
Washington, D.C.

SUSANNAH WEST
Assistant Principal
Whitney Vocational High School
Toledo, Ohio

J. A. WHITEHEAD
National Association of Dental Laboratories, Inc.
1820 Massachusetts Avenue NW.
Washington, D.C.

DANIEL F. WHITEHIDE
Chief
Auxiliary Utilization and Development Section
Division of Dental Health
Public Health Service
U.S. Department of Health, Education, and Welfare
Washington, D.C.

RUTH WITMORE
Educational Director
International Union of Electrical, Radio and Machine Workers, AFL-CIO
Washington, D.C.

ROSE K. WINNER
Office of Manpower Policy, Evaluation and Research
U.S. Department of Labor
Washington, D.C.

MARJorie WILLIAMS
Chief
Office of Medical and Allied Health Sciences
Veterans Administration
810 Vermont Avenue NW.
Washington, D.C.

LESLIE WILSON
American Society of Radiologic Technologists
Roanoke Memorial Hospitals
Roanoke, Va.

THELMA WILSON
Beckley Appalachian Regional Hospitals
Beckley, W. Va.

CHARLES WINKLER
Medical Center
University of Alabama
Birmingham, Ala.
EDWARD WISE
1200 Tanley Road
Silver Spring, Md.

BETTY JANE WOLFSHANGER
Regional Supervisor
Tennessee Department
of Education
Knoxville, Tenn.

FRANCES WOLFORD
Division of Medical Care
Administration
Public Health Service
U.S. Department of Health,
Education, and Welfare
Washington, D.C.

W. J. WOODIN
Memorial Sloan-Kettering
Cancer Center
410 East 68th Street
New York, N.Y.

NINA WOODSIDE
Chief
Bureau of Chronic Disease Control
D.C. Department of Public Health
Municipal Building
Washington, D.C.

ROBERT E. WOODWARD
Director of Program Planning
State Committee for Technical
Education
State Board of Education
Columbia, S.C.

BERNARD YABROFF
Director of Employment Opportunities
Branch
Office of Education
U.S. Department of Health,
Education, and Welfare
Washington, D.C.

ALLEN ZIEGER
Executive Director
Zieger Osteopathic Hospital
Detroit, Mich.
APPENDIX C

DISCUSSION LEADERS

WILLIAM L. BATT, JR.
MONTAGUE BROWN
HARRY W. BRUCE, JR.
THOMAS E. CALLAHAN
SAMUEL S. DUBIN
DOROTHY B. FEREBEE
ISAAC FINE
MARVIN FRIEDMAN
WARREN GANONG
EARL T. KLEIN
EUGENE LEVINE
DARREL J. MASE
HOWARD MATTHEWS
JAMES J. MCFADDEN
ELEANOR N. MCGUIRE

MATTHEW MCNULTY, JR.
PHILLIP W. MORGAN
HENRY PFEZLOMSKI
GUY ROBBINS
RALPH SHOWALTER
KENNETH G. SKAGGS
ANN R. SOMERS
GEORGE STEPHENSON
MERLE E. STRONG
PATRICIA SUBSMAHNN
TERESINA B. THOMPSON
ROBERT M. TOMLINSON
PHYLLIS I. TOWNSEND
LEON TUNKEE
W. A. WEBER

Recorders

SALLY ANDERSON DHEW
JOHN BATELCHOR DOL
DONALD BONE DHEW
JOSEPH HALL DOL
HELEN HAMER DHEW

MARKAY KERR DHEW
WALTER LARANOW DOL
MARGARET SHEEHAN DHEW
JEAN SZALOCHI DHEW
ELEANOR F. WESIOLOWSKI DHEW

Resource Persons

JOSEPH CAVANAGH DHEW
ETHEL COLLINS DOL
RALPH COWART DOL
DWIGHT CRUM DHEW
DOROTHY B. DALY DHEW
BERNARD DOWNEY DOL
BOB GRANAKIS DOL
ELAINE HANDY DOL

ROBERT HERMAN DHEW
DAVID HOOVER DHEW
DONALD JOHNSON DHEW
RUTH L. JOHNSON DHEW
RUTH R. JOHNSON DHEW
ALTON JONES DOL
OTTO LEGG DHEW
EILEN LEZTER DHEW

STANLEY MARKUSO DOL
EVELYN MURRAY DOL
EDISON NEWMAN DHEW
HARRY NOVICK DOL
MARTHA PHILLIPS DHEW
MARYLAND Y. PENNELL DHEW
GEORGE SMITH DOL
WALTER STUBSFORD DOL
UNEMPLOYMENT in America stands at almost five percent. Yet we face the paradox that with nearly four million people unemployed—
it often takes weeks to have an appliance or other repair made—
hospitals and many other community services are understaffed—
housewives cannot get the help they seek for work in the home or in the yard—
we have been admitting almost 200,000 foreign workers annually because American workers were not considered available—
—and the papers are full of Help Wanted Ads.

I am convinced that a substantial number of jobs can be developed from such presently existing and unmet service needs—in business, at home, on the farm and in the community.

Therefore, I am launching a nationwide Job Development Program in service and related fields—to assure that trained workers are available to provide needed services at satisfactory wages and working conditions—to assure that managerial skills are developed to provide these services as part of our free enterprise system—to assure that consumer needs are met better and more fully.

The Secretary of Labor and the Secretary of Commerce are charged with responsibility for carrying this program forward. They are to work with other Federal, State, and local agencies and to enlist the fullest possible private participation in the planning and operation of this program.

Government can make great contribution—
by assembling information about job opportunities, unmet needs and available manpower—
by promoting institutional and on-the-job training and apprenticeship—
by providing technical assistance to management—
by stimulating new enterprises through small business loans and in other ways.

But ultimate success will depend on the resourcefulness and cooperation of business, labor and consumer groups. In many cases training and other parts of this program can best be arranged by joint labor-management committees.

By July 1, 1965, this Job Development Program should reach 10,000 jobs a month.

This initial five-month stage can be accomplished under existing law. It will be supported out of funds already appropriated or requested in my Budget Message.

I will also propose to the Congress the adoption of legislation by amendment of the Manpower Development and Training Act and in, if necessary, other appropriate ways which will give this program the broadest and firmest possible basis.

For I mean to press far beyond this initial stage. Our service needs are increasing and will continue to do so—reflecting the growing proportion of consumer spending that goes to services as incomes rise. We must meet this demand and realize fully its employment potential.

But this will not be an easy task.

We will need to provide many of the presently unemployed with the basic training—and education—which these service jobs require.
Our present information about existing and potential job opportunities must be greatly increased.

New ways of providing home and community services must be explored.

Difficult management problems in filling what are often part-time—or seasonal—jobs must be solved.

Better means of transportation between unemployed workers and jobs—either within a large city, or between the agricultural areas in the country where various peak demands occur—need to be developed.

Many of these prospective jobs are with small employers, so greater efforts must be made to work with trade associations and similar groups.

There are two other problems which have prevented a more rapid expansion of service employment—low wage rates and an attitude that much service work lacks dignity.

This Job Development Program must be so administered that it does not undercut present wage or other work standards. It should contribute to raising these standards and to recognition of the importance and value of all service work.

But these problems can all be met. They must be met if we are to advance toward our goal of full employment opportunity in America.
APPENDIX E

The President’s Job Development Program: Its Implications for Health Manpower and Services

CHARLES W. PHILLIPS, Staff Assistant to Assistant Secretary for Education, HEW

(The following paper was prepared for the Job Development Conference on Training Health Service workers, to explain the President’s Job Development Program, and relate it particularly to the health service industry.)

A YEAR AGO, on February 1, 1965, President Johnson launched a nationwide Job Development Program in service and related fields. President Johnson’s statement declared the purposes to be:

- to assure that trained workers are available to provide needed services at satisfactory wages and working conditions
- to assure that managerial skills are developed to provide these services as part of our free enterprise system
- to assure that consumer needs are met better and more fully.

The President called upon all government agencies, under the leadership of the Secretaries of the Departments of Labor and of Commerce, to work with State and local agencies, and to “enlist the fullest possible private participation in the planning and operation of this program.” Among other aids, the Federal Government was to assemble information about job opportunities and available manpower; promote institutional, on-the-job, and apprenticeship training; and provide technical assistance to management. A goal was set for the program—to develop 10,000 jobs per month by July 1, 1965.

The Manpower Act of 1965 (P.L. 89-15, April 26, 1965, 79 Stat. 75—amending the Manpower Development and Training Act of 1962) incorporated the program into section 103, which reads:

The Secretary of Labor shall stimulate and assist in cooperation with interested agencies both public and private, job development programs, through on-the-job training and other suitable methods, that will serve to expand employment by the filling of those service and related needs which are not now being met because of lack of trained workers or other reasons affecting employment or opportunities for employment.

The Program Thus far

There has been enthusiastic nationwide response. The initial goal of developing 10,000 jobs per month has been met and exceeded, according to Department of Labor Statistics. By the end of 1965 over 112,000 potential jobs were developed in service and related occupations.

Institutional (in school) training programs accounted for between 60 and 70 percent of the total number of training opportunities since the beginning of the program. Local public employment offices pinpointed the need for and the selection of over 70,000 trainees under institutional training projects.

The on-the-job training program accounted for the remaining percentage of the total. There have been nearly 42,000 on-the-job trainees in the service and related fields for whom projects have been approved and funded since the initiation of the Job Development Program.

An important innovation began under this program, namely, the developing of national contracts between the Secretaries of Labor and Health, Education, and Welfare on the one hand, with private employers or trade associations on the other. These contracts set up industrywide training programs, or programs which include large geographic areas cutting across State boundaries. For example, a contract with the Tidewater Oil Co. provides training for 1,000 new service station managers. A contract with the National Tool, Die, & Precision Machine Co. provides for training...
1,200 workers. Most significant to this Conference on Job Development and Training for Workers in the Health Services, is the contract with the American Hospital Association for the training of 4,000 workers in the auxiliary health occupations.

Most of these national contracts provide for joint institutional and on-the-job training. It is recognized that although parts of some training must be done on the job in a work situation, it is equally necessary to have some supplementary classroom instruction. The classroom instruction may range from basic education, where needed, to various elements of vocational and technical education which may be required.

**Looking Ahead in Job Development Generally**

The Job Development Program may be viewed as three links in a chain: (1) developing jobs; (2) upgrading the skills of workers and making the work force adaptable; and (3) matching workers and jobs. In each case, the metaphor of a link requires imaginative understanding and a complexity of working relationships between all levels of government, private enterprise, and the public.

The full meaning of job development has been partially obscured by its primary focus to date on getting jobs for the unemployed. That emphasis has been justifiable, considering the intolerably high rate of unemployment the Nation has had to endure. That emphasis must continue, even though we have made a sharp reduction in the unemployment rate to the present 4.1 percent and may look forward to driving it still lower. But there is another side to the coin.

We must recognize a whole new dimension of service needs of our people, and a basic shift in work orientation which this will entail. In the early days of this Nation and until the latter part of the 19th century, the largest industry in America, by far, was agriculture. Most workers were "husbandmen," or farmers. For many years, however, agriculture, in spite of its increasing productivity, has suffered a declining work force. Today, a very small percentage of our work force can supply us with all of the food and fiber we need.

Until recently, increase in manufacturing employment more than compensated the decline of farm workers, absorbed, in addition, millions of immigrants, and built the strongest industrial nation in the world. As yet, evidence is indeterminate whether the pace and role of technology will sustain high productivity with a declining work force. Technology may only change the role of workers within the manufacturing sector, rather than cause a decline in their absolute numbers.

But even a stabilization or dynamic equilibrium in the manufacturing labor force would not be enough to meet the job needs of a rising population. A new job-wage sector is needed.

We do not have to invent this new sector. It is not only at hand but is pressing us for attention. A brilliant achievement in tilling the soil, and an equally impressive development of a capacity to produce goods, has brought us to the wealth and resources wherein most Americans have a good to high standard of living, and wherein all can be above poverty. We can turn more attention to what one works for when he is not working for bread alone. We are on the threshold of a Great Society quantitatively and can give the attention long demanded to making it equally great in quality for all.

The improvement in the quality—in the humanly productive use of our wealth—will come through the development of the service occupations. This is no effort to create work for work's sake, or simply to find something to do with people. These jobs, as President Johnson has insisted, must pay good wages and have good working conditions. "Service" is not "servitude" (in history, the primary means by which a few lived well at the expense of the many). Moreover, the nature of a service occupation offers new opportunities for self-fulfillment and satisfaction, making more of work than a mere economic activity.

The trend toward which we are moving may be clear, but not all of the dimensions of what it will entail are. The other links in the chain—developing skills in a work force and matching men and jobs—require much effort.

The service occupations now include many hundreds of categories. Many of these positions may have the security of not succumbing easily to automation, but they have grown markedly in skill requirements. New categories of service are coming into being. An oxygen therapist was not known a very few years ago. Some professions have grown so complex that they have moved through professional specialization on to the development of subprofessional aides who are developing new occupational careers as such. This latter is true in education, in health services, in the whole
spectrum of scientific and technical fields.

In one sense, job development is choosing us instead of us choosing it. To develop the curricula, do the training, upgrade the skills, and match workers and jobs, will be a major hurdle. The challenge may well take us far beyond soaking up the presently recorded unemployed. It may well demand much of us in seeking greater efficiencies in the use of employed manpower and in overcoming an underutilization of manpower.

Looking Ahead in Job Development in the Health Services

The attention of this Conference is focused on job development in the health services. In the next 5 years this will present one of the most formidable tasks the Nation will face. How many additional auxiliary and subprofessional health service workers will be needed in each occupational category in the years ahead is yet to be determined, but it is estimated conservatively that we will require at least 1 million more persons in the health services by 1975. It will not be an easy task to find this number of available persons, to train them adequately, and to match them to jobs where needed.

Legislation in recent years has done much to augment the supply of professionals in the health services, by providing for expanded training facilities and financial aid to students. Hopefully this will begin to meet the need for the many more physicians, dentists, osteopaths, nurses, and other health professionals that are required. But, as the number of sorely needed health professionals is increased in arithmetic sequence, so will the need for supportive personnel, i.e., workers in the health services, be increased in geometric sequence if the health requirements of Americans are to be served fully.
APPENDIX F

Selected Reference Material, U.S. Government

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

The recent Medicare legislation will bring more medical care in institutions and in the home to millions of elderly persons who need it. Our population—increasing in numbers, more knowledgeable of scientific advances and consequently more demanding of health services—has been outstripping our capacity to provide such services. The results of medical research are making possible even better medical care for all Americans of all ages, if we can provide enough trained people to implement the results of that research. The need for expansion of health service manpower is present and clear.

Under various pieces of legislation, which this Conference will discuss, the Federal Government has provided support for a wide variety of training programs, particularly in the field of health. The task before us is to expand these programs, to find where such trained persons are or may be needed, to recruit them, to train them, and then to place them so that their skills can be fully utilized.

Federal programs will be no more effective than local initiative to help define specific needs for specific communities, to help develop concrete programs that can be reviewed and funded, and to give the professional leadership and cooperation necessary to define contents, maintain standards, and train people.

Background Data Book, February 1966. This book was prepared by the Manpower Resources Program, Division of Community Health Services, Public Health Service, (Lucy M. Kramer, editor), specifically for the Job Development Conference on Health Service Workers. Contents include tables and charts on health manpower statistics, DHEW training aid available, reports on selected training projects and research, a legislative digest, and a bibliography of reference materials. (There is a limited supply of these books available from the Manpower Resources Program, Division of Community Health Services, Public Health Service, U.S. Department of Health, Education, and Welfare.)


Utilization of Auxiliary Staff in the Provision of Family Services in Public Welfare. Monograph prepared jointly by Office of Secretary (Division of State Merit Systems) and Welfare Administration (Bureau of Family Services), December 1965.

OFFICE OF EDUCATION PUBLICATIONS.

Directory of State Officials Responsible for Supervision of Health Occupations Training. (Mimeo, November 1965.)

Guidelines for Developing a Training Program for:
1. Medical Office Assistant.
2. Nursing Unit Management Assistant.
3. Operating Room Assistant.
4. Physical Therapy Assistant.
5. Occupational Therapy Assistant (Mimeographed separates, 1964).

Practical Nurse Education: Impact of Federal Aid on Basic Preparatory Programs, 1957–62. (Mimeo, December 1963.)


OFFICE OF PROGRAM ANALYSIS.


Office of the Under Secretary.

Health Professions Educational Assistance Amendments (P.L. 89-290). (Article by Eugenia Sullivan. Reprinted from HEW Indicators, November 1965.)

Medicare—Social Security Amendments of 1965. Reprint of article by Wilbur J. Cohen and Pearl Peerboom from HEW Indicators, August 1965. (Contains calendar of significant dates and events; selected references on legislative history of social security; etc.)

Public Health Service.


Social Security Administration.


U.S. Department of Labor.


What Is the Neighborhood Youth Corps? Neighborhood Youth Corps, Manpower Administration, 1965.
### APPENDIX G

**FEDERAL LEGISLATION AFFECTING THE SUPPLY AND DEMAND OF HEALTH MANPOWER, 1956-65**

<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>84–652</td>
<td>National Health Survey Act (S. 3076).</td>
<td>July 3, 1956</td>
<td>To provide for a continuing survey and special studies of sickness and disability in the United States and for periodic reports of the results thereof, and for other purposes.</td>
</tr>
<tr>
<td>84–830</td>
<td>Alaska Mental Health Enabling Act (H.R. 6376).</td>
<td>July 28, 1956</td>
<td>To confer upon Alaska autonomy in the field of mental health, transfer from the Federal Government to the Territory the fiscal and functional responsibility for the hospitalization of committed mental patients, and for other purposes.</td>
</tr>
<tr>
<td>84–835</td>
<td>Health Research Facilities Act of 1956 (S. 849).</td>
<td>July 30, 1956</td>
<td>To amend the Public Health Service Act, so as to provide for grants-in-aid to non-Federal public and nonprofit institutions for the constructing and equipping of facilities for research in the services related to health.</td>
</tr>
<tr>
<td>84–911</td>
<td>Health Amendments Act of 1956 (Graduate Training of Professional Public Health Personnel) (S. 3958).</td>
<td>Aug. 2, 1956</td>
<td>To improve the health of the people by assisting in increasing the number of adequately trained professional and practical nurses and professional public health personnel, assisting in the development of improved methods of care and treatment in the field of mental health, and for other purposes.</td>
</tr>
<tr>
<td>84–941</td>
<td>National Library of Medicine Act (S. 3430).</td>
<td>Aug. 3, 1956</td>
<td>To amend title III of the Public Health Service Act, and for other purposes.</td>
</tr>
<tr>
<td>85–26</td>
<td>Untitled (H.R. 3035)</td>
<td>Apr. 25, 1957</td>
<td>To provide a temporary extension of certain special provisions relating to State plans for aid to the blind.</td>
</tr>
<tr>
<td>85–110</td>
<td>Untitled (H.R. 7238)</td>
<td>July 17, 1957</td>
<td>To give the States an option with respect to the basis for claiming Federal participation in vendor medical care payments for recipients of public assistance.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>85–151</td>
<td>Indian Health Facilities Act (H.R. 8053).</td>
<td>Aug. 16, 1957</td>
<td>To authorize funds available for construction of Indian Health facilities to be used to assist in the construction of community hospitals which will serve Indians and non-Indians.</td>
</tr>
<tr>
<td>85–544</td>
<td>Public Health Service Act Amendment (H.R. 11414).</td>
<td>July 22, 1958</td>
<td>To amend sec. 314(c) of the Public Health Service Act, so as to authorize the Surgeon General to make certain grants-in-aid for provision in public or nonprofit accredited schools of public health of training and services in the fields of public health and in the administration of State and local public health programs.</td>
</tr>
<tr>
<td>85–840</td>
<td>Social Security Amendments of 1958 (H.R. 13549).</td>
<td>Aug. 28, 1958</td>
<td>To increase benefits under the Federal Old-Age, Survivors, and Disability Insurance System to improve the actuarial status of the Trust Funds of such System; and otherwise improve such System; to amend the public assistance and maternal and child health and welfare provisions of the Social Security Act; and for other purposes.</td>
</tr>
<tr>
<td>86–571</td>
<td>Untitled (S. 2331).</td>
<td>July 5, 1960</td>
<td>To provide for the hospitalization at St. Elizabeths Hospital in the District of Columbia or elsewhere, of certain nationals of the United States adjudged insane or otherwise found mentally ill in foreign countries, and for other purposes.</td>
</tr>
<tr>
<td>86–610</td>
<td>International Health Research Act of 1960 (S.J. Res. 41).</td>
<td>July 12, 1960</td>
<td>To establish a national institute for International Health and Medical Research to provide for international cooperation in health research, research training, and research planning, and for other purposes.</td>
</tr>
<tr>
<td>86–720</td>
<td>Public Health Service Act Amendment (H.R. 6871).</td>
<td>Sept. 8, 1960</td>
<td>To amend title III of the Public Health Service Act, to authorize project grants for graduate training in public health and for other purposes.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>86-778</td>
<td>Social Security Amendments of 1960 (H.R. 12580).</td>
<td>Sept. 13, 1960</td>
<td>To extend and improve coverage under the Federal Old-Age, Survivors, and Disability Insurance System, and to remove hardships and inequities, improve the financing of the trust funds, and provide disability benefits to additional individuals under such system; to provide grants to States for medical care and for aged individuals of low-income; to amend the public assistance and maternal and child welfare provisions of the Social Security Act; to improve the unemployment provisions of such Act; and for other purposes.</td>
</tr>
<tr>
<td>87-27</td>
<td>Area Redevelopment Act (S. 1).</td>
<td>May 1, 1961</td>
<td>To establish an effective program to alleviate conditions of substantial and persistent unemployment and underemployment in certain economically distressed areas.</td>
</tr>
<tr>
<td>87-64</td>
<td>Social Security Amendments of 1961 (H.R. 6027).</td>
<td>June 30, 1961</td>
<td>To improve benefits under the old-age, survivors, and disability insurance program by increasing the minimum benefits and aged widow's benefits and by making additional persons eligible for benefits under the program, and for other purposes.</td>
</tr>
<tr>
<td>87-274</td>
<td>Juvenile Delinquency and Youth Offences Control Act of 1961 (Requires Health Manpower for Mental Health and Health Services in Correctional Institutions) (S. 279).</td>
<td>Sept. 22, 1961</td>
<td>To provide Federal assistance for projects which will demonstrate or develop techniques and practices leading to a solution of the Nation's juvenile delinquency control problems.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>87-276</td>
<td>Training of Teachers for the Deaf (S. 336).</td>
<td>do</td>
<td>To make available to children who are handicapped by deafness, the specially trained teachers of the deaf needed to develop their abilities and to make available to individuals suffering from speech and hearing impairments the specially trained speech pathologists and audiologists needed to help them overcome their handicaps.</td>
</tr>
<tr>
<td>87-293</td>
<td>Peace Corps Act (H.R. 7500)</td>
<td>do</td>
<td>To provide for a Peace Corps to help the peoples of interested countries and areas in meeting their needs for skilled manpower.</td>
</tr>
<tr>
<td>87-395</td>
<td>Community Health Services and Facilities Act of 1961 (H.R. 4998).</td>
<td>Oct. 5, 1961</td>
<td>To assist in expanding and improving community facilities and services for the health care of aged and other persons, and for other purposes.</td>
</tr>
<tr>
<td>87-510</td>
<td>Migration and Refugees Assistance Act of 1962 (Requires Health Manpower) (H.R. 8291).</td>
<td>June 28, 1962</td>
<td>To enable the United States to participate in the assistance rendered to certain migrants and refugees.</td>
</tr>
<tr>
<td>87-543</td>
<td>Public Welfare Amendments of 1962 (Requires expanded health and rehabilitation services) (H.R. 10606).</td>
<td>July 25, 1962</td>
<td>To extend and improve the public assistance and child welfare services programs of the Social Security Act, and for other purposes.</td>
</tr>
<tr>
<td>87-692</td>
<td>Untitled (S. 1130)</td>
<td>Sept. 25, 1962</td>
<td>To amend title III of the Public Health Service Act to authorize grants for family clinics for domestic agricultural migratory workers, and for other purposes.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>87–838</td>
<td>Untitled (H.R. 11099)</td>
<td>Oct. 17, 1962</td>
<td>To amend the Public Health Service Act to provide for the establishment of an Institute of Child Health and Human Development, to extend for 3 additional years the authorization for grants for the construction of facilities for research in the sciences related to health, and for other purposes.</td>
</tr>
<tr>
<td>87–868</td>
<td>Vaccination Assistance Act of 1962 (H.R. 10541)</td>
<td>Oct. 23, 1962</td>
<td>To assist States and communities to carry out intensive vaccination programs designed to protect their populations, particularly all preschool children, against poliomyelitis, diphtheria, whooping cough, and tetanus.</td>
</tr>
<tr>
<td>88–129</td>
<td>Health Professions Educational Assistance Act of 1963 (H.R. 12)</td>
<td>Sept. 24, 1963</td>
<td>To increase the opportunities for training of physicians, dentists, and professional public health personnel, and for other purposes.</td>
</tr>
<tr>
<td>88–156</td>
<td>Maternal and Child Health and Mental Retardation Planning Amendments of 1963 (H.R. 7544)</td>
<td>Oct. 24, 1963</td>
<td>To amend the Social Security Act to assist States and communities in preventing and combating mental retardation through expansion and improvement of the maternal and child health and crippled children’s programs, through provision of prenatal, maternity, and infant care for individuals with conditions associated with child bearing which may lead to mental retardation and through planning for comprehensive action to combat mental retardation, and for other purposes.</td>
</tr>
<tr>
<td>88–164</td>
<td>Mental Retardation Facilities and Community Mental Health Centers Construction Act of 1963 (S. 1576)</td>
<td>Oct. 31, 1963</td>
<td>To provide assistance in combating mental retardation through grants for construction of research centers and grants for facilities for the mentally retarded and assistance in improving mental health through grants for construction of community mental health centers, and for other purposes.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>88–204</td>
<td>Higher Education Facilities Act of 1963 (H.R. 6143).</td>
<td>Dec. 6, 1963</td>
<td>To authorize assistance to public and other nonprofit institutions of higher education in financing the construction, rehabilitation or improvement of needed academic and related facilities in undergraduate and graduate institutions.</td>
</tr>
<tr>
<td>88–210</td>
<td>Vocational Education Act of 1963 (H.R. 4955).</td>
<td>Dec. 18, 1963</td>
<td>To strengthen and improve the quality of vocational education and to expand the vocational education opportunities in the Nation, to extend for 3 years, the National Defense Education Act of 1958 and Public Laws 815 and 874, 81st Cong. (federally affected areas), and for other purposes.</td>
</tr>
<tr>
<td>88–352</td>
<td>Civil Rights Act of 1964 (H.R. 7152).</td>
<td>July 2, 1964</td>
<td>To enforce the constitutional right to vote, to confer jurisdiction upon the district courts of the United States to provide injunctive relief against discrimination in public accommodations, to authorize the Attorney General to institute suits to protect constitutional rights in public facilities and public education, to extend the Commission on Civil Rights, to prevent discrimination in federally assisted programs, to establish a Commission on Equal Employment Opportunity, and for other purposes.</td>
</tr>
<tr>
<td>88–368</td>
<td>Juvenile Delinquency and Youth Offences Control Act Extension (H.R. 9876).</td>
<td>July 9, 1964</td>
<td>To amend the Juvenile Delinquency and Youth Offenses Control Act of 1961 by extending its provisions for 2 additional years and providing for a special project and study.</td>
</tr>
<tr>
<td>88–443</td>
<td>Hospital and Medical Facilities Amendments of 1964 (H.R. 10041).</td>
<td>Aug. 18, 1964</td>
<td>To improve the public health through revising, consolidating, and improving the hospital and other medical facilities provisions of the Public Health Service Act.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
### FEDERAL LEGISLATION AFFECTING THE SUPPLY AND DEMAND OF HEALTH MANPOWER, 1956–65—Continued

<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>88–497</td>
<td>Graduate Public Health Training Amendments of 1964 (H.R. 11083).</td>
<td>Aug. 27, 1964</td>
<td>To amend the Public Health Service Act to extend the authorization for assistance in the provision of graduate or specialized public health training, and for other purposes.</td>
</tr>
<tr>
<td>88–560</td>
<td>Housing Act of 1964 (S. 3049).</td>
<td>Sept. 2, 1964</td>
<td>To extend and amend laws relating to housing, urban renewal, and community facilities, and for other purposes.</td>
</tr>
<tr>
<td>88–581</td>
<td>Nurse Training Act of 1964 (H.R. 11241).</td>
<td>Sept. 4, 1964</td>
<td>To amend the Public Health Service Act to increase the opportunities for training professional nursing personnel, and for other purposes.</td>
</tr>
<tr>
<td>88–597</td>
<td>District of Columbia Hospitalization of the Mentally Ill Act (S. 935).</td>
<td>Sept. 15, 1964</td>
<td>To protect the constitutional rights of certain individuals who are mentally ill, to provide for their care, treatment, and hospitalization, and for other purposes.</td>
</tr>
<tr>
<td>89–4</td>
<td>Appalachian Regional Development Act of 1965 (S. 3).</td>
<td>Mar. 9, 1965</td>
<td>To provide public works and economic development programs and the planning and coordination needed to assist in the development of the Appalachian Region.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-73</td>
<td>Older American Act of 1965 (H.R. 3708).</td>
<td>July 14, 1965</td>
<td>To provide assistance in the development of new or improved programs to help older persons through grants to the States for community planning and services and for training, through research, development or training project grants, and to establish within the Department of Health, Education, and Welfare an operating agency to be designated as the “Administration on Aging.”</td>
</tr>
<tr>
<td>89-97</td>
<td>Social Security Amendments of 1965 (Medicare) (H.R. 6675).</td>
<td>July 30, 1965</td>
<td>To provide a hospital insurance program for the aged under the Social Security Act with a supplementary medical benefits program and an expanded program of medical assistance, to increase benefits under the Old-Age, Survivors, and Disability Insurance, to improve the Federal-State public assistance programs, and for other purposes.</td>
</tr>
<tr>
<td>89-105</td>
<td>Mental Retardation Facilities and Community Mental Health Centers Construction Act Amend-</td>
<td>Aug. 4, 1965</td>
<td>To authorize assistance in meeting the initial cost of professional and technical personnel for comprehensive community mental health centers, and for other purposes. \</td>
</tr>
<tr>
<td></td>
<td>ments of 1965 (H.R. 2985).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89-109</td>
<td>Community Health Services Extension Amendments of 1965 (S. 510).</td>
<td>Aug. 5, 1965</td>
<td>To extend and otherwise amend certain expiring provisions of the Public Health Service Act relating to community health services, and for other purposes.</td>
</tr>
<tr>
<td>89-115</td>
<td>Health Research Facilities Amendments of 1965 (H.R. 2984).</td>
<td>Aug. 9, 1965</td>
<td>To amend the Public Health Service Act provisions for construction of health research facilities by extending the expiration date thereof, and providing increased support for the program, to authorize additional Assistant Secretaries in the Department of Health, Education, and Welfare, and for other purposes.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>89–117</td>
<td>Housing and Urban Development Act of 1965 (H.R. 7984).</td>
<td>Aug. 10, 1965</td>
<td>To assist in the provision of housing for low- and moderate-income families, to promote orderly urban development, to improve living environment in urban areas, and to amend and extend laws relating to housing, urban renewal, and community facilities.</td>
</tr>
<tr>
<td>89–136</td>
<td>Public Works and Economic Development Act of 1965 (S. 1648).</td>
<td>Aug. 26, 1965</td>
<td>To provide grants for public works and development facilities, other financial assistance and the planning and coordination needs to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions.</td>
</tr>
<tr>
<td>89–171</td>
<td>Foreign Assistance Act of 1965 (H.R. 7750)</td>
<td>Sept. 6, 1965</td>
<td>To amend further the Foreign Assistance Act of 1961, as amended, and for other purposes.</td>
</tr>
<tr>
<td>89–174</td>
<td>Department of Housing and Urban Development Act (H.R. 6927).</td>
<td>Sept. 9, 1965</td>
<td>To establish a Department of Housing and Urban Development, and for other purposes.</td>
</tr>
<tr>
<td>89–236</td>
<td>Immigration and Nationality Act, amendments (H.R. 2580).</td>
<td>Oct. 3, 1965</td>
<td>To amend the Immigration and Nationality Act, and for other purposes.</td>
</tr>
<tr>
<td>89–239</td>
<td>Heart Disease, Cancer and Stroke Amendments of 1965 (S. 596).</td>
<td>Oct. 6, 1965</td>
<td>To amend the Public Health Service Act to assist in combating heart disease, cancer, stroke, and related diseases.</td>
</tr>
</tbody>
</table>

See footnote at end of table.
**FEDERAL LEGISLATION AFFECTING THE SUPPLY AND DEMAND OF HEALTH MANPOWER, 1956-65**—Continued

<table>
<thead>
<tr>
<th>Public Law</th>
<th>Title</th>
<th>Date</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-290</td>
<td>Health Professions Educational Assistance Amendments of 1965 (H.R. 3141).</td>
<td>do</td>
<td>To amend the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, and osteopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy students, and to extend expiring provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions, and for other purposes.</td>
</tr>
<tr>
<td>89-291</td>
<td>Medical Library Assistance Act of 1965 (S. 597).</td>
<td>do</td>
<td>To amend the Public Health Service Act to provide for a program of grants to assist in meeting the need for adequate medical library services and facilities.</td>
</tr>
<tr>
<td>89-329</td>
<td>Higher Education Act of 1965 (H.R. 9567).</td>
<td>Nov. 8, 1965</td>
<td>To strengthen the educational resources of our colleges and universities and to provide financial assistance for students in postsecondary and higher education.</td>
</tr>
<tr>
<td>89-333</td>
<td>Vocational and Technical Rehabilitation Act Amendments of 1965 (H.R. 8310).</td>
<td>do</td>
<td>To amend the Vocational Rehabilitation Act to assist in providing more flexibility in the financing and administration of state rehabilitation programs, and to assist in the expansion and improvement of services and facilities provided under such programs, particularly for the mentally retarded and other groups presenting special vocational rehabilitation problems, and for other purposes.</td>
</tr>
</tbody>
</table>

*This is a list of major legislation enacted during the last decade, implicitly or explicitly affecting the supply and demand of health manpower in relation to the programs of the Department of Health, Education, and Welfare. Social Security legislation establishes and implements programs that often involve health personnel but its major professional and technical manpower requirement is in the field of social work. Therefore, only major amendments to the Social Security Act that refer specifically to new or expanded health programs (e.g. maternal and child health, medicare etc.) are included in this listing. It was prepared by Lucy M. Kramer, under the direction of Dr. Harvey I. Scudder, Chief, Manpower Resources Program, the Division of Community Health Services, Public Health Service, specifically for the Department of Labor—Health, Education, and Welfare Conference on "Job Development and Training for Workers in Health Services" held in Washington, D.C., Feb. 14-17, 1966.*