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ABSTRACT To stimulate and facilitate exchange of developments and ideas between approximately 252 health leaders from 45 states and 2 territories, position papers were presented, reactors provided applications and implementation of the topics, and discussion groups identified questions, offered examples of existing solutions to problems, and recommended further actions and program developments. Six opening speeches and luncheon addresses concern the contributions of vocational education to health occupations education, and the challenges facing health education services. Position papers were:

(1) "Utilization and Preparation for Health Care Delivery System(s)" by E. Kerr, (2) "Coordination and Cooperation in Planning, Developing, and Conducting Health Occupations Education Programs" by J. Hamburg, (3) "Occupational Exploration and Entry Level Programs in Health Occupations Education," by L. Borosage, (4) "Personnel Resources Development for Health Occupations Education" by R.E. Kinsinger, and (5) "Operational Strategies and Resources for Extending Health Occupations Education Programs" by R.N. Evans. Discussion summaries, recommendations, a conference evaluation, and several papers related to conference issues are included. (SB)
National Conference for Health Occupations Education

University of Illinois at Urbana-Champaign
College of Education
Urbana, Illinois
June 1970

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An Invitational National Conference for Health Occupations Education

Robert M. Tomlinson, Lois M. Langdon, Chet Rzonca, and Rebecca Rzonca

June 1969

The Conference reported herein was conducted under a contract with the Division of Vocational and Technical Education, Office of Education, U.S. Department of Health, Education and Welfare. Contractors, persons making presentations, and participants under such Government sponsored conferences are encouraged to express freely their professional judgement in the conduct of the conference. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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U.S. Department of Health, Education, and Welfare
Office of Education
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The National Conference for Health Occupations Education was initiated as a result of preliminary planning by staff members in the Bureau of Vocational, Adult and Library Programs of the U.S. Office of Education. It is one of the last of a series of conferences sponsored by that office and focusing on various aspects of concern as a result of the Vocational Education Amendments of 1968, P.L. 90-576. Something of a pattern for the conferences had been established; a national conference was to be conducted and, hopefully, succeeding conferences would be held at a regional, state and local level. The position and working papers of the national conference could provide resource materials for the following conferences. In each case, the contractor who conducted the national conference was also obligated to produce a "Handbook" or "Guidelines" for the particular area of concern consistent with the conference. (Copies of the Guidelines may be obtained from the Bureau.)

Organizing and conducting a three day national conference for the health occupations education field which would make the maximum contribution to progress in the area posed a significant challenge. The extremely rapid expansion and change across the total of the health field in light of technological and sociological changes as well as the involvement and concern of multiple agencies, institutions and organizations contributed to the dilemma of determining purposes and objectives. Historically, most sub-groups and specialties have been oriented to a relatively narrow aspect of the total field; interests were often based on preparation level, occupational specialty, categories of funds available, approval procedures, etc. Within such a context, it was deemed most desirable to sponsor an approach whereby the heterogeneous interests across the total field could come together, become better acquainted, and at least start an exchange which hopefully would lead to improved working relationships and coordinated planning to meet
the current and emerging needs. With this priority in mind, it was therefore necessary to plan for a relatively large attendance group. Not only would the total attendance be relatively large, but each discussion group would have to be larger than might be desired to provide an opportunity for the diverse viewpoints to be expressed and exchanged. Discussion group composition was pre-arranged to obtain the desired diversity.

The formal advisory committee as well as suggestions by many people knowledgeable in the field confirmed the initial thinking and approach. The position papers were developed to provide a background and broad structure for the topic; the reactions were to provide a transition and basis for the discussions which could be appropriate for all locations, levels and specialties. The major objectives were to provide a forum where: (1) an exchange of newer developments, approaches and thinking could be presented; (2) individuals could become acquainted and develop a basis for future exchanges and activities; and (3) an interest in and commitment to further development would be continued following the Conference. Results of the discussions and recommendations from the group could provide a common basis for reference and for future meetings or activities. This latter objective would be assisted through the Conference proceedings. The highly competent participants could, and did, provide an extensive and valuable resource for all concerned. Informal exchanges at the Conference were also expected to provide for common interests according to geographic area, specialty or type of program.

To enhance the likelihood of high productivity during the Conference, and particularly in the discussion sessions, discussion leaders, recorders, and resource persons were identified on a prior basis. Copies of key papers and reactions were provided to these people ahead of the Conference so that they might be better informed in coordinating the discussion sessions. Additionally, a work session for these persons was scheduled on the day prior to the full Conference so that all could become acquainted and be better versed on the approaches and purposes of the activities. The Conference discussion chairmen acted
as an advisory and feedback group during the Conference in an attempt to better meet the needs of the participants. A rather tight, but potentially flexible, schedule was developed in an attempt to be able to adjust as the circumstances required.

Through correspondence and discussions as the Conference planning developed, two major concerns seemed to emerge with a high degree of commonality: (1) recognition and concern that occupational information, exploration, guidance, and some occupational preparatory activities must be initiated at the secondary school level as a base for entry into the health occupations as well as to provide a flow of potential students to post-high school programs; (2) a great concern about existing proliferations and divisions and a desire to work cooperatively together across all levels of education and types of programs to meet the need for personnel. These two concerns continued throughout the discussions at the Conference as an underlying theme.

This Conference, as any conference of its type, developed an atmosphere and personality of its own. It would appear reasonable to characterize the N.C.H.O.E. as being dynamic, genuinely concerned with the issues, and somewhat anxious that adequate directions and answers must be found. In the first discussion sessions, it might have appeared as though there were wide and divergent views and interests, everyone talking and few listening. By the afternoon of the second day, it became far more apparent that there was a commonality of underlying concern for, and commitment to cooperative relationships in developing coordinated programs and approaches. The divergence of views and comments were more concerned with specific means of implementation and procedures that were causing, or leading to, difficulties in achieving the major commitments. In many cases, there was a higher level of agreement than seemed apparent until some reflection was actually given to the process and views that were emerging. In general, there appeared a willingness to set aside some artificial barriers and interact as interested individuals.

By the last day of the Conference, there was apparent and strong feeling across the group that the discussions and recommendations were
coming to the end of a first phase of exploration and the majority was ready to launch a second phase of more detailed planning for meeting the needs that had been identified and discussed. In this sense, the Conference was somewhat frustrating since the major investment of discussion and exchange had taken place, but the second phase of accomplishing a basis for future development would not be possible in the length of time available. There was a strong feeling, and recommendation that a follow-up conference to accomplish the second phase of development should be held in the relatively near future. Many of the participants at the N.C.TH.O.E. should attend a second working conference to take advantage of the exploration and exchange already accomplished and draw upon this investment in achievement of the next phase.

While it is difficult to immediately, or in this short time, to evaluate the outcomes of the N.C.TH.O.E., the enthusiasm, involvement and responsiveness of the participants indicate a significant benefit from this meeting. Hopefully, follow-up activities at the national, regional, and state levels can be forthcoming. The rate of development within the field would tend to indicate that future meetings must be held with some degree of regularity and continuity for maximum benefit.

Robert Tomlinson, Director
Chester Rzonca, Associate Director
Lois Langdon, Assistant Director
Rebecca Rzonca, Research Assistant
INTRODUCTION AND ACKNOWLEDGEMENTS

Introduction

The National Conference for Health Occupations Education, held in New Orleans, February 4-6, 1970, provided an opportunity for selected health leaders to come together and discuss the challenges of preparing and utilizing health care workers. The major topics which were presented and discussed centered about the changing health care delivery system, opportunities for health occupations education, coordination and planning, occupational exploration, personnel resources development, and strategies and resources for extending health occupations education programs. Particular reference was made to the opportunities for health occupations education through the Vocational Education Amendments of 1968, P.L. 90-576.

Conference participants were selected from recommendations provided by State Directors of Vocational Education, the Conference Planning Committee, invitations sent to associations and agencies and individual requests for attendance. The selection procedure resulted in a heterogeneous group composed of persons from all levels of education, various professional associations and agencies, and representatives from local, state, regional and national government. Forty-five states and two territories were represented allowing for a truly national conference. A complete listing of participants is provided in Appendix C.

Each chapter of this publication, with the exceptions of Chapters One and Seven, is devoted to a major topic as presented at the Conference. Each of these Chapters contains the major position paper and four reactions relating to it. Chapter One contains a welcome from the U.S. Office of Education presented by Dr. John Zapp, priorities for vocational education prepared by Dr. Grant Venn, and the opportunities for health occupations education through vocational education by Dr. Rupert Evans. In addition, Chapter One contains the presentations of the Conference luncheon speakers. The quality of these addresses and their relevance to the Conference was evidenced by the enthusiasm of the participants in attendance.
Chapter Seven has been compiled from the written reports supplied by the discussion group chairmen and recorders. The content of this Chapter reflects the common areas of agreement, issues, problems, and possible solutions. The evaluation of the Conference by the participants is also provided.

Appendices A, B, and C respectively, provide information concerning Conference personnel, the Conference program and a listing of participants. Appendix D describes selected exemplary programs and provides a further development of some of the issues discussed at the Conference. Each section is separated by a blue title page for easy reference by the reader.

A related but separate activity being conducted under the Conference contract is the development of a handbook. This handbook will be devoted to guidelines, procedures and recommendations necessary in developing, implementing and operating health occupations education programs.

Acknowledgements

This Conference was made possible through funds provided by the Bureau of Vocational and Technical Education, United States Office of Education, and the cooperation of the Department of Vocational and Technical Education, University of Illinois which assumed the responsibility for conducting the Conference.

As with any activity of this type, it is the work of many concerned individuals which results in a successful Conference. Particular reference and thanks are due to the Conference Planning Committee whose assistance and guidance has proved helpful throughout the Conference activities. A complete listing of Planning Committee members is provided in Appendix A. The presenters of position papers and reactors are also commended for their preparation and Conference presentations. Those persons serving in these capacities are noted in Appendix B, the Conference Program. Each of the ten discussion groups contained a chairman, recorder, and two resource persons identified prior to the Conference who guided and contributed to interaction among participants. All general sessions and luncheons were able conducted by their respective chairmen as identified in Appendix B. The participant selection procedure was made possible largely through the efforts of State Directors of Vocational Education.
Recognition is also given to the continuing efforts of Miss Helen Powers, Program Officer, Secondary, Post-Secondary and Health Occupations Programs, Bureau of Vocational and Technical Education, U.S. Office of Education. Miss Powers has been actively involved in the Conference planning and development since its inception and will continue to work with follow-up activities.

Thanks is also extended to Rose Watts, Shirley Atwood, Sandra Zander, and Becky Rzonca for their efforts in completing the many responsibilities necessary to the Conference and this publication.
CHAPTER V

Personnel Resources Development for Health Occupations
Education - Robert E. Kinsinger
Reaction - Leonard Berlow
Reaction - Lewis D. Holloway
Reaction - Frederick C. Adams
Reaction - Joseph Kadish

CHAPTER VI

Operational Strategies and Resources for Extending Health Occupations Education Programs - Rupert N. Evans
Reaction - John E. Bean
Reaction - Harry P. Davis
Reaction - Mary L. Ellis
Reaction - Edwin Rumph

CHAPTER VII

Summary of Discussions, Recommendations and Conference Evaluation

APPENDICES

Appendix A - Conference Personnel
Appendix B - Conference Program
Appendix C - Conference Participant List
Appendix D - Self-Destruct: A Concept for Training Allied Health Personnel to Meet Immediate Problems - G. Frederick Dunn
Health Services Survey and Training Program - Albert Pitts
Health Careers Guidance Clinic
Practical Nurse Work-Study Program - Lawrence Abrams
Exploratory and Entry Level Health Occupations - Jerry Olson
Some Facts About Vocational and Technical Education
Program and Personnel Approval
Accreditation, Licensure, Registration and Certification
CHAPTER I

Welcoming Remarks
John S. Zapp

Vocational Education Priorities for the 1970's
Grant Venn

Roles and Opportunities for Health Occupations Education Through Vocational Education
Rupert N. Evans

Challenges for Medical Education and Services for Coordinated Health Care
William H. Stewart

The 1970's Challenge to Health Education
Whitney M. Young, Jr.

Implications of the Changing Health Care System
Frederick N. Elliott

1-0
Panelists and Participants:

I am most pleased to not only welcome you on behalf of DHEW, but also to thank you for your participation in the Health Occupations Conference. It is indeed most fitting and appropriate as we initiate a new decade of years and experiences that we also evaluate our individual and collective roles in the field of health occupations. It is certain that as the decade changes, we also must.

Your discussions at this point have demonstrated the well documented fact that we have not kept pace with the changing demands in the health occupations field. And it is for this reason that the Office of Education and the Office of Health and Scientific Affairs are pleased that such a blue ribbon group as yourself would spend three days to investigate and collaborate in your workshops, and with your attempts to assist in designing more functional approaches to the problems facing us all in the expanding health occupations field. We are very much interested in the areas you have identified at this point.

The comments this morning related to designing a better relationship between the functions an individual is trained to do and the functions and duties he will actually be assuming when employed. This is not limited to, but especially true in the exciting area of new careers, and as they relate to the state licensure and certification requirements and limitations.

We in DHEW are presently endeavoring to develop and maintain a much closer relationship on the policy level between the involved portions of the Office of Education and the Office of Health and Scientific Affairs. Because we do realize the increasingly important role the sub-vocational health occupations will play in carrying out the health commitment of the Nation. And, I would stress that those of you in the States and local areas develop and cultivate a stronger relationship between your occupation and health compacts. And that you involve the professionals of the health community in your health occupations

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training and education. That you build continued education into health occupations to offer a better promise of advancement and enrichment. And through this and other means develop a sense of professionalism and respect into the entire allied health field.

I shall borrow Dr. Stewart's phrase in his luncheon speech, of redundancy and not be such by itemizing the many things already identified. I want to again express our appreciation for your participation and we do look forward to the reports that this Conference will produce.

Thank you.
VOCATIONAL EDUCATION PRIORITIES FOR THE 1970'S

by

Dr. Grant Venn
Associate Commissioner
Bureau of Adult, Vocational and Library Programs
Office of Education
Department of Health, Education and Welfare

The Vocational Education Amendments of 1968 were enacted by Congress to accomplish Herculean goals: equal opportunity for all students who could benefit from vocational education, quality vocational education, up-dating of an archaic system of education, and a fourth "R" - relevance. In effect, Congress asked vocational educators to help each student prepare for a meaningful, productive role in the world of work. It asked schools to be accountable, to make every youth potentially employable.

Vocational Education for Everyone

Vocational education, then, should be made available to all students at the high school and post-high school levels. Our schools must no longer be used as "selecting out" mechanisms.

Exploratory work programs should also extend down the educational ladder to junior high school classes. These programs should reach all youngsters, including the bright, middle-class, white, affluent student, before he is "selected out" to pursue an academic career - one for which he may be temperamentally unsuited but which he will try to follow because he knows no alternative. Youngsters should also be exposed to vocational education in the early grades, so that they recognize it as a worthy alternative to academic preparation.

These exploratory work programs should allow students to become acquainted with several broad occupational areas, and to explore a specific area in depth. A junior high school program in twenty Georgia schools, for example, exposed students to real or simulated work experiences in six major occupational interest groupings. Work experiences were supplemented by viewing of career development films and by individual guidance.

Many exploratory work experiences can also be provided through a prevocational curriculum. In many schools, for instance, a typical manufacturing company has been organized within a classroom setting, with students performing the various functions involved in selecting, designing, planning, tooling, producing and marketing a product. This type of program is adaptable to many

This section was developed for presentation at the National Conference for Health Occupations Education, but it was not presented at that time due to the illness of Dr. Venn.
school settings.

The number of vocational education programs designed to serve everyone should not, of course, overshadow the need for quality in the programs. Congress has appropriated funds for exemplary programs and projects under the 1968 Vocational Education Amendments. These projects should represent bridge-building efforts between research and development and actual school operations.

Exemplary programs should include, in one operational setting, all the following aspects:

- Broad occupational orientation at the elementary and secondary school levels.
- Work experience and cooperative education provision for students not previously enrolled in vocational programs to receive - prior to the time they leave school - specific training in job entry skills. This might also include provision of opportunities for students who might otherwise drop out of school to enter relatively short-term occupational training courses in secondary or area vocational school.
- Intensive occupational guidance and counseling during the last years of school and provision for initial placement of all students at the completion of their schooling. Placement would be accomplished in cooperation with the appropriate employment services and manpower agencies.
- Provision for the grantee or contractor of the program to conduct it with support from regular funding sources after termination of Federal assistance.

Exemplary programs should not involve original research or development activities. Instead, they should be programs based on the results of successful research and development projects. In other words, vocational education should take its best projects and replicate them, until exemplary projects are not isolated episodes but part of every State's educational system.

Quality vocational training for everyone is necessary because an increasingly technological society demands skilled workers. Fewer and fewer opportunities are available to uninformed and untrained workers.

Training the Disadvantaged

Schools, as I said, must move to reach everyone - including the disadvantaged, the handicapped and the school dropout. To make sure that vocational education reaches these last groups, Congress has set aside funds specifically for them.

The problem involved in training disadvantaged students and adults lies, I believe, in convincing them that there is hope. Studies suggest that most disadvantaged persons share the same yearnings as do the rest of our population,
but they doubt the possibility of achieving these desires. Because their futures have always seemed too uncertain to merit investment of time in study, their horizons have been lowered and only goals that could be immediately gratified have been sought. What sometimes appears to be lack of ambition and anti-social attitudes on the part of disadvantaged students and adults may actually be realistic responses to prevailing conditions.

Directors of manpower training programs, for example, have discovered that displaced but experienced workers who have taken retraining courses have done so with reasonable confidence that their new training would result in jobs. Disadvantaged persons in such programs, on the other hand, have displayed a lack of confidence in such a happy ending, an outlook that subsequent experience often proved to be correct. Handicapped by the lingering effects of poverty, inferior education and poor health, many trainees found there were still no jobs to compensate them for their investment of time and effort. Others encountered racial discrimination in hiring practices. Manpower training had become one more unfulfilled promise.

What was and is true for such adults is also true for their children. Disadvantaged youngsters must see the relation between preparation for work and the availability - to them - of better jobs.

In California and some other States and cities teachers and counselors have been going into industry to secure jobs for graduating disadvantaged and handicapped vocational students, and doing it successfully. But more research, statistics, and information about the success of job-holding handicapped and disadvantaged students are needed, so that private industry and business can see that such workers are good risks. The success of such job-holders should also be publicized, so that the disadvantaged and handicapped may have renewed hope that they, too, can be employed.

Vocational Education as an Agent of Change

Our society is rapidly changing and vocational education has an important role to play in helping our educational system adapt to the needs of this change.

Conceived when this Nation was a stable, agricultural society, our system of education was planned to serve yesterday’s goals. Too often it still prepares students for yesterday’s world.

I believe vocational education can be the agent of many of the changes required for today’s world. The changes will come. Even if educators do not recognize that much of today's education is irrelevant to today’s needs, students do.

The prevalence of student activism, which is one of the greatest problems
facing educators today, is also the potential source of a beneficent renewal of our society. For students who are today putting down and dropping out could - tomorrow - be joining in and building up within our society.

Our educational system has instructed youth in personal rights, but it has deprived them of the opportunity to undertake any concomitant responsibility; it has instructed youth in the ideals of our democracy, but has failed to show them how to work within the system to achieve these ideals; it has given them knowledge and developed their ability to think for themselves, but has failed to provide them with anything constructive to do with their knowledge. It has denied them the power to translate thoughts into action.

Students are ready now to take part in a society that needs productive, concerned and responsible citizens. Career preparation at the high school and post-high school levels opens up rewarding alternatives to the extended years of dependency, restlessness or unemployment now faced by many young people before they are allowed to assume the responsibilities of adulthood.

**Employment is the Goal**

To ensure relevance, vocational educators must accept a responsibility they have long shirked. They must realize that training is only one step on the ladder from unskilled youth to employed adulthood, that the goal of occupational preparation is employment and that we have not fulfilled our function when we let a trained youth leave school without a job that has increased earning as well as learning opportunities.

Educators must straddle the no-man's-land between training and employment. We are, in our way, matchmakers. The means to match trained students to jobs are available and varied and we must use all these means - by working with State Employment Services and employment agencies, and by going directly to business and industry to recruit jobs for our students.

Every vocational student merits the same concern and whole-hearted support of counselors and teachers that college-bound students have always received. It is time that vocational students received the same attention to help them find jobs.

Vocational cooperative education is one of the better ways to do this. It gives students a chance to learn the occupational skills they are studying in school on real jobs, under actual working conditions and in contact with experienced workers responsible for having up-to-date knowledge of the requirements of their field.

Business and industry also benefit from cooperative programs, which provide them with a pool of experienced workers. And through their involvement in such programs, vocational educators can keep in touch with the frequent
changes in occupational fields.

A variation of the traditional approach to vocational cooperative education is that used in distributive education and other occupational programs in St. Louis. There the facilities of the employers are used for both classroom instruction (provided by public school personnel) and on-the-job training.

In the retail stores, for example, instruction is given in classrooms where specific job skills and employability skills (work habits and attitudes, personal appearance, and communication skills) are taught. Class periods are followed by work periods during which students gain on-the-floor, behind-the-scenes, and over-the-counter job experience. Similar programs in the St. Louis public high schools cover office and industrial occupations.

Recent studies show that most workers lose jobs for reasons other than incompetency in technical skills. Many vocational educators attribute this phenomenon to inadequate training in a real work environment. Cooperative education, however, has led to relatively high job placement records and high employment stability among former students, who also report high job satisfaction. Vocational cooperative education, then, can help bridge the gap between school and work.

When we do bridge that gap for millions of youths and adults, we will stand a good chance of successfully developing the greatest resource of America — her peoples' full potential for working in satisfying and productive careers.
We are in the midst of a revolution of relationships among occupations, with the status of occupations changing rapidly, and with an inversion of pay scales based on supply and demand. We're about to enter a period in which some of the people, in health occupations in particular, who have been vastly underpaid in the past, are about to receive somewhere near the amount of money that is due to them. This increase in pay is coming not because they're good people (though they are good people), but simply because there aren't enough of them. At the same time, society is recognizing that in every nation in this world, underdeveloped and developed alike, we are turning out more college graduates than we can absorb into the professions. In every nation in the world, we are turning out more college graduates than we can absorb into the professions, and the effect of this is going to be disastrous for some people. This is going to mean that many people who go through college will not be entering the professions, even though they expected to have done so. It's going to mean that the pay scales for many of the professions are going to go down, relative to those occupations for which a baccalaureate is not required.

I talked recently to an economist who suggested that it was a highly undesirable thing to train people for the health profession because the cost benefits ratios were poor. He said, "I have a solution. If we temporarily stop training people for the health professions, then the shortages will get more and more acute, pay scales will go up, and that will attract people to the health professions". Unfortunately, this gentleman's cost benefit analysis doesn't take into account the priceless benefits of life. Because he can't price them, they don't fit into the equation. But we don't have to stop training people for the health professions. The desire, indeed the demand for support for training in this field, the desire and support for service in this field is expanding so rapidly that we just can't begin to keep up with it. That's why pay scales are going up and they're going to go up more rapidly.

Now what about vocational education's relationship to this field. In 1957 we turned out seven thousand people in health occupations, using vocational education funds. These graduates increased from 7,000 in 1957 to 141,000 last year, 1968. This sounds like a phenomenal increase, and it is a phenomenal increase.
increase, but the number of graduates has started to level off, and I'm concerned about this. The estimates for 1970 are only 160,000 graduates. We could compare this with the estimates of sixty-three billion dollars being spent per year on health care, but billions of dollars just don't mean anything to me. Instead, compare our increases in health occupations vocational graduates with persons employed in the health occupations now and by the middle of the decade. We're going to have to have four and a half million. I think that's a very conservative estimate. To meet this tremendous need, we're talking about turning out 160,000 people in 1970, in vocational education programs. Look at this another way. We have only 1,200 out of 18,000 secondary and post-secondary schools, colleges and universities that have even one program in health occupations. And only 21,000 of those people which we're training now are being trained in secondary schools. The remaining 120,000 are being prepared in post-secondary and adult programs.

Vocational education covers preparation for virtually any occupational group that requires less than a baccalaureate degree for instance. It exists in every one of our states and territories, and every one has a state director and state board of vocational education. Some are more effective than others, but they exist throughout the nation. There are a hundred thousand people in this country serving on advisory committees that work with vocational education. Not very many of them are in the health occupations fields, however. Vocational education is in the process of a major revolution in goals. It has shifted from a program which had very narrowly defined programs along occupational category lines, to a program which emphasizes preparation for all of the families of occupations for which it has responsibility. And it has switched to goals that emphasize not only meeting the manpower needs of the nation, but also to goals which emphasize increasing the individual options that are available to students and to goals which emphasize the fact that vocational education can lend relevance to general education for all of the students with which it is involved. Vocational education exists, and it ought to be used.

Mac Detmer tells us that 85 percent of the health occupations workers to be prepared require less than a baccalaureate degree. And Billie Kerr tells us that the needs for sub-baccalaureate workers are growing faster than those for physicians, dentists, and other people who require well beyond the baccalaureate. Hence, it seems clear that if Mr. Nixon is willing, then both now and in the future, vocational education ought to be more able to provide support for more than 85 percent of the health occupations education that we need. But there's a curious, little known fact about vocational education at the local level. Unlike the people from Washington, and people at the state level who work closely with major occupational groups, too often, at the local level,
level, vocational educators wait to be asked to start a program. Generally speaking, they are very willing to start a program if they are asked, and if they anticipate no great difficulty from conflicts within an occupational group. One vocational educator said to me this morning, "We had this group who came in from social work, and we had a different group which came in from medical social work. They asked for separate programs, and they couldn't agree on what ought to be done, so I said to them, 'Well, you go back and resolve that difficulty, and then come to me and we'll get a program of the type that we all agree we need.'" This says to me that the suggestion in one of our position papers for the formation of health education councils is sound. These groups can go to vocational educators at the local and state level and say, "These are the sorts of occupational education programs that we need in the health professions." Then you're going to get support, and strong support for the development of the programs that meet the needs of our nation.

One other comment about an inadequacy in vocational education. Day before yesterday, a state in this nation that has decided that all of its vocational education funds ought to go to secondary schools, and none of its money ought to go to post-secondary schools. The Congress recognizes that this condition exists, and they said to the people in the state who get vocational education funds, "You must put a certain proportion of this into post-secondary education." When I talked to this state's director of vocational education, he said, "Well, we'll put the minimum required by Congress into post-secondary education. I don't believe in it, but I'm forced to do it, so that's what I'll do." It could be that another function of councils for health occupations education could be to persuade people who have this viewpoint that it's not the level of education that counts, but rather, what sorts of educational programs are needed. Perhaps it could persuade such administrators that we ought to put our funds and our efforts into the programs that meet those needs.

During this Conference, we're going to hear from people from within and without the health occupations groups that we're doing lots of things wrong. In fact, some people keep telling us that everything we do is wrong. I do wish we had some way of self-destruction for certain parts of certain of our programs. But I surely don't want everything we're doing to self-destruct, because we're doing lots of things right. Let me point out to you that the group represented here is a major leader in the type of education which combines theory with practice, and that you are a major leader in education that involves both instruction in the classroom and in the clinical situation, and ties the two closely together. This is too seldom recognized. The rest of
occupational education and indeed, all of education, could profit greatly from the things that they could learn from watching you. Let me point out also, that to the best of my knowledge, the group represented here is the only one in the nation that represents a significant cluster of occupations that gets together, is here together, to plan together for educational programs that meet the needs of that entire occupational cluster. We don't have anything comparable to this in the building trades, or in the distributive occupations. We ought to have, and I hope that other groups around the nation will take cues from you.

There are many things that have to be done. As I listen in on some of your discussions, it seems that everybody was identifying problems, and nobody was coming up with solutions. In this Conference, we'll be talking in more concrete terms. I'm optimistic about the future of health occupations education, and I'm optimistic that you'll provide leadership to all of vocational education, outside your field, as well as within it.
Those of us who are frequently found as luncheon or after-dinner speakers develop a small, reliable stock of cliches for all occasions. In the medical speech field, most of us mention with some frequency the need to "mobilize our health resources". This phrase has a nice ring to it, but it contains a very inaccurate metaphor. It suggests that we have in being a health army with divisions and battalions that can be pulled out of one sector and hurled into another on command.

The fact is, of course, that no such army exists and no such command can be issued. The $63 billion health business in the United States is proudly and sometimes fiercely pluralistic. It is run by several hundred thousand physicians and other health professionals, plus scientists and educators, plus administrators of public and private agencies and institutions. Each has his own vision of the health system. Each has his own conviction about his particular function within it.

The first description of the health services system in the United States is that it cannot be described in any one model or in any one page description.

On the whole, over the long years during which it has evolved, the health service of this country, by whatever description, has served us well. It has helped to create a very high level of medical capability. For many of our people it has provided and continues to provide services of a quality unsurpassed anywhere in the world.

It is now apparent to all of us, however, that the health services are being put to the severe test of change. The pressures forcing this change are being generated both within the medical world and in the broader society of which that world is a part.

The internally generated pressure for change stems from the sudden revolution in medical technology. Historically, across the long span of the centuries back to Hippocrates, the practice of medicine consisted largely of an unequal struggle to prolong life and reduce misery. The struggle was unequal because available knowledge was limited and unsystematic, and because tools were rudimentary at best. Very rarely was the doctor able to accomplish any

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1-12
kind of medical victory. In fact, when a patient did recover, it was usually attributed to divine rather than human intervention.

There was, however, one basis on which the physician's performance was evaluated. The good doctor was considered "good" because, lacking the ability to cure a specific ill, he gave "care" to the whole patient. He made him feel better, temporarily at least. He was a skillful comforter. He was essentially an artist. And because the artist thrives in a cultural medium of individualism, there was little need for organizational patterns beyond those which were necessary to pass the torch from one generation to another.

Then, beginning in the late 18th century and continuing into the 20th, came a period when the tide of the long battle began to turn - not so much by curing diseases as by keeping them from happening to large groups of people. Many of these gains were external to medicine - a general rise in living standards and levels of acceptance brought better nutrition and cleaner surroundings for most of the people. Others stemmed from the beginning of biomedical science. We learned how to treat public water supplies. We learned how to immunize against some diseases.

In most of these instances society was the patient, fear was the motivation, and the individual benefitted as a member of the community. Therefore, organizational patterns began to evolve in public health. Meanwhile, the practice of medicine remained essentially an art form, retaining its highly individualistic flavor and orientation.

Now for the past two decades, we have been in a third historical period - the therapeutic age. Primacy has been given to diagnosis, treatment and cure - through the "wonder drugs", through "wonder surgery", and other applications of biomedical science and technology. The accent has been on the specific disease or disability, the focus on the diseased organ or tissue.

This technological revolution has sharply altered - both for better and for worse - the relationship between the physician and his patient. I shall discuss these changes a little later. Here the point I want to stress is that this technological revolution challenges the fundamental basis of the present health services delivery.

For, in common with all our other exploding technologies, medical technology depends upon system. It demands specialization and subspecialization. It requires effective interlocks between specialties, and well-organized teams of supporting technologists. It requires complex and costly equipment which in turn demand complex and costly housing.

Thus, whether or not he likes it - or even thinks about it - the medical man has become the organization man. The more specialized he becomes, the
greater is his dependence upon system. Modern medical care cannot be provided
without highly sophisticated social and fiscal and technical systems of which
the hospital is one outstanding example.

The other powerful pressure for change in the health services comes from
society at large. Equal opportunity for health services is now among the ex-
pectations of all the people.

From a purely technological point of view, we are committed to the mass
production and universal distribution of technical excellence without distur-
b ing the art of medicine so essential in assisting the individual to cope with
pain, loss of independence and identity, and ultimately death.

That in itself is a very tall order. It is an order that quite obviously
cannot be filled with the resources available to us now or in the foreseeable
future. The resources - especially manpower, the hardest to come by and the
longest in development - are too thin and too unevenly stretched.

In quantitative terms alone it is clear that we cannot do all things for
all people all at once. Choices will have to be made, priorities will have to
be established; existing resources will somehow have to be redirected, and new
resources will have to be created with all possible speed.

This quantitative challenge is further complicated by the dimension of
quality. We cannot ever expect to achieve complete uniformity of services
available everywhere. But it is plain that the range of quality now in exist-
ence - from high excellence to scant mediocrity - is far too wide. We need to
bring up the quality level where it is below acceptability, and at the same
time make sure that the new resources we are hurried to create meet the same
high standards.

What I am saying, in essence, is that there is an urgent need for organ-
ization within the health services system. In fact I believe that this is its
greatest need and that many of the problems or if you choose, the crises in
the delivery of health services, will not be solved until the need for organ-
ization is met. And since we are not dealing with an army subject to instant
mobilization, this organization can only be achieved by incentive and consent.

I would like to shift now into a look at a more specific area in this
organizational problem. I was tempted, at this point, to give some thoughts
I had on the evolving field of the allied health professions but the excellent
position papers of Kinsinger, Hamburg, Kerr and Borosage say all I know and
redundancy in a luncheon speaker is not very interesting. Rather I thought I'd
spend the next few minutes exploring the problems of the medical schools as
they relate to this gigantic organizational problem of the delivery of health
services.

1-14
Let's begin with a fundamental question - what is a medical school for? For years it has been fashionable, almost obligatory, to talk about the three-fold function of a medical school - research, teaching, and service. Certainly every medical school is engaged in all three of these worthy activities and indeed must be.

But the unique function assigned to the medical school is the production of physicians. For the production of physicians, the medical school stands alone. Research and services can and are performed in many other schools and institutions. Society has decided the only route to medical practice is through the medical school to the attainment of the M.D. degree.

Until fairly recently it was possible to define medical education as the process that went on in a medical school. This definition is no longer valid.

There are several reasons why this definition is obsolete. Not long ago the line between premedical college education and the medical school was sharp and clear. There was little overlap or duplication. There was also relatively little communication between the two distinct levels.

Now, however, that sharp line is fuzzy. Premedical education has been lengthened to a four-year curriculum usually crowned by the B.S. degree. Undergraduate teaching in chemistry, biology, and mathematics has greatly improved and gained in sophistication.

These changes raise a number of obvious questions. Is a good deal of the basic science teaching in medical schools actually redundant for a majority of the students exposed to it, or even for a substantial majority? If so, can we afford the cost of this redundancy in terms of staff and student time? Would it not be possible and desirable to experiment with advanced placement of students to enhance the efficiency and the time-table of the entire process?

The line at the terminal end of the medical school education also used to be sharp and clear - the line between medical school and medical practice. Only a brief general internship separated the two stages. In those circumstances, the content of medical school preparation was, and had to be, closely relevant to medical practice.

Now, however, this line is lost. It has disappeared into a long residency period during which the physician undergoes his differentiation. And this differentiation takes place according to criteria over which neither the medical school nor society at large has much control. Types of residency training, and their number and distribution, are determined largely by the service needs of hospitals rather than by the total health care needs of the community at large. Obviously there is some correlation between the two, since the hospital provides a substantial share of the total care delivered. But the hospital's
requirements have little bearing on the needs for physicians to provide ambulatory care or service in other types of institutions. Many services for which we feel the most urgent need today are precisely those which are neglected in the present process whereby physicians are differentiated and distributed after the receipt of the M.D. degree.

Now, if my theme statement is true, that medical education can no longer be defined as what happens in medical school, then the medical school occupies a middle ground removed from both the raw material - the student beginning his higher education process - and the finished product, the practicing physician. In this position the faculty tends unconsciously to redefine its purpose, away from the social product. The teacher defines his function more in terms of his discipline - for example, pathology - or his specialty - surgery; or his special interest - perhaps research. Each man has his own specialized goal which he imparts to his students.

The composite result of this human tendency is an organization with a multiplicity of goals and an obscure or even invisible unifying mission. Such an organization is a virtual Tower of Babel. I believe it is this dissonant cacophony of competing voices that has defied rational interpretation in study after study as the medical school seeks to reorient itself to changing conditions.

Stepping away from this Tower of Babel for a moment, I shall now turn to a corollary theme statement for consideration. Not too long ago, the people's definition of a physician was very similar to the medical school's definition of its graduates. Today, perception is not nearly as similar between society and the medical school faculty as to what a physician is.

As a matter of fact, since the advent of specialization as the dominant motif in medicine, it may well be impossible to define the word "physician" per se. I suspect that all physicians experience this problem in a number of down-to-earth ways.

Ask the physicians at your medical school what they do when confronted with that box on the Income Tax forms that asks for occupation. Do they write physician? Or do they write "surgeon" or "pediatrician" or "professor"?

All of us who are physicians are very accustomed to being asked immediately on being introduced to someone as a physician, "What kind of physician?"

It seems to me that society itself is very confused as to what a physician is and what to expect of him. On the one hand, the more sophisticated and urbane segments have welcomed the technology of medicine with eager arms. The moment these people's judgment indicates there is the possibility of something serious, they immediately seek out the specialist that they think they
need. Of course, they may guess wrong and, therefore, waste precious time on a medical detour.

On the other hand, there is the comfortable picture of the family doctor - the physician of everyone's definition a few decades ago. When he cannot be found, society feels both cheated and worried.

Meanwhile, as I have noted earlier, physicians are actually being differentiated into specialties by the availability of residencies, by sources of funds, by medical fads and popularity factors which may or may not be relevant to the real needs for health care. What bearing does the widespread popularity of surgical residencies have upon need for surgery? What bearing do pediatric residencies have on the needs of infants and children? Does society really think now that all babies should be delivered by obstetricians and that all the ills of children should be cared for by pediatricians? If so, and if this is what American medicine wants society to believe, then it takes only a little arithmetic to demonstrate that it can't be done. There are not enough obstetricians, not enough pediatricians, and there probably never will be in the foreseeable future.

Or are we willing to settle for something else? And what should it be? If one segment of society is willing to settle for an alternative, can such an alternative be developed without contributing to the development of a two-class medical care system? What is the nature of that "something else?" Who defines it? Who gears the total educational process to produce it? What is the medical center's logical responsibility for participating in this reevaluation and retooling?

These questions lead directly into another challenge - the challenge of preparing the physician to be the manager of the small army of technical associates without whom he cannot apply modern medical technology, and preparing him also for the job of advocate for his patients whom he must guide through the maze of health services. This important part of his professional preparation is acquired now in part by doing, but only in the institutional settings of medical school and hospital. Nothing prepares him for these tasks in the community, where the medicine may be less complex but the human and institutional relationships are disorganized and much more complicated.

Hence, if we are defining the physician as the end product of residency - which may well be the most honest definition available at present - our product is only partially relevant to needs, and only partially prepared to perform the role required of him.

If on the other hand, we define him as the product of the medical school, he is even less relevant and less well prepared.
I believe this largely unformulated dilemma is the crux of the crisis we all talk about in medical education. It is no longer possible to define medical education as what goes on in the medical school. And society no longer defines the physician it needs in the same way that the total medical education process views its product.

Well, we could go on and on talking about the problems. In fact, I get the feeling that that is what this National Conference is all about. And there will be many other national conferences before the problems in the delivery of health care are handled to the satisfaction of all involved.

You will notice I suggested few solutions. I am not sure that we can define the problems specifically enough yet to come up with meaningful solutions. We are in that state of unease when the need for change is perceived to be mandatory but we are looking before we leap. This Conference is one of those looks. I wish it every success.
I'm not sure of your expectations of my presentation here today. I just hope that I do not have the experience that I've heard Michelangelo once had. After he had spent months lying on his back painting the ceiling of the Sistine Chapel, I understand that as he brushed the last stroke it suddenly occurred to him, "My God! They wanted wallpaper."

I do want you to know that I am fully aware that while in terms of numbers and quantity you are relatively small compared to audiences I usually address. I am also fully aware that in terms of influence and power, policy- and decision-making, you are, in fact, the Establishment. Your bosses wouldn't admit this, but I've been close enough to the Establishment to know that you are the people who are very crucial to things that I hope we share in common.

I want to talk to you both as citizens and as professional people in the field of education and the field of health. As citizens I'm sure I share with you all of the concerns and the anxieties about our society and the fact that we as a country, in spite of our affluence, technology, and productivity, are in trouble. As citizens, I hope that you feel as I do that we aren't going to get out of trouble simply by commiserating with each other and moaning. We're going to get out of trouble only by doing something about it. We must provide leadership. We must not make assumptions as some people do that man is inherently bad; certainly we have said here that man has the proclivity for good as well as for evil. It all depends on where the leadership decides to zero in - on his evilness or on his goodness. I am, I suppose, a rather naive optimist, a cautious optimist, but I still have a basic belief in the intelligence of people, if not the morality of people. We are in trouble in this country, primarily because those who have not are today fully aware of the difference in their status. They're no longer hidden away in rural areas in the South or even the North. They're aware of the difference in their standard of living and that of other people. But not only are they aware; they are fully conscious that the difference is not due to congenital inheritance, but to the fact that they are the victims of man-made indifference, callousness, and institutional immorality.
Not only are people aware of the differences and why, but people are fully aware of how changes have taken place and how other groups have utilized their resources to throw off the yoke of oppression and deprivation. All the have-nots in our society, whether they be poor whites in Appalachia, or poor blacks in Watts, or Mexicans or Puerto Ricans, or the original Americans, the Indians, have all read about revolution. They have heard how Patrick Henry said, "Give me liberty or give me death!" They know all about the civil disobedience of the Boston Tea Party. They know all about Susan B. Anthony and Carrie Nation - how they rose up and got women together in support of their drive for women suffrage, and chained themselves to the polling places. They know all about Murray, Green, Debs, and Gompers and all of the labor movements' activities which led to the recognition of the labor unions.

But more important, the disinherited and the disadvantaged of our society are today joined by new allies, young people. I know that there are Americans who feel that the enthusiasm of the young about social justice is but a fad of the moment. I would hasten to assure you it is not; it is a different young generation. It is the first young generation that had no option about resolving conflict. Where other generations could have resolved their conflicts through world war, with no holds barred, this generation cannot do so and it knows it. For we will either live together as brothers in this society, or we will all die together as fools.

We can't fight another war because the enemy has the weapons of total destruction as much as we have them. But it's a different generation also because they were born to receive things, and materialism they take for granted. So they have a different value system and they can't be co-opted and seduced by promises of stock options and economic security. They believe in the things that they have read about the American dream. And they will be with us. And anybody who thinks that the confrontations begin and end on university campuses must be smoking more opium than they give the kids credit for smoking. Every institution in this society will be confronted; they will be challenged. Every parent will be challenged for nobody has an immunity. At best, you've got a little time to get together while the kids are concerned about Vietnam. But when and if that casualty is taken care of, they will then turn their attention to our institutions - the health, the welfare, the educational institutions, and the business institutions.
I think we are in trouble, also, because in spite of all the things you have probably identified as illnesses in America, you have probably not identified the one that I think is the most serious, and that's the illness of amnesia. It's amazing to me how quickly Americans forget. Nothing amuses me and at the same time angers me more than to see rank-and-file members of the labor unions talk about how they were going to vote for Wallace because they were sick and tired of demonstrations. We learned demonstrations, picketing, and boycotting from the labor movement.

Nothing annoys me more than to hear people talk about, "We made it, why can't they? We pulled ourselves up by the bootstraps; why don't they?" Well, obviously, this is a lie. Nobody pulls themselves up by their bootstraps. The same people who say this cut their eye teeth on N.Y.A., W.P.A., F.E.R.A., and C.C.C. These are the same people whose ancestors were given forty acres and a mule, and a farm agent to teach them how to farm. And today a subsidy to teach them not to farm.

These are the same people who somehow have the stupid notion that the only people who get handouts are welfare clients, simply because the handouts are called by different names. It's a defense contract when it goes to business. It's research grants when it goes to universities. It's farm subsidy when it goes to Mr. Eastland. You know he gets about a hundred and eighty-six thousand dollars a year to pay him not to grow anything in a state where kids are starving to death. They call it by different names, but everybody gets help from the federal government. Suburbanites get free highways to enable them to get to the cities while poor have to support their own mass transportation.

It is this amnesia - this forgetting of how other groups got together - that you see today, with people getting upset about the shouts of black power without recognizing that there's nothing different in this phenomenon. Every ethnic group in America, when it felt itself imposed upon, got together by mobilizing its political and economic strengths to reward its friends and to punish its enemies. They didn't make the mistake of calling it Jewish power or Italian power or Irish power. The Irish just kept their mouths shut and took over the police departments. The Italians got themselves a little business. It's the same basic technique of getting together and saying, "We must be organized." Black power is not a threatening phenomenon. It's not an assertion of domination. It's a plea.
for recognition. It is saying, "I am somebody. I am not an object to be ignored. I have roots and I have dignity and I have pride. And I want to participate in those decisions that affect me and my children and my family and my people." And there's no reason why anybody should cop-out, unless they're looking for reasons to do so. All I'm suggesting to you is that you are citizens first of this country before you are skilled technicians and professionals and experts in bureaucracies and institutions around the country. And citizens we are - we may have come over here in different ships, but we're all in the same boat together. You are voters, and individually you are not just a person in your organization who carries a load. You are a voter in your community.

So I first appeal to you as citizens to do something different, and that is to begin to act on the basis of a rational, logical, review of historical experiences and not just to react to tragedy and crisis. We of this country have, I suppose, distinguished ourselves by only reacting to crisis. You know, ten accidents at the corner and we get a streetlight. Or three floods and we get a flood wall. We get bombed at Pearl Harbor and we decide that Hitler's a menace. The fact that he gobbled up Europe and cremated six million Jews didn't really upset us. Then we got bombed at Pearl Harbor.

Churches got upset when James Forman stood up and interrupted their services, but not when Whitney Young spoke to them five years before saying, "Do something." I didn't interrupt their services. University administrators suddenly decide, after the students take over the administration building, that maybe they'd better have some Afro-American studies and increase the number of black students and faculty. They didn't do it twenty years ago when I spoke to them and asked them to do it. They smiled and they said I was a nice fellow and if all black people were like me there'd be no problem. And what I wanted to say was that if all white people were like me there'd be no problem either.

But why do we always have to wait for crisis and tragedy in order to respond? You know as well as I do that given the kind of communication that we have in this country, the instant revelation of affluence on the screens of poor people living in hovels, that those people are not going to permit a continuance of second-class citizenship and the kind of ordering of power that we have in this country today.
We are in trouble today, primarily because of political leadership, locally and nationally, city and state. Leadership that is ambivalent about whether it wants to lead or to follow. Leadership that is at this point trying to decide whether it must reflect the public mood, or whether it's going to change the public mood. Leadership that's better at rhetoric than at performance.

This is what we're facing. Are we going to reflect the anxieties, the panic, the fears, the ignorance of what might be a numerical majority, sometimes called silent, but which I call selfish. Or are we going to help people to understand that "there but for the grace of God go I?" And that these victims of society's indifference are my brothers and sisters, whatever the color of their skin.

I think you are blessed in a way, as members of the health establishment -- educators in the health field. You represent something that everybody can well relate to, that nobody has an immunity to - health problems. You can talk about competence and know that race is only important if a man is mildly ill. If he's really sick, if he's really in agony, he doesn't stop to do a blood test on the doctor or the person who is going to bring him relief. You're fortunate in that you, more than anyone else, ought to understand what it means to suffer. You know about suffering, not just physical suffering, but psychological. You know what it means to die, not physically, but emotionally, day by day. You know what it means to be invisible - to be treated as if one were not, and to be in effect, a statistic. You are the ones I think who are in the best position to interpret human values, and to let people know that our similarities are far greater than our differences.

I have been more concerned about health, I suppose, this past year. Mrs. Aikens, who is a member of our staff, has brought home to me and to Walter Reuther the importance of this field. (I happen to be a member of the - I suppose I'm the Vice-Chairman - of the Committee of One Hundred for the National Health Insurance; I know a little bit about what's happening, although I claim no expertise.) But I have been impressed, not positively, but impressed that this is the second largest industry aside from defense in this country. Sixty billion dollars we spend a year (approximately) on health, public and private. We have the greatest competence, the greatest technology, the greatest know-how of any country in the world, and yet we are about sixteenth in world population in terms
of child mortality. And you say, well that's because of the Puerto Ricans and the Indians and the blacks. Well the Washington Post, very recently, (you probably recall this) said, "Take them all out, all the blacks, all the Puerto Ricans, all the minorities. Where do we rate in the world?" And we're about eleventh in the world. We spend maybe twice as much.

For a country which is supposed to be so expert and so efficient and so together when it comes to delivery of gadgets and things, we are hopelessly naive and ill-equipped in such a basic thing as health. In no area of this society do we reflect our indifference, our callousness more than in the area of health.

I am a strong proponent of national health insurance. I hope the AMA delegate will not leave the room. We've had meetings with the AMA delegates; we've had meetings with Mr. Finch, Mr. Zimmerman, Mr. Butler, and Dr. Egeberg. I talk about national health insurance not as an expenditure, but as an investment. The problem in our society is that we look at what something is going to cost, rather than at what it costs us now not to do it.

What is the cost of the inadequate health service in this country? Two million people get no health service at all. Another forty million get totally inadequate health service. And that's the middle-class American, the lower middle class; you know, the affluent peasant in our society who reached middle-class economic status, but is not undergirded by the aesthetic, cultural, and educational standards. He really thinks that he's getting good medical care, but he's not getting it either. And you know this.

Now here we are with the whole generation of young people who are service-oriented, and who are not hung up on working on Wall Street. I'm talking about the brightest white kids today; I'm not talking about the dull-witted ones. I'm talking about the Phi Beta Kappas and the heads of the newspapers - the brightest young white kids today want to be in people-oriented kinds of professions. Here's a chance for you to recruit, not the mediocrity, but the most talented people; they're begging for it. But they aren't going to come into a profession that says, you can take your training on the poor. If you should fail and they die, so what - it's not going to make any difference. They write letters about this. A young fellow wrote to me from a university a while ago in his junior year,
and you know when you get to the junior year of medical school, you've got it made. And he said, "I have to quit. I'm tired of the phoniness in the medical field." Now I know that you're not largely geared to talk about medical professions - doctors. You've talked largely about the paramedical, the post-secondary school kind of training. But I want you to know that it is possible today for you to attract people who have heart as well as head. And that might well be one of the major problems in the health field as it is in education generally, as evidenced by how upset some teachers are when they're told they should teach in ghetto schools. I think medicine and health can make a real contribution.

I am concerned when I look around the room and see so few black people. I almost - I saw one black lady; I wanted to rush up - I kind of felt like Mr. Stanley when he was looking for Dr. Livingstone in Africa. I wanted to rush up and say, "Dr. Livingstone, I presume?" It tells us about our past, but it doesn't have to tell us about our future. Most of you are in supervisory and administrative positions, and blacks just aren't there, even though poor people and black people are disproportionately represented among the clientele. I think you have to decide once and for all that this is a special problem, that what we want to do is talk about outreach. How do we really reach out and help those who need it the most? You don't do it without involving those who are the clients in the decision-making process. We're no longer talking about individual help; we're talking about institutional change now. We're trying to help individuals and it's like taking water out of a leaking basement with the faucet still on. It's not enough. Everybody has to look at his institution. He has to say, "Is our board of directors representative? Do we have at the staff level and at the level of supervisory employment, members of minority groups? Do we have some of the poor?" We have learned in the Urban League that you can bring in the poor. Their English may not always be correct, but it's better to say, "I is rich" than "I am poor." We get terribly hung up on English in all this. I'm not yet sure what's the important thing, but I won't tell you how to do this; I won't try to run your business.

Let me do it in reverse. When I came to the Urban League, only one percent of our staff was white. And I was concerned about this, because we are an interrati organization and we talk about democratic participation, and we weren't a very good example of it. Now I know why. In the past, only a few missionaries who were white wanted to work with the Urban League.
and black people didn't have any other place to work. But all that has changed. Today, everyone is looking for an "instant" black man, you know, to put in their institution, so any black man who has an education can very easily get a job. There are white people today who want to work in civil rights who are not the missionary type and who don't want to work for black people, but with black people.

So we decided to change it. And we went through three or four steps. I first signed the President's Plan for Progress, and said we were a fair employment opportunity organization. We put that in a little ad in the paper. That increased our number from one to one point five.

So we took the second step. I sent out a memorandum to all of our personnel people - we are a very large organization with some twenty-five hundred full time staff. I said, "In the future, if two people equally qualified apply, one white and one black, hire the white person." I knew this was preferential treatment; I understood that. But we were trying to change a pattern that had developed. This took us up to about three percent. And that was not very adequate.

So we had our Research Department look in on it. And we found that the real problem was that according to our test, which we ourselves wrote, white people could not qualify; they could not meet our standards. They didn't understand the psychology of the poor, the language of the ghetto and all those things. They were Phi Beta Kappas. I remember Dean Rusk's son came on our staff about that time. He was a Phi Beta Kappa from Cornell; and Adrienne Zuckert, whose father was in the Air Force, she was a Phi Beta Kappa from Radcliffe. What we did was to set up a provisional kind of employment period, for six months, where we built in remedial training in order to help these people come up to our standards. We exposed them to the language and the things that they needed to know in order to work in this field.

This is a success story. I want you to know that at least thirty percent of our staff now happens to be white; and they have turned out to be just as good, if not better, than some of our black staff people. Now we could have used all the old excuses which whites use; I know them by heart. We could have said, "Well, nobody applied." Or we could have said, "They might be lonely." Or, "Do you want us to lower our standards?" Or, we could have said, "What about our Christmas party?" I could have used all these, but we decided not to. We wanted to hire white people, so we went
out and looked for them and found them. And we changed our tests - which were unfair to them because it was not reflective of their culture and their environment. We simply had to modify these for we wanted to bring them in.

Well, if I can figure out how to do that with my limited experience at being a boss, what can white people who boss all their lives do if they really want to? You can get black board members; you can get black staff if you really want to. If you don't, then you use all of the old cop-outs. Somehow, I want this profession not just to use the rhetoric of outreach and say that you are trying to be relevant, I suppose in terms of the ghetto. You can't do it with language. You will be tested and you will be tried. George Bernard Shaw sounded like Bertrand Russell when he said that America might well be the only society ever going from a state of barbarism to a state of decadence without ever having gone through civilization. Seriously, if we cannot make people in the health field get together, we are not going to do it in any other field - because here we do have a common ground. For the most part, we all get colds, we are all susceptible to cancer and heart trouble. Black people as they get integrated are beginning to suffer from mental illness, and are even beginning to commit suicide. We never had this problem.

I think there's one point I'd like to make and that is that if we're really going to move into the ghetto in a meaningful way, we have to do more in viewing its inhabitants as people of strength, not just so many studies. So many white people have gotten rich, have gotten big jobs with the federal government being experts on black studies and black people. Now I'm not against research; I certainly don't want to appear anti-intellectual. All I'm saying is that I think we've had enough research on black people. We've been inspected and dissected. And we've come up with all the pathologies about matriarchal families - you know the only difference is that white mothers are more subtle in their domination. There is really no difference between the races. White men make more money, but white women still dominate.

What we need to do today, if we insist on research and don't want to get rid of it, is to study white people. I, for instance, am very curious about the attitudes of white people. I confess I didn't think of this until the Kerner Commission was formed composed of conservative white people, and a couple of black people, and Milton Eisenhower whom I don't think anybody would call a flaming liberal, with his starry-eyed ideals. But
these people brought it to my attention. They said the problem was not outside educators, that nobody needed to come from Peking to tell a black mother that a rat has just bitten her child. This is very obvious. The problem is not outside Communists; they said the problem was racism among white people. The white community reacted very negatively - from Lyndon Johnson on down. And I know why. They misunderstood the term. Racism they interpreted to mean joining a lynch party and going out and stringing up a black man from a tree or engaging in vulgar epitaphs or name-calling like "effete snobs" or "mock robbery". Let me be fair. That's not racism at all. I mean, that kind of racism we can handle. The Klan I don't worry about. This kind of blatant tom-foolery is so obvious that even bigots don't want to identify with it. It's a subtle kind of indignity and humiliation that people engage in without ever thinking about it.

Let me give you one quick example. About ten years ago, my wife and I finally got enough money to afford a maid for one day a week to help her out. One lady came to visit and she introduced herself as "Lucille". And my wife said, "What's your last name?" And the lady looked a little shocked and said, "Fisher". So she said, "All right, Mrs. Fisher, come in." They talked and decided they could stand each other so she decided to go to work right then and there. That afternoon my two daughters came home from school, one six and the other thirteen, and Mrs. Fisher met them at the door and said, "I'm Lucille." And my wife came up and said "Lauren and Marcia, this is Mrs. Fisher." Mrs Fisher came back into the kitchen with my wife and said, "Oh Mrs. Young, you don't need to do that. I like to be called by my first name. It makes me feel more comfortable, like a member of the family. After all, white folks have always called me that. I'm kind of used to it." And my wife said, "Mrs. Fisher, as much as we respect you, it is not for you that we are primarily doing this. What we are doing is trying to teach our young people respect for people, regardless of what kind of work they do. We try to teach them to dignify a human being. We don't permit our six-year-old to call a forty-five-year old by her first name." And Mr. Fisher said, "Oh I understand." About fifteen minutes later the telephone rang and my wife answered and it was obviously Mrs. Fisher's little son - four years old. He said, "Is Lucille there?" And my wife said, "No, there's no Lucille here," and hung up. She told Mrs. Fisher, "I think your son called. Why don't you call him back?" She called back and I'll never forget the conversation. She said, "Son, did you call?"
And he said "Yes, Mommy, but they said there was no Lucille there."
And she said, "Son, there isn't. Here, I am somebody. I am Mrs. Fisher. Call me Mother."

Now it would be impossible to convey to you the increased sense of pride and dignity that went into that woman's voice when she said it. The fact that she literally stood a little taller because of it. Now, I don't relate this story to make you get defensive and run back home and call a family conference and revolutionize things. You can't do it; it's too late. Your youngsters will do it differently. But the important thing is that these are things that we do unconsciously in our society.

Until 1964 nobody was concerned with the fact that legally I could not stay in this hotel. Today, the manager greets me and gives me a suite. It was legal because I was black. I couldn't go into Cicero, Illinois - Al Capone could. It had nothing with my college degrees. He could go because he was white and I couldn't because I was black. And that's what we accepted in this society. Racism is not physically lynching people; it's lynching them in a much more dangerous, serious, and harmful way.

We can't leave the solution of this problem up to the crackpots, whether they be black or white. We can't call out the Panthers and say, "See, I'm against you all." I'm not against the white people because of the Klan, and the White Citizens Council, the John Birch Society, the Minutemen and such. Then by the same token white people can't be against all black people. We have our extremists too, and we have a right to have some. There is no reason why white people should have a monopoly on extremists. Unless you're looking for a cop-out, you just don't single that out.

In the long run, the truly violent people in this country are really not black. They've never been black. It's not the black people who fight to change the gun laws. There's not a black person in this country concerned. You could ban all the guns tomorrow. You know who fights against banning guns? The American Rifle Association. They're not black. They're white people: little old ladies with tennis shoes, out there doing target practice; wild westerns - they're not black people. A black person didn't kill Abraham Lincoln or John Kennedy or Robert Kennedy, or Martin Luther King. We've been the most patient people in the world, you know, or else we've got the longest time fuse known to man. But so many white people - I guess the media does this - never refer to white youngsters who
act anti-social, as white. They manage to give them other names. They
talk about black militants, and the SDS, students who overtook the
administration building at Berkeley. Or they call them "hippies" or
"crazies", but they never call them whites. They only call them white
when they shave and cut their hair; then they're white kids again.
You'd be amazed how many people really think today that the Chicago-Eight
are all black. Dillinger is not a black man. Ruben is not black - in
case you didn't know.

These are white people. You know what they're saying to black people
today? They're saying, "Man don't be a fool. Riot, tear up your
Pollute the water; tear up the electric system." We never heard about
this stuff until the white people started talking to us about it. You
know who these young people are? They're not sons and daughters of
Appalachia, but the sons and daughters of Senators and Congressmen -
white. And they are now forming coalitions. This is where the real danger
is. This is why you can't protect us with guns. Because when you look
down the barrel of that gun, the guy standing there will not be Rap Brown,
but will be your own son or daughter who says, "This I believe."

Now let me end with this as I come back to you as citizens. I
wonder a lot you know, about the credibility of society. Black people
are not going to get on a boat and go back to Africa. You can forget
that, if anybody sitting around here is thinking that's going to solve the
problem. And we're not going to move to any separate state. I speak for
ninety percent of black people when I say that we've been in this country
for four hundred and some years; we've given our blood and our sweat and
our tears to the development of this country. We've been the hewers of
the wood, the tillers of the soil, the nurses of the babies. We've done
the dirtiest work in this country and we've got a claim to every inch of
land in this country. We are not about to walk away from it.

America is going to deal with us right here, and in the process it is
going down in history as a people who suddenly developed leadership that
made America live up to its creed; or it's going down the drain in history
as the biggest hypocrite the world has ever known. Peace and stability
will never come until people get a piece of the action. Unless you get a
piece of the action, you don't know what it's about. But even more impor-
tant than order and peace, and all that, is yourself. You as an individual -
the person that you look at each night and each morning - that person that
you live with daily. Anyone who can be aware of the terrible conditions
under which some human beings live in this country, in spite of the
affluence, and not respond to it, is in worse shape than the victim. He
is a vegetable with clothes on. He lacks the one quality that nature
gives to the civilized human being.

But in your role as a parent...let me tell you a story. It has
to do with a member of by board, Chairman of our Finance Committee.

About ten months ago, he told me of an incident that occurred when he
was having breakfast with his two children, a girl twenty-one and a boy
twenty-three. Suddenly, just to make conversation, the girl says, "Where
are you going this week, Dad?" And he said, "I'm going with Whitney Young
to host luncheons in three cities with employers to try to get them to
employ more black people." And his son almost fell off his chair. "You're
going to do what?" And he explained it to him again. And the boy said,
"You mean you're not going out this week to buy a product that you can
make a margin of profit on?" He said, "No." There was absolute silence -
and suddenly his daughter, with tears streaming down her cheek, came over
and hugged him and kissed him.

And he said to me, "Whitney, I want to thank you. I am a father who
has done everything for his kids. I've given them expensive international
travel, cars, clothes, liberal allowances, - everything. But I never got
more genuine respect, love, and affection, than I did in that one moment.
And I want to thank you for it."

Now this is really where it's at. I visit college campuses all over
this country. The students, almost without exception, tell me at the end
of a lecture, when we're sitting around informally, that they don't
understand their parents. Their parents always seem to say, "You don't have
to smoke and drink, just because everyone else does: stand up for what you
know is right. You have your own value system. Operate on that individual
value system. Don't follow the crowd." And then they say to me, "But they
say; they never do. My father and mother haven't lifted a finger to help
a black man get a top job in an institution or an organization. They never
fought to get a black teacher in a school or in the neighborhood. They
sit there, I hear them, and somebody says 'Nigger' or somebody says some-
thing derogatory about a black person. They smile and go along. And
they expect me to stand up." You teach not by exhortation, but by example.
Your kids are what you make them and what they see in you. If you've got guts, they will have guts.

So in the final analysis, it is far more than helping my black brothers and sisters. It's helping yourself. Generations yet unborn are going to look back at this period and wonder about a lot of us. First of all they're going to wonder how we could have gotten so excited about something that was so simple. The color of a man's skin posing all of the confusion. And they're going to laugh at us. Fifty years from now, people will laugh at us. It's silly. Absolutely silly; people in the health professions know it better than anybody else. Cut beneath that epidermis and we're all alike.

An ancient Greek scholar was once asked to name the date when they would have justice in Athens. And he replied, "We will have justice in Athens when those who are not injured are as indignant as those who are." And so shall it be in this society. And I'm convinced that you're on your way. Thank you very much.
Implications of the Changing Health Care System
by
Frederick N. Elliott, M.D., Assistant Director
American Hospital Association
Vice-President and General Director
Mount Sinai Hospital Medical Center of Chicago

It has been suggested to me that I review some of the subjects that you have been discussing, from my own points of view as a hospital administrator and the employer of some seventeen hundred people, one who participates in medical and para-medical education, and also from my former personal background as a physician in the private practice of medicine.

I hope the former qualifications give me the credentials to express critical concern. Of course my history as a private medical practitioner may provide no more than bias and ignorance. Even these have a certain value at a meeting such as this, because they may cause me to articulate some points of view which may still remain current in the medical profession and the public, and with which you must contend, and against which your solutions, if they are good ones, must prevail.

Mr. Detmer has suggested that I might share with you some of the views garnered from a period of practice, administration, study of a large number of hospitals and other health care institutions, and from my present commitments to health care service, education and research. I will do it as briefly as possible, because I know that some of the papers to which you have listened have outlined for you, sometimes even in quantitative terms, the nature and magnitude of the forces with which we are attempting to contend.

You have been told about the strains being placed on the medical care system by the increase in our population, and the increase in individual expectations of health care as a right.

The multiplication of this demand by the increase of our technical capacity, knowledge and skills, our techniques for identifying illness and dealing with it, has been placed against the absolute deficit that exists in numbers of people to do the job. These deficits have been described to you in specific numbers. We need so many nurses, so many physical therapists, and so many laboratory workers. A passing comment
on those figures is that I have some reservations about them, because they are predicated upon something which I am not quite ready to accept. I have some reservations about the appropriateness of what we are already doing to deal with the problems that confront us. This is maybe a little bit out of your line, because you are primarily educators, but let us look at what we are doing. We are delivering medical care to individuals on an individual basis, based upon diagnoses made in the traditional way. The traditional way of making a diagnosis is based upon the practice of medicine as it was developed primarily by people like Sir William Osler. It calls for a careful history of the patient, his complaints, his family history, his personal history, his background, vocational and otherwise and a careful physical examination supported by certain laboratory tests, radiography and so on. The diagnosis is hopefully a condition which we, by the application of medicine or by cutting an organ out and replacing it with a clean wound can improve. The application of all the time that is required and the techniques that are involved in arriving at this kind of a diagnosis and treatment for every one of the approximately two hundred and four million people in this country, which in thirty five years will be over four hundred million, is highly impractical if not impossible.

So I start my remarks to you on a note of high hopelessness as far as providing everyone with quality medical care is concerned. The approachable problem, with some ray of light suffusing it is to promote health, rather than to promote the identification of illness and the treatment of illness in medical terms. Already, the concept is very widely held, and expressed by the World Health Organization, that health is a condition of physical and mental and social well-being. Even those of us trained very intensely in the treatment of physical illness, realize that there are psychological and social components, both in the cause, manifestations, and long term effects of disease of which we have taken all too little notice. In the individual, any physical illness is beset with a very heavy psychological and social component. Let me give you an example: If we were to give the type of service that we are talking about giving in medical care, to every individual, we would come across a lot of bread winners, middle aged men for instance, who have gallstones. They presently are not causing any symptoms, but under the strictest
rules of surgery, they should come out. So we take out the gall bladder. Now at the present cost of medical care, the damage that we may do psychologically in broken family relationships, in insecurity in respect to a job, in interrupted income, in financial strain, in social dislocation, in fear of death, and so on, may leave the patient, if you consider the broad profile - social, physical and mental - sicker than he was before we touched him.

If we are going to give the highest quality in medical care to two hundred and four million people and search them all for bumps like small hernias, take out all the gall stones, remove all the kids' tonsils, and so on, we are going to strain our medical care system way beyond its capacity. At the present time, we have about twenty percent of our people who get no medical care and about ten percent who get a wasteful amount of medical care based on their ability to pay for it. We have a complete non-system in identifying these cases and in dealing with them. So to promise quality medical care in these terms as a basic right for all people, we may be assured only of further frustration, disappointed expectations, further social alienation, exhaustion of our resources, and bankruptcy.

So actually we have to start talking and thinking about a health care system. Such a health care system addresses itself to quite different problems and to the old problems in a different way. It is concerned with the quality of our environment and the illness which is increasingly resulting from the deterioration in the quality of our environment. I am not talking merely about smog and polluted water and DDT. I am talking about our psychological and social environment as well as our physical environment. It identifies the answer to congenital illness not as marches of dimes or quarters or dollars but in responsible attitudes toward procreation. These changes and that kind of thinking are not very evident at the present time. But everyone of us who professes to be in a field that can heal or educate has a responsibility to think about them and to bring them more and more to the attention of others and more and more to the attention of ourselves in such ways that we revise our attitudes toward health and toward the changes that must come about in our society and in the thinking of individuals before we can have a healthy society. That is, if we manage to preserve society long enough in order to do it.

1-35
Now this seems to indicate that we have an interim problem and we have a long-range problem. I will drop the long-range problem because for right now it's so far distant that it is only theoretical. But we are stuck with an interim problem and it is very acute. I believe we have made some really bad mistakes in the delivery of medical care; we made a mistake in promising medical care to all our people because we cannot deliver it. We made a further mistake when we allocated the increasing amounts of the gross national product to the economic support of the present program, which as I say has exhaustion and bankruptcy built right into it. For physicians to identify the illness they will treat and then get paid for it, for hospitals to go along with that on a reimbursable basis which is based on a formula so that no hospital can go broke or fail, if we have a cost plus reimbursement program for the identification of individual morbidity, and treatment with the most excessive procedures, we have bankruptcy as well as exhaustion of our resources built into the system. So we have some responsibilities that considerably transcend in importance the curriculum content or the techniques of conducting examinations. We have to start thinking in a much more constructive way.

How are we going to get the people to help us with this? The process is called recruitment. I think that is a most unfortunate term because it indicates that we want to get people into our system because we need them to perform standardized functions. We need so many bodies to do so many jobs. And by various types of blandishment we hope to get them into the system. I wish we had something more to offer them, and I believe we do, as I will mention in a minute, I would like to have us think of recruitment rather in terms of involvement which I think begins very early in the educational program. Now speaking, as I say, with all the assurance conferred by ignorance I will venture into this field for just a minute.

To my mind we have certain goals in education. The first goal in education is to make it possible for people to communicate with one another. Now the art of communication is involved mostly with the transference of emotions and the relationships between individuals. It is facilitated by our use of language. And as we acquire more and more skill with it, and more and more capacity to convey nuances and
shades of meaning, we increase our ability to communicate. This to me is the central core activity of education that can proceed from any level to any level based on the potential of the individual. We have another basic skill which needs to be acquired, and that is the skill and the ability to quantify and therefore to rank and assign priorities. This is essentially mathematics and again it can range from counting and trading cows up to the most complicated and abstruse problems in calculus. If we acquire the ability of communication in the language sense, which primarily communicates emotions, and communications in the mathematical sense, which basically communicates magnitude and the priorities assigned to it, we have established the central core of education for an individual which is basic to all other fields of knowledge.

One of these fields is the knowledge of living processes. If we expand the communication field, the language sense and the mathematical sense, into the study of natural phenomena, by the application of mathematics and language, into the field into which we presently define as physics and chemistry, and the molding of them together that we call physiology, and the more detailed studies that we call biochemistry, and biophysics and so forth, we have an almost endless spectrum of available knowledge developed on the two primary skills; I can see no reason why the two primary skills and the knowledge of life processes do not provide us with a continuum of knowledge which is the "core curriculum" for all people we need in the health field. We take these three things and superimpose on them some more specialized, specific knowledge which again merely implies numbers, physical principles, and the capacity to manipulate and we come up with a person who can either wash dishes correctly or remove a brain tumor. As a matter of fact, the amount of actual skill required is not so great in either case, providing that the educational basis is adequate. Nor is the effect on the health care system so different, because I can assure you that a person who feeds somebody in our hospitals with a fork with food cooked into it, maybe has done as much damage as somebody who has let a scalpel slip upstairs, as far as what our real function should be. And this is what I want to talk about next.

It seems so obvious, to postulate that in any educational process there are bodies of skills and knowledge between which there need be no
hiatuses. There is no necessity for compartmentalization until we get to the level of the development of specific skills, and this is where a hospital comes in, or where the area of practice comes in. It seems so obvious that the basic skills of communication and quantification and knowledge of the application of these to the natural phenomena of the life sciences, is a problem for the total educational system in this country. We should not have parochial or regional differences, because knowledge as we have it contemporaneously is a universal thing. Shared by the Chinese and the Russians as well as by the people in New England and California and in between. At least it should be. I would like to see the natural sciences taught to a lot of people who do not get them. I see these people now with higher degrees in the various disciplines whose lack of knowledge of their own body and psyche as a rational basis for successful interpersonal relationships, is tragic. Now if we take a person out of that educational system for any reason, because he is not very smart and has taken in about all he can handle, or he is under some economic pressure, or he wants to drop out and think a while; we have him going into one of the so-called occupations. Then, we as employers, have got him, and it seems to me we have a very heavy responsibility that we often do not honor. We try to train him to do a job, and as quick as we can we leave him get along as best he can, which is a terrible thing to do, but we do it. So he develops some skills as an inhalation therapist or a surgeon, or a dishwasher or whatever it is, and that is where it ends. Now it seems to me that we as employers, and as operators of institutions have a very grave responsibility which we have not yet defined. We always take refuge, you know, behind talking of the care of the patient. But you know, basically, the care of the people that work with us is our prime concern. I deal with about a hundred thousand people turning to our institution for care every year. The average care they get, is from a few minutes up to a maximum, a mean maximum of say, eight or nine days. Our effect of the lives of those people is minimal in comparison with the long term effects on the eighteen hundred people who are going to give us their entire productive lives, or should. And I maintain that proper attention to their care would make quality patient care an inevitable by-product, because we
have something more to do than carry out certain procedures of diagnosis and treatment. If we do not have a humane institution, which transmits to everybody within it our conviction about the value of life and the value of human existence, we have failed the people that give us the productive part of their lives, and they will fail our patients.

Now let me go back to so-called recruitment. I would like to call it involvement. I believe that our admission to certain educational programs and to certain training exercises is based upon very limited and maybe irrelevant grounds. I know that entrance to medical school is based upon intellectual capacity to absorb and regurgitate facts. No measurement is made of the human capacity which will make a man a healer. Those qualities are never looked for. They are never estimated. And this oversight becomes apparent when we have a resident who is a complete failure and has almost succeeded in destroying a large part of the productive part of his life before he realizes that he is not a healer, not a physician. Then we go around looking for a job for him as a technician and we have fed another person into the system who will convince more and more of our society that the professions are vested interest groups, materialistic, technically oriented, not really interested in people.

So I regard most counseling that goes on in most schools as a sham. A presentation of the earning capacity and the title and the job descriptions and so on, to young people, is an irrelevancy at best. It does not involve the aspect of them by which they should be brought into the health care system. We should and we can, at the present time, if we are sensitive enough and willing to go to work, identify the qualities in young people which orient them towards concern for other people, and the capacity to express it, which would be a much more valid criteria for entrance into the health care system, than the aptitudes we presently measure. We can also apply the same strictures to the selection of our instructional staffs. The mastery of a topic or a pedagogical method I would put way down the list of priorities for people who should teach others. It is the capacity to involve people that is the mark of the teacher, not merely a command of the technical or intellectual material. Those of us who went through the educational system recall
the whole thing from beginning to end - public school, high school, college, university, medical school - mostly as an infinity of marking time. We remember only a very few teachers who provided us with the motivation that gave any real significance to it all.

Now if that lays a burden on the educational system, it certainly lays a burden on those institutions such as the hospital where we train people. If we do not provide people with the kind of supervision, the kind of hands-on supervision, the evidence of constructive concern for their development and potential, we are dishonoring the heaviest commitment which we bear, one greater than patient care. We have a problem in our system to provide not only the mobility upward that you talk about, but the kind of environment in which people can identify their potentials, find support for their motivation to realize their potential, and find room to move. At the present time, we cannot do it, because we have independent hospitals and we do not have transferal of educational credits and skill credits. A person is locked into our very small system. We are talking now about utilizing people in the armed services. You know why they have successfully developed careers in the armed services? Because they have a big system. People can be qualified within it, and move within it. Some years ago the railways did the same thing; it was big enough to allow movement inside of it. Somebody who has become very skilled in a particular task in my hospital has no credentials in any other hospitals. So now we are talking about the obligation we have to create a big enough system whereby there will be the mechanism for a transfer of the recognition of competence. This is not answered by licensure, because at the present time, even a fellow with an M.D. is not permitted in any accredited, worthwhile hospital to do everything permitted by license. His clinical privileges are based on his training, experience and competence, not upon his medical degree. So the license to be an M.D. does not involve or permit a person in a given hospital to do everything. Now we are at the beginning of a system there. The accreditation and the licensure that we see being set up, to identify small groups and to insure their vested interests, by creating a barrier to others, is actually a retrogressive step in the direction of progress. So I have a proposal. Instead of accrediting and licensing
the individual, why not accredit and license the institution? Institutions, you know are responsible for the quality of the care which they give. Hospitals are now the responsible unit. Understand this, hospitals, and their Boards of Directors, are responsible for the quality of medical care. The courts are enforcing this. If this is true, then why are not hospitals given the right as well as the responsibility to determine who is qualified to do what? Why is not the allocation made by the system which is ultimately responsible to a patient for his care? In legal circles, and particularly in medical circles, if you want somebody to have apoplexy, talk about the corporate practice of medicine. The strictures against the corporate practice of medicine will be dead within ten years, regardless of whose lamentations attempt to retard it, for a very simple reason: the field of medical practice, and the range of skills, and the number of people that have to be involved, require a team approach. And once you have a team, you have a corporation. In the future, it is going to be hospitals or their successors that are going to take care of people, because the individual physician who is the captain of the team will have to coordinate a large number of skills over a whole spectrum of activity. That will be his primary function. Patient care becomes therefore, a corporate enterprise because it is going to take such a number and variety of people to provide it. But we have a responsibility to make the corporation ever bigger so that people can move around in it without loss of credentials and loss of the headway that they have made in the development of their skills. If we do not do this, it will inevitably happen at an even higher level. Not because of intrusion but because of the vacuum created by the abdication of our responsibility. Health care is now in the public domain and in the area of public welfare. At the present time, the rational distribution of medical care, I said medical care, not health care, requires that we establish some realistic standards rather than what we call the ultimate in quality. This talk about quality using the ultimate in our esoteric methods and so on is just nonsense. We do not have enough to go around, and we never will have, especially if the government starts paying for it. If we were waiting for the engineers of Mercedes Benz and Rolls Royce to provide us with transportation, there would only be a few hundred cars in this country. It took Henry Ford, fashioning a simple cheap contraption of many imper-
fections, with the ability to get from here to there, to put everybody on wheels. And unfortunately, we are going to have to make some unpopular leadership decisions as to what we can produce and how we can share it equitably. We are going to have to do less in the area of very esoteric and expensive treatment and more in the area of education, immunization, nutritional counseling, and analysis to pick up conditions early, so we can actually get an effective distribution of what is practical and reasonable; this is our responsibility. In the meantime, we have a citizenship role to play as organizations and individuals, in taking action towards breeding a healthy society, by cleaning up our environment, by changing some of our attitudes towards personal liberty, population and procreation, and by taking an intelligent and courageous part as leaders in the field to do that. If we do not, then a higher eschelon vested with the responsibility to the public will inevitably have to do it.

It always amuses me to see in this country, that we have come from the concept of government of and by and for the people, to the point where even in so-called enlightened circles, I hear government spoken of as some alien force, invading and taking us over and making prisoners of us. We can invest government with its proper responsibilities, and see that it carries them out, and in a much more intelligent way than it has been able to do so far. So I would like to lay on you and on myself, a responsibility, for transcending our concerns about curricula, about intercommunication, about different classifications of institutions, and so forth, to recognize that first of all, people need a common bond of knowledge, that they should pursue it as far as their motivation and their talents will allow, and that our problem in that area is not to teach, but to motivate. That is the meaning of education. It is not the addition and the enumeration of facts, and their regurgitation, but the stimulation within an individual of a knowledge and respect for his own talents and potential and a desire to release them through knowledge and skill in the service of others. We have to re-orient our program of recruitment in hospitals to be something more than an appeal to come in and be called a certain thing with a certain badge and get X dollars a month. We have to replace the sense of occupation with a sense of vocation, and indicate that we have a system which is based on something very simple, a conviction about the value and dignity of human personality and
existence, that we are dedicated to that proposition, and people who wish
to serve can find a way of doing so, with great personal satisfaction.
Our training program has to be built not only around technical exper-
tise but the capacity to serve. It seems to me to be absurd that we
have leeched this out of our educational and training process. I am
not for sending nurses back to black stockings, in bed at eight o'clock
at night, carrying bedpans and monitored by an moustachioed old lady
who always was suspecting their virtue. But on the other hand, I am
telling you that you cannot learn to serve without serving. And that when
we deprive our training program of the service potential of allowing peo-
ple to find the satisfaction and self justification they can find in
serving, we are leeching out of the educational process its most important
dynamic. We are leaving it a desert of intellectual and educational
sterility. We have a responsibility in hospitals then not only to create
that kind of an environment but as leaders, to drop some of our cherished
ideas of economy and separateness, in creating first of all a medical care
system which will shape up to an honest appraisal of what we can deliver
to put a stop to these violated expectations which are creating so much
alienation in our society, to level as to what it is we can do, to direct
our medical care services so they will be pointed in the direction of
useful acts of education and health. We must act as citizens in the area
of environmental control and approach the problems of population and eco-
nomic inequity as well as the areas of administration of institutions
and recognize our responsibility to the people who serve us. We should
enlist the imagination, creativity, and involvement of young people
rather than use artificial recruitment on the basis that we have the need
for so many bodies, the need for so many hours, and so many dollars.
I believe our society is abandoning the principles of service, abandoning
the idea that the fundamental job of education is to motivate people to
find their own potential and to realize it. We are allowing economic
considerations, considerations about our area of control, and our vested
interests, to seriously interfere with the real job we should be doing.

Thank you.
CHAPTER II

UTILIZATION AND PREPARATION OF PERSONNEL FOR OUR HEALTH CARE DELIVERY SYSTEM(S)

Session Speaker
Elizabeth E. Kerr

Reactors
Israel Light
L.M. Detmer
Benjamin C. Whitten
B.F. Childers
In the last fiscal year the health bill of our nation exceeded sixty billion dollars, yet there is serious talk of a "health crisis" in this country today. Our present health-care resources are already overtaxed and the demands for even more and better health services continue to be widespread and ever-growing.

Factors influencing these demands stem from changes both in society in general, and in the health field itself: e.g.,

A. Increased population
   1. Higher birth rate
   2. Lower mortality rate at birth and among infants
   3. Longer life span

B. Greater public awareness of preventive and therapeutic health measures
   1. Improved communications media
   2. National disease-oriented projects (muscular dystrophy, cancer, heart, etc.)

C. Increasing number and use of available medical insurance plans
   1. High cost of medical care
   2. Anxious public

D. Federal legislation which subsidizes health care for specific subgroups of our population (Medicare, Medicaid)

E. Urbanization
   1. Concentrated populations
   2. Ghetto areas

F. Facilitated transportation
   1. More mobile society
   2. Migrant workers
   3. Transfer of patients between types of health care agencies

G. Expanding medical knowledge

H. The burgeoning of technical health-care equipment.

Presented at National Conference for Health Occupations Education
February 4-6, 1970
New Orleans, Louisiana

2-1
Since World War II, technological advances, such as those found in heart surgery and renal dialysis and those effected by computers and other electronic equipment, are requiring such specialized skills that, of necessity, preventive and therapeutic health services are being grouped around large medical complexes. The place of care has moved progressively from the home to the physician's office; and, increasingly to hospitals, extended care units, and skilled nursing homes; and to community or neighborhood health centers and rehabilitation units.

Concomitantly, society has become increasingly aware that it lacks the quantity and quality of health services it needs and feels it has a right to expect. There is growing recognition of the uneven distribution of health care among the rural poor, urban ghetto dwellers, migrant workers, and other minority groups; and, of the sharply rising costs that prohibit care for some and create major financial burdens for many more. Today, the American people are demanding that quality health care be delivered equally, and at a reasonable cost, to all segments of our society.

On July 10, 1969, President Nixon brought to the nation an eight-page "Report on the Health of the Nation's Health Care System" prepared by Robert Finch, Secretary of Health, Education, and Welfare and Dr. Roger Egeberg, Assistant Secretary-Designate for Health and Scientific Affairs. This document highlighted the crisis in our health care delivery system. All about us we can still find evidences of concern, e.g., recent articles such as in an edition of The National Observer, "Doctors Fret Over Image, Hear Plugs for Health Care," in an issue of U.S. News and World Report, "The Crisis in Medical Care and How to Meet It," and, in a news release from The Washington Post, "Need for Complete Revamp of Health Care."

Technological and social changes have precipitated the urgent need to reorganize the system of health care delivery in this country so that the availability of more effective and efficient health services will be assured. While reorganization of the system, to some extent, has already begun, we have yet to develop an integrated system in which needs and efforts to meet these needs are closely related. This will call for even more and better prepared health manpower and for improved utilization of all health-care personnel.

The magnitude of the training challenge is enormous. Expansion of educational opportunities to prepare health workers at all levels is needed, if those needing health-care services and those needing and wanting employment in this field, are to be served.

In 1966 William H. Stewart, then Surgeon General of the U.S. Public Health
Service, identified the need to prepare 10,000 health workers per month for the next ten years, a total of about 1 1/2 million. Four of these ten years have elapsed and we have lost ground rather than made progress toward reaching that goal. Moreover, further needs are continually being identified. Predictions are that by 1975 the health industry will be the nation's largest employer, with one out of every 16 workers employed in the health field.

This poses challenges which, while staggering, are not insurmountable if forces from all segments of our society can be mustered to meet them.

Tired of the platitudes about the health manpower shortage and suggested remedies for it, many insist on moving into the problem-solving phase. Government alone cannot solve the problems. Its capabilities are small compared with the combined resources and experiences of the professions, voluntary agencies, religious and educational institutions, hospitals, organized labor, business and industry, and concerned citizens. If an effective health care delivery system is to be achieved, it is imperative that the resources of each of these very powerful forces be applied and that their efforts be expended in concert, lest separate courses of action build new rigidities into a system already in desperate need of more flexibility.

Let us be cautioned, however, by a statement written by John W. Gardner, former Secretary of Health, Education and Welfare, in his paper, "A Nation is Never Finished":

"Responsible men and women concerned to achieve goals have to cope with two contrasting attitudes on the part of their fellow citizens. One is a violent, explosive impatience to get it all done instantly -- and bitter disillusionment if that doesn't happen. The other is a disinclination to take any action at all -- sometimes from disagreement with objectives, more often from apathy or cynicism. Both attitudes pose serious threats. We can be brought down by the volatility of our aspirations or by our incapacity to aspire."

Indeed, the problem-solving phase must entail the cooperation, organization and thoughtful deliberations of many different groups in order to reduce existing barriers, to resolve conflicting opinions, and to insure that plans for the future are formulated wisely.

Many of the existing barriers are maintained by tradition and by concepts more appropriate to a guild of the middle ages than to a modern profession. In most instances, they have no justification other than to protect the positions of those already ensconced.

Too often, health manpower has been considered solely in terms of doctors, dentists, and professional nurses; while other health-care personnel have been overlooked or ignored. In general, only when the demand has been great enough
to outweigh the loss of services, have professionals acceded to the performance of certain functions by prepared technicians and assistants; first on a de facto basis, then on a de jure basis.

In his paper presented at the National Pharmaceutical Council in Washington, D.C., November 1968, Dr. M. Alfred Haynes, Project Director, National Medical Association Foundation, Inc., said:

"At the risk of being burned at the stake, I venture to suggest that, even more than doctors, this country needs new kinds of health workers -- especially the paramedical types. Many of the basic health needs of the community can be met without the many years of training required by the specialist."

During the same meeting, a past president of the American Council on Pharmaceutical Education said, "Health professionals are confronted with numerous small revolutions; revolutions of ideas, revolutions of technology, of practice, of attitudes, and goals. We must re-evaluate our duties and reassign some of our technical functions."

Indeed, it makes no more sense to ignore the need for allied health personnel than to organize a symphony orchestra with all conductors and no instrumentalists. The preparation of these workers should be of great interest to the primary health professional, for as prevention of illness and treatment of disease advance in complexity, his dependence can only increase.

There have been barriers to introducing new health careers and to providing mobility in the health manpower hierarchy for workers who begin at the bottom. To advance upward in the health disciplines, it is generally necessary to go back to the beginning and start anew. Skills, knowledge and attitudes acquired in pursuit of one occupational goal rarely apply toward a higher goal, and work experience is generally undervalued.

At each rung of the ladder organized groups have erected barriers aimed at fending off encroachment by other workers. This is extremely discouraging to the aspirant and is wasteful of talent that will always be in short supply.

A registered nurse in California recently wrote a letter published in the American Journal of Nursing -- "I graduated from a diploma program in nursing. After one year of employment, I decided to study for a degree, only to be totally discouraged by the educators who should have been encouraging....There does not seem to be a realistic approach to bringing the three-year nurse into the formal education system. A nursing degree, it seemed, was not possible. At present I am obtaining my degree in another field."

Why should individuals be trained in such a way that a heavy lid is put on their aspirations? Instead, they should be challenged with promise at every
entry level.

There must be an examination of current practices in certification, registration, licensure, accreditation, and program approval as these relate to maintaining and improving the quality of programs preparing health workers. Speaking at the May 1969 meeting of the American Nurses' Association's Council of State Boards of Nursing, William K. Seiden, L.L.D., former director of the National Commission on Accrediting posed the question, "Are we properly structured in our licensing system to fulfill our social functions?"

In the face of public pressures on health care professionals, and growing resentment of their autonomy, Dr. Seiden proposed major changes in our present system of independent licensing boards which are now, in most states, made up solely of members of the profession in question. He suggested a single board, with representatives from the public and the several professions, to license members of all the health professions, with committees representing the individual professions reporting to it. He said this system would be more democratic and assure protection of the public interest; Dr. Seiden also believes that our present systems risk breakdown if faced with public confrontation.

Still another barrier to increasing health manpower is that, to date, the labor force of allied health-care workers has been predominately women. Despite large turnover rates characteristic of a young female labor supply, the health services industry between 1950-65, had expanded from 1.5 to 2.8 million; or by 87%, 2 1/2 times the rate of our economy as a whole. But wages and working conditions in the health services industry generally lag behind the more advanced sectors of our economy; and federal and state legislation have excluded hospital employees from the provisions of fair labor standards acts.

Primary health professionals are increasingly utilizing supportive personnel so that their time and talents can be more efficiently used to serve a larger number of people. At the turn of the century, physicians and dentists constituted over 97% of the little less than one-half million health workers in this country. In 1966, these two groups represented about 16% of the approximately 2 1/2 million health workers; 84% of our health manpower were those in the category of allied health personnel.

Further evidence of expansion in allied health personnel is shown by figures which compare the 1965 with the 1967 estimated numbers of persons employed in selected occupations within several health fields:
GROWTH IN SELECTED HEALTH OCCUPATIONS

<table>
<thead>
<tr>
<th>Occupation Type</th>
<th>1965</th>
<th>1967</th>
<th>Increase N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians</td>
<td>288,700</td>
<td>305,500</td>
<td>16,800</td>
<td>5.8</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>621,000</td>
<td>659,000</td>
<td>38,000</td>
<td>6.1</td>
</tr>
<tr>
<td>Licensed Practical Nurse</td>
<td>282,000</td>
<td>320,000</td>
<td>38,000</td>
<td>13.4</td>
</tr>
<tr>
<td>Nurse Aide, Orderly, Attendant</td>
<td>500,000</td>
<td>800,000</td>
<td>300,000</td>
<td>60.0</td>
</tr>
<tr>
<td>Home Health Aide</td>
<td>6,000</td>
<td>12,000</td>
<td>6,000</td>
<td>100.0</td>
</tr>
<tr>
<td>Medical Laboratory Scientist</td>
<td>3,500</td>
<td>4,000</td>
<td>500</td>
<td>14.3</td>
</tr>
<tr>
<td>Medical Lab. Technologist</td>
<td>35,000</td>
<td>40,000</td>
<td>5,000</td>
<td>14.3</td>
</tr>
<tr>
<td>Medical Lab. Technician &amp; Aide</td>
<td>46,000</td>
<td>56,000</td>
<td>9,500</td>
<td>20.4</td>
</tr>
<tr>
<td>Dentists</td>
<td>93,400</td>
<td>98,700</td>
<td>5,300</td>
<td>5.7</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>13,500</td>
<td>15,000</td>
<td>1,500</td>
<td>11.1</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>91,000</td>
<td>95,000</td>
<td>4,000</td>
<td>4.4</td>
</tr>
<tr>
<td>Dental Lab. Technician</td>
<td>25,500</td>
<td>27,000</td>
<td>1,500</td>
<td>4.9</td>
</tr>
</tbody>
</table>


Yet, despite the growth in number and types of supportive health workers, continuing education to assist the health professional to understand their roles, and his relationships to them, has been almost negligible. As a result there has been over-utilization, under-utilization and, in general, poor utilization of presently employed allied health personnel.

While roles and their relationships among health workers have been changing, further changes are imperative. There must be even greater utilization of personnel in role-types already established, emerging types, and types as yet unknown. Time needed to prepare personnel, with the exception of the primary professionals, is relatively short; thus a rapid response to rising demands is possible.

Types of programs preparing allied health workers range from short-term, on-the-job training, to a baccalaureate degree level or above. This conference, however, will give particular attention to vocational and technical level programs which prepare health workers for positions not requiring a baccalaureate degree; the level of preparation now commonly referred to as "health occupations education."

In the past, supportive health workers were prepared in hospitals, primarily through on-the-job training. Hospitals no longer can carry the major burden for financing, administering, housing, staffing, and planning for broad and complex training responsibilities. There has been an accelerating trend to transfer the administration of training programs from health service agencies to educational institutions. This trend embraces the philosophy of charging educational costs to educational institutions supported by the public tax base.

Today, the larger portion of health occupations education consists of one- and two-year post-secondary programs offered in community and junior colleges and
in vocational and technical schools. The great majority of these programs are administered under the 1963 Vocational-Technical Act and the 1968 amendments to this Act.

This shift in responsibility for preparatory programs has been possible because service agencies cooperate with educational institutions by providing clinical facilities for student practicum supervised by faculty employed by the educational institution. This cooperative arrangement generally carried out under a written contractual agreement, enhances the opportunity for students to identify and appreciate the many roles among health workers; and their relationship, one to the other. No health worker can be trained in isolation from the health complex of which he will become a part for it is there where he learns that the skills and knowledge of all team members can and must be interwoven.

As any system changes, modifications and effects are slow due to the evolutionary nature of the changes. At this time it is difficult to predict what ultimate effect our changing system of health-care delivery will have on the education of supportive health workers. Therefore, programs must be planned so that they will be susceptible and responsive to needed changes. Today, most programs are predominately self-contained, or single-purpose, curricula. New models for effective health occupations education must be developed.

A new focus on "core" subjects common to several health occupations curricula, and on "career ladders" and "career lattices," with articulation both vertical and horizontal, is long overdue. When an educational institution offers several types of programs which cluster by field of preparation or because of certain commonalities in their content, selected subject matter can be taught in common, or "core" courses. This better utilizes instructional personnel and gives students more opportunity to learn about, and appreciate, the roles of other members of the health team.

In the past, most one- and two-year programs related to a specific health field have been operated as independent entities with little or no interrelationship. The establishment of "career ladders" to provide for mobility either upward or downward within a specific health field, seems imperative.

While the "career ladder" promotes the concept of mobility within a specific health field, the "career lattice" allows for movement into another health field; horizontally, upward, or downward.

Curricula must be designed to facilitate progress from vocational to technical to professional education and practice in the health occupations. Only then can the greatest contributions be made by those having the desire, motivation, and abilities
to move to a higher level of preparation.

Curricula used by the military must be evaluated to determine to what extent "advanced standing" can be given to returning corpsmen or other veterans seeking admission to programs. Equivalency examinations have far reaching implications for health occupations education in that they provide a means for unlocking dead end careers. To facilitate their use, the objectives for each course in every curriculum must be realistic, clearly identified in writing, and so stated that the expected behavioral outcomes can be measured and evaluated.

Dr. Robert Kinsinger, Program Director, W. K. Kellogg Foundation, has said, "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."

In planning programs to prepare health workers much emphasis has been given to curriculum organization, financing, student recruitment, laboratory facilities, arrangements for clinical practice, and textbooks. Much too little has been done to build an adequate corps of qualified and effective instructional personnel. Few universities have undertaken programs to enable a health practitioner to become an accomplished teacher in the health field. Such programs must be given top priority.

Current practices and emerging teacher education programs to prepare teachers for health occupations education must be examined, and a rationale developed for further inservice and preservice teacher education.

In 1966 there were 3,652 teachers employed in vocational-technical programs in health occupations education. In 1968 the number had already risen to 6,508, an increase of over 75%.

The need for an increased number of instructional personnel can more realistically be met when criteria are established and utilized to effect differentiated staffing in this field of education. The talents of master teachers, teachers, teacher assistants, and teacher aides must be appropriately used by providing them tasks and responsibilities commensurate with their abilities.

There is great need to study and improve teaching techniques and materials currently being used. A multi-media approach to instruction is now possible with the use of new methods which have burst upon the educational scene in great profusion.

Supervisors, consultants, and administrators for health occupations education are also in short supply. Educational opportunities and planned experiences to gain skills for these positions should receive immediate attention.
In general, the public has little knowledge of health occupations other than about doctors and nurses, and even less knowledge of educational opportunities. In kindergarten through high school, more effort must be directed to the development of career orientation for all types of occupations, including health careers, the roles of health workers, and the preparation required for each role. For those with expressed interest in a health career, secondary schools should expand their offerings to provide for in-depth exploration of occupations in this field. This would serve to acquaint students with the broad opportunities in the health field and would assist each one who aspires to become a health worker to select, from among the many types of preparatory programs, the program which is most in keeping with his interest, motivation, and abilities. They should provide quality training programs for those youth who elect to work in an entry-level health occupation but who do not plan to continue their formal education after leaving high school.

Health educators must work more closely with occupational counsellors on high school campuses so that students may obtain accurate and complete information on health careers, including the requirements for different types and levels of preparation.

Health occupations education must be expanded to serve the training needs of the handicapped, the disadvantaged, minority groups, the older worker, youth under 18, and other similar groups. Project REMED, which encourages the preparation of returning veterans for occupations in the health field, and President Nixon's plan for welfare reform emphasize this need for expansion. More men must be attracted to the health field; as students of a health career and as teachers and administrators of educational programs. Only then will the prevailing image of health careers as a women's domain be changed. The involvement of more men will also tend to effect a greater degree of stability in the health care work force.

This paper has identified some of the stellar issues in health occupations education today and has treated them in broad, general terms. Many of these, and perhaps others, will be dealt with in more detail by those giving presentations later in this conference.

In summary, the evolution of new patterns in the delivery of health services in this country, prompted by technological advances and societal changes, is demanding more and better prepared health workers. This demand, in turn, necessitates effective decision-making relative to both the utilization and the preparation of health-care personnel.
Major questions for consideration include:

A. What should be the relationship between functions performed and preparation to perform them?
   1. Are the increasing costs of health care and the shortage of health workers demanding that functions be performed by persons who can meet the "minimum acceptable level" of quality performance?
   2. Is the greatest need for highly and narrowly trained specialists in large health-care centers; or is it for generalists in smaller institutional settings?
   3. What should be the appropriate ratio of specialized education to general education in each different level of preparation?
   4. What is the adequacy of in-service preparation for a specialized function as compared with a longer, more formal program offered in an educational institution?

B. Are many persons being overprepared in terms of the monetary returns they can expect for services performed?

C. What roles do the following have in the preparation and utilization of health workers?
   1. The public school
   2. Cooperating clinical agencies
   3. Related associations
   4. The employer
   5. Certification and accreditation agencies
   6. Governmental agencies

D. What are the employment opportunities for the disadvantaged in the health field?

E. What should be the source of finances for preparing health-care personnel? Student tuition? Public education funds? Cooperating clinical agencies? The patient? Local, state, or federal government?

F. Should the student be paid while enrolled in his preparatory program? If not, why? If so, how and on what basis?

G. Should the employer be expected to provide in-service education for all new employees, especially those newly prepared?

We at this conference have been identified as leaders who can give effective direction to the adequate preparation and appropriate utilization of the health manpower in this country. The achievement of this direction will require our thoughtful deliberations, a high degree of cooperation, and an effective coordination of our efforts. For, only when the educational functions are performed well and when our health resources are designed to encourage full individual development, will we achieve the kind of competence and dedication needed to advance the health of all citizens of this nation.

This is our common goal. Hopefully, during these three days, we will move forthrightly and energetically toward easing restrictive barriers, resolving existing conflicts, and formulating wise plans for the future. Let us be about our task!
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SUMMARY REACTION TO POSITION PAPER I

UTILIZATION AND PREPARATION OF PERSONNEL FOR THE HEALTH CARE DELIVERY SYSTEM(S)

Israel Light, Ed.D., Dean, School of Related Health Sciences, University of Health Sciences, Chicago Medical School.

Problems and Issues

1. Sooner or later, work in most health occupations involves contact with patients. It is reasonable to suggest that all technical-vocational programs in these fields give greater attention to more effective interpersonal communications, both written and verbal. How can this be done?

2. Technical-vocational educators must beware of and resist the pressures from the medical-health field to train people in highly specialized areas at entry levels. How can technical-vocational programs provide generic and comprehensive knowledge and skills at entry levels and thereby provide a base for later specialization at successively higher levels of education and sophistication?

3. Despite the stress in technical-vocational programs on facts and manual skills, is it possible to give greater attention to problem-solving techniques?

4. There is no leadership in this field among you. Why? The health "industry" is 3,500,000 - 4,000,000 strong, the third largest occupational grouping in the Nation and still growing. The American Vocational Association HQ staff has no specialist in the health occupations. Many State Departments of Health and Public Instruction do not talk with one another. What can be done to change this state of affairs?

Principles and Practices

1. The human-health services are so many and varied that a specialty in this area is justified and should be required of many vocational-occupational counselors in their training programs. Every such counselor should have had some period of actual employment in such a setting as a requirement and condition of employment.

2. Living as we do in a certificate-oriented society, the "piece of paper" is the status symbol and the only acceptable legal tender or "coin of the realm" by which the piece of paper can be acquired is the academic credit. In order for more people to have more opportunity to acquire more of this currency - and to make it more negotiable currency - it is necessary that institutions at various levels of training relate intimately and collaboratively with one another in constructing their respective curriculums to result in a better "fit" and thereby enhance educational mobility. If one needs credentials more to GET the job than to DO the job, the strategy for this articulation is obvious. Technical-vocational programs must be closely articulated with related offerings in the nearest or most closely adjacent educational levels of training. Such agencies would include hospitals, Neighborhood Health Centers, and junior-community colleges.
SUMMARY REACTION TO POSITION PAPER I

UTILIZATION AND PREPARATION OF PERSONNEL FOR THE HEALTH CARE DELIVERY SYSTEM(S)


Part I: Problems, Issues, Roadblocks, Limitations, and Other Considerations

A. Issue: Length of occupational curricula should be determined by length of time graduates remain in employment related to their educational preparation.

B. Issue: Occupational curricula should be limited to what is essential to job performance.

C. Issue: Can occupational curricula in the public education sector adopt the model of rapid training developed by the Federal government for the education of some categories of military health personnel?

D. Problem: Planning for occupational curricula at local and state level on occasion excludes representatives of major employers in the health industry (such as hospital administrators); the consequences have been graduates with skills less than optimally relevant to local industry needs.

E. Roadblock: Contemporary culture gives more value to length of time and processing of students than to relevance of educational content to post-educational (job) experience.

F. Roadblock: Changes in use of health personnel are limited by the power of traditional concepts on "professional" roles.

G. Issue: Will secondary school educators provide students from poverty with marketable job skills?

H. Roadblock: Some education "principles" have outlived their relevance to current societal needs.

I. Consideration: Secondary school students have the capacity to successfully complete (at the secondary level) occupational curricula offered at the junior college level.

J. Consideration: With the great growth in third-party payments (insurance) for health services, the costs of training and education programs within hospitals are increasingly borne by the total community and much less so by the hospitalized patient.

K. Issue: Is it economically feasible to develop valid equivalence measures for occupational fields that do not involve large numbers of persons? (Normative data are dependent on large population.)

L. Issue: Can curricula be developed to provide graduates with marketable job proficiency in two or more occupational fields? That is, the education of a "parameddler." Example: LPN - CLA - PTA.
M. Consideration: To what extent will secondary and post-secondary schools increase the availability of occupational curricula to the older adult?

N. Issue: Should students be prepared for employment in the national or local labor market?

O. Issue: Educators in health occupations curricula should have some concurrent clinical service responsibilities as a means of assuring greater relevance of education to job performance requirements.

P. Issue: Specialist-generalist question can best be resolved in decision processes of local planning bodies.

Part II: Principles, Desired Practices, Sources of Information or Help; Implications for Practice

A. Principle: Among those to be involved in decision processes relating to the creating of or change in health occupation curricula is the hospital administrator (and other administrators who represent major potential employers of graduates of these curricula).

B. Principle: Personnel requiring longer periods of preparation should be demonstrably more proficient on the job than those receiving less education to justify the greater community investment in their education.

C. Desired Practice: Secondary school systems should develop curricula that will provide students with marketable job skills. (Students from poverty and poverty-threshold homes require jobs at the earliest possible time to provide themselves with a means for economic self-sufficiency.)

D. Desired Practice: Occupational curricula should be available in secondary schools for the intellectually superior student who has no interest in higher education (via "honors" voc-ed curricula).

E. Desired Practice: Current concepts of professional roles need a thorough reevaluation and reconstruction for more efficient use of health manpower.

F. Principle: To the economically feasible extent, curricula should be designed to provide for career mobility.

G. Sources of Information or Help (for perspective of hospital industry): Metropolitan, state, and regional hospital associations; health careers and health manpower councils. (Roster available from AHA.) Hospital associations allied to the American Hospital Association Health Careers and Health Manpower Councils have a significant and growing number of individuals with specific responsibility for interests relating to careers and education. (Rosters available from AHA.)

H. Desired Practice: Information about the world of work in health should be incorporated into curricula of all students K through 12.

I. Implication: There is growing interest in and distribution of health career information to K-8 and high school students, teachers, and counselors via hospital associations, health careers councils, and related agencies.
Some Realities for Consideration by Conference Participants:

1. Skilled manpower is in short supply in all major occupational fields.

2. The largest sources of available manpower are the disadvantaged and the teen-ager.

3. Health occupations, except for the professional classifications, have a poor image and, in many instances, a non-competitive salary scale.

4. Parents are reluctant to have their secondary school-aged children enter programs that don't appear to lead to "prestige" jobs.

5. Much of what we require in occupational training programs in unnecessary with regard to job competence.

6. Lowering entrance criteria for training eligibility does not necessarily result in "lower exit standards" for a program.

7. Our technology has produced hardware and software that permits individual learning to proceed other than by reading.

8. Increasingly, employers who depend upon skilled workers must participate in the training process.

9. Some jobs just don't fit in any career progression system of "ladders" or "lattices".

10. Professional and technical workers need training in order to make full use of aides and assistants.

11. Our technology, in many instances, produces devices and procedures that should result in the need for less comprehensive training for many tasks.

12. Short periods of concentrated training with the rewards of a "better job", more pay, more prestige in the immediate offing make sense to a lot of people.

13. In our ever-changing society training must be continuous and training systems must be devised by our major industries.

14. The "mandate" that public schools provide occupational orientation needs reinforcement and a delivery system.

15. Testing does not need to be a "selecting-out" device.
UTILIZATION AND PREPARATION OF PERSONNEL FOR OUR HEALTH CARE DELIVERY SYSTEM(S)

B. E. Childers, Executive Secretary, Committee on Occupational Education, Southern Association of Colleges and Schools, Atlanta, Georgia.

Problems, Issues, Roadblocks, Limitations

Licensure requirements as presently structured by licensing agencies in each state plus professional associations who feel compelled to "guard" the profession.

Status of the entire field of allied health professions as compared to the status identified by the professions.

Certification requirements for teachers, administrators, supervisors, and coordinators for all health professions based on unrealistic job skills and degree requirements.

Inadequate articulation between the allied health professions, the health professions, and professional occupational educators.

Overly structured institutional systemization of all health occupation training; little room for innovation, experimentation, or variance from the norm.

Desire among many educators to improve image and status by extending length of program and adding inordinate "General Education" courses to achieve an Associate degree or a Baccalaureate to gain academic respectability.

Oversimplification of the problem of a shortage of allied health professions by assuming we can solve the entire problem by having more programs of some type we have had in the past.

Desired Principles, Practices, Changes, Source of Assistance, Implications, Minimum Requirements

A massive public information project must be undertaken to make the public, (youth and adults) aware of the need for allied health professionals and the available institutions and systems for licensure.

We must standardize and liberalize licensure requirements to provide adequate opportunity for credit for experience and education taken in "non recognized" institutions and agencies and provide logical but meaningful horizontal and vertical mobility without loss of time.

Extensive indepth studies of new techniques, methods, procedures, multimedia approaches to health occupation education not limited to the strict sense of the classroom-laboratory-hospital system. We must explore the possibilities of cooperative programs, counseling programs, homestudy techniques, upgrading classes, television, etc. in the training process.

We must re-evaluate our current manpower utilization to assure full efficient use of all personnel now available and create new positions for the gaps in health service. We must be cautious about over training and over selling programs and opportunities.

2-17
The proliferation of licensing and accrediting agencies must be re-evaluated to assure adequate internal evaluation with reasonable external review. All allied health professions might be merged into a single national or a co-operative group of regional agencies to accredit schools of health for the entire field rather than having such extensive single program approvals.

Must consider the possibility of Centers of Allied Health Education to maximize the cross utilization of staff, facilities and programs. This will also allow for more upgrading and vertical and horizontal mobility in subsequent training. More of such centers should be residential.
CHAPTER III

COORDINATION AND COOPERATION IN PLANNING
DEVELOPING AND CONDUCTING HEALTH
OCCUPATIONAL EDUCATION PROGRAMS

Session Speaker

Joseph Hamburg

Reactors

Richard C. Allen
Harry E. Davis
Arch Lugenbeel
Katherine L. Goldsmith
In 1968 the United States spent over 53 billions of dollars for health care. The bill for 1969 is estimated to be close to 60 billion. This money from both federal and private sources begins to approach 7 per cent of our gross national product, and there are indications that by 1975 it will climb to 10 per cent. Not included in this expenditure is the cost of educating the quarter of a million students presently enrolled in health training programs throughout the nation.

The health industry, if I dare call it that, presently employs over 3 1/2 million people in more than 125 definable health professions and occupations and 250 secondary specialty descriptions. This makes it the second largest employer in the United States. Were it to have the manpower it presently needs, added to this force, it would become the leading employer.

A doubling in the numbers of health personnel and a five-fold increase in expenditures has occurred in the last 20 years. This surge is related not only to a rapidly expanding population and an advancing technology, but also to a shift in social attitude which simply stated is, that health care is assumed to be the right of all rather than the privilege of some of our citizens. It is this philosophy translated into dollars, which has led to the doubling of our public health care budget in the last 3 years.

These changes have also brought demands on our delivery system which it finds more and more difficult to satisfy. As the time lag increases between the initiation of these demands and their satisfaction, a growing impatience with the health care delivery system becomes more evident.

Justifiable or not, such phrases as "non-system" and "cottage industry" are rapidly finding their way into the lay and the scientific press. For the moment at least, only the health practitioners are being singled out as the targets of culpability for the system's incompetence and over utilization. Any smugness, yea satisfaction which some of us in academe may be enjoying over the present discomfiture...
of our colleagues, will be short lived.

It will take but a few logical deductions on the part of our society to have them realize that whatever else these practitioners may be, they are in part, the product of our educational institutions.

It is we educators who selected them and trained them for their tasks. If indeed we do have a non-system, then as educators we must share the guilt of its perpetuation. Not only have we failed to teach or even research health system organization, but our educational curricula themselves are the very epitomy of a non-system. We need only to look at the lack of lateral and vertical mobility which exists today within our restrictive and archaic health educational boxes to become painfully aware of our own culpability.

The sage Charlie Brown has wisely observed, "We have met the enemy, and he is us." It gains us little to attempt to blame professional vested interests, restrictive licensure and accreditation, etc, for this impasse; for indeed those of us responsible for the education of our health professionals have done little to try to change this whole process. Let me assure you that a nation which spends 60 and more billions of dollars annually for health care and quite possibly 5 billions of dollars additionally for the education of its health workers, will not continue to support blindly such disorganization. It will demand more effective and efficient operation, and it will get it either voluntarily or otherwise.

I do not suggest that we act out of fear of reprisal or even expediency, but as honest academicians and investigators this could be an opportune time for us to make some candid appraisals of our whole educational process.

We might begin by looking at some of the existing administrative structures to see if they are compatible with our professed goals. Without sounding too trite, those of us in education do say that education is a continuum—a lifetime of learning, that it does not begin or end with either the formal training period or the informal one which accompanies and follows it. Yet, what have we done to guarantee that this process is indeed a continuum? What academic or administrative procedures insure, for example, that the biology taught in high school is the biology needed by students headed for vocational education? Or that it articulates with the biology taught in the Junior and Senior colleges?

And if it doesn't mesh, whose responsibility is it? Is it the destiny of lower education to conform always to the standards and restrictions of higher education? And if so, then, how certain are our senior colleges and universities that the biology they are teaching is what the student really needs for his life's work? How was this need determined? Did educators first engage in a careful analysis of
the variety of tasks in which a student might enter and from this define the levels of biological information which he should acquire? There is some evidence to indicate that this was not the case. As far as our senior universities are concerned, course content seems to vary more with the interests of the instructor than with the needs of the student.

I expect there will be two major challenges arise to these questions: first is the one called out whenever the existing traditional teaching structures are threatened, namely, academic freedom. Doesn't each teacher, in fact, each school, have the right even the duty to teach whatever each feels is correct, necessary or important without the pressures of outside influence? And second, if we do begin to teach pragmatically for the needs of society rather than for the fulfillment of the individual, don't we tend toward a standardized society full of people technically competent but unable to reason beyond their discipline?

The first question is an easy one to answer. I do not believe that academic freedom is endangered by a desire on the part of the consumer to expect education to be relevant. Society doesn't wish to intrude upon the sanctity of the classroom, but it does ask whether education has the right to be an expensive undirected and disjointed system.

The second question is a bit more difficult for me to answer because I would have to agree that an education which is purely technical, leaves much to be desired. I will not accept the premise, however, that one cannot prepare people who are technically competent, and aware as well of their environment and their social responsibility. I do not believe that these two goals are divergent or mutually exclusive. Furthermore, disparaging technical competence in this day and age when we have become increasingly dependent upon each other's performance of such skills seems inane.

I must quote John Gardner, our former secretary of Health, Education and Welfare, who noted, "Any society which looks up to shoddy philosophy because philosophy is a lofty activity and looks down on excellent plumbing because plumbing is a lowly activity, that society will have neither good philosophy nor good plumbing. Neither its pipes nor its theories will hold water."

If we look at the deficits in health manpower, we find the greatest needs exist at levels requiring less lengthy academic preparation. In fact our present health manpower pyramid seems to be upended if not top-heavy, a lot of chiefs and not enough indians. If the future holds that we are to provide comprehensive health care for all of our citizens, then it becomes obvious that not only will we need more people toward the base of this triangle, but that they in turn must perform
skillfully. It will be this large group of talented people in our health occupations who will bear the major load and responsibility for the implementation of any comprehensive health care system.

I would state categorically that the future success or failure of such a system will depend in large part upon how well and how thoroughly these health workers are prepared and in turn how devoted they are to their tasks. The responsibility for their preparation is not limited merely to those immediately involved, but concerns all of us having any role in the education of health workers and professionals. If we are to field health care teams in the future, then the members of these teams must not only be highly skilled in their respective positions and understand the roles of all the others, but be able to coordinate their diverse activities toward a common objective.

This mutual dependence and coordination must be made an integral part of the learners' academic preparation, and cannot be left to chance or to be acquired in some casual fashion after they take to the field. To accomplish this goal will require the active cooperation and coordination of all the educators at all levels responsible for the preparation of these health workers.

The suggestions I have to make toward achieving this goal will probably sound unrealistic to some of you, a pie-in-the-sky proposal, but pieces of this are already operational in some parts of our country and at certain levels of education. For the purposes of this paper, I will assume that being men and women of good will, we recognize the weaknesses in our educational linkage system and are willing to do something constructive about it.

This being the case, what is it that we should be trying to accomplish through cooperation and coordination of our educational efforts? Let me list but a few:

A. Provide a continuum of education which will permit the upward mobility of a health worker within a discipline without an unnecessary reduplication of educational experiences at each level.

B. Provide within the design of individual course material the proper foundation for the subject so that the progression to more advanced work in that same topical area does not repeat endlessly, previously covered material.

C. Identify the commonality of education experiences which exists among the various health disciplines and expedite their transferability to permit lateral mobility among the different educational pathways.

D. Provide whatever classroom or laboratory experiences are required to facilitate such lateral mobility.

E. Develop the criteria for academic credit which must be given for skills and information acquired through other than the presently accepted classroom channels.
Although my assigned topic asked me to emphasize the importance for coordination and cooperation among the various educational programs at the occupational level rather than the so-called professional level, I believe there is a greater need for this with the latter group. Unless I am greatly mistaken, the vocationally oriented health occupations seem to enjoy a comfortable relationship with each other. It is only when they attempt to relate to programs at a so-called "higher" level that noise begins to develop in the system. And the higher up one goes, the louder the noise.

If I have assessed the problem correctly, the difficulty in affecting solutions will lie in vertical rather than horizontal articulation. What I have to suggest is predicated upon this premise.

I would propose the voluntary establishment at both the state and national levels of the following three types of basic councils:

A. An Interdisciplinary Health Professions Education Council.  
B. A group of Intradisciplinary Health Professions Education Councils.  
C. A series of Topical Health Professions Education Councils.

These are rather cumbersome and clumsy titles; let me try to clarify their meaning by describing their purposes.

A. An Interdisciplinary Health Professions Education Council. This council would be charged with the responsibility for looking at the total spectrum of our health educational system. From this council would come recommendations of a broad and general nature, e.g., which categories of health personnel were most necessary and where. Suggestions on the training and composition of a variety of health care teams. Improvement of curricular design to permit greater mobility among the health occupations and professions. This council could look at some of the special education problems of the health occupations and professions such as core curriculum, continuing education, etc. Finally it would maintain close liaison with the activities of the other councils.

On this council would be representatives from both practice and education of the major health categories; Medicine, Dentistry, Nursing, Pharmacy and Allied Health. Also included would be knowledgeable consumer representatives. This council would also relate closely to its state and national counterparts.

B. Intradisciplinary Health Professions Education Councils. These councils, one for each specific health discipline, would be charged with the responsibility for a continuous curricular review of its own particular specialty with a goal toward permitting greater career mobility within its own ranks, at the same time maintaining liaison with the other councils as noted above. Using nursing as a deliberate
example, this council would be composed of representatives from both education and practice from among the Nurses Aides, Licensed Practical Nurses, Associate Degree Nurses, Baccalaureate Degree Nurses, etc., also included would be selected consumers.

C. Topical Health Professions Education Councils. These councils, one representing each of the major subject areas, would be charged with the responsibility for curricular design within its topical area to ensure the relevancy of the material being presented and to eliminate all unnecessary repetition and redundancy.

If we stay with the earlier reference to biology, then such a council would have in its constituency biology teachers from high schools, vocational schools, junior colleges and senior colleges. The consumers in this case would be selected representatives from among a variety of students and health practitioners who could and most assuredly would communicate to this council the adequacies or inadequacies of such topical preparation. As with the other councils, continuous liaison would be essential.

To whom would these various councils report? First of all, if the council membership is carefully chosen, it will contain the very educators and administrators who have the capability for mounting or implementing the recommendations which are developed during the course of their deliberations.

In addition, they could report their recommendations to the appropriate state or national office. At the state level this might be a board of regents or a committee on higher public education. At the national level this could be directly to such offices as American Council on Education or to the Department of Health, Education and Welfare. The important matter here is not the chain of command, but rather the impressive effect such a voluntary effort would have upon the decision-making process of those authorities responsible for the establishment and funding of Health Occupations Education Programs.

Perhaps this type of council structure which I have suggested is too grandiose. Then, I would recommend that a start could be made by merely establishing one or several. Perhaps the suggested council structures will not work; then, they should be shifted and changed until they do. There is nothing sacrosanct about their arrangement or their composition. Perhaps the problem will be that so many varieties of health educators and practitioners cannot work harmoniously together for the common interests of society and patient care. In this case, then those that can, should continue the effort with the hope of enticing others along the way. The laggards will identify themselves.

On the national level, we have beginning evidence that such cooperation is
feasible. One organization which I am proud to represent is the Association of Schools of Allied Health Professions. This organization's objective is to provide leadership and coordination in an interdisciplinary and inter-agency manner to educational endeavors in Allied Health. For the very first time, people concerned with the various aspects of education in allied health and at different levels, are sitting down and meeting with each other, sharing each others' problems and aspirations. The cross-section of talent and forces represented in this Association are too numerous to mention; suffice it to say people from various backgrounds but with common goals are subordinating their special interests to work together.

A new organization barely one year old is attempting a similar effort but on a broader scale. This is the Federation of Associations of Schools of the Health Professions. This federation includes such organizations as the Association of Schools of Allied Health Professions, the Association of American Medical Colleges, the Association of Schools of Public Health, etc.

By meeting together and sharing experiences, it is hoped that common goals will be realized more expeditiously.

More direct evidence of such cooperation can be seen by the development underway at the University of Alabama in Birmingham; one, incidentally, which we at the University of Kentucky are desirous of emulating. I am referring to their Regional Technical Institute for Health Occupations established under the aegis of their School of Health Services Administration. This Institute will provide a coordinated approach to academic preparation in a variety of health careers, with periods of training varying in length from four weeks to two years. Involved in this effort are several schools and colleges within the University of Alabama per se; existing junior colleges throughout the state and the clinical facilities of the medical center as well as those of the outlying special hospitals. Included in the schools at the University at Birmingham are the Colleges of Medicine, Dentistry and Nursing. These colleges will have direct input into these various health occupations programs. Within one university at least, and there may be others doing the same, we see evidence of beginning cooperation and coordination of a variety of health careers at many levels.

I must apologize for broadening this presentation to include the entire educational spectrum. However to present the needs of health occupations education without making proper provision for their articulation, would be to repeat the very errors which we wish to avoid.

One could reasonably ask what the likelihood would be for establishing the type of communication I have proposed among so diverse a group of educators and practitioners previously indisposed to such coordination?

3-7
The answer to this is dependent on many variables: the reasonableness of the people involved, the sense of urgency which they feel toward mounting such an effort, the presence of effective leaders to organize such councils, the availability of funds to support them, etc. Most important will be the realization among those concerned of the consequences which might result from a continuation of the present attitudes and relationships. Without conjuring up too many demons, it would be a simple matter for any of us to detail the types of restrictive fiats a disenchanted legislature might invoke. Must we continue to act only in response to threat?

I hope that from the challenges to this paper will come the substance which will drape this skeleton proposal with the muscles of action.
SUMMARY REACTION TO POSITION PAPER II

COORDINATION AND COOPERATION IN PLANNING, DEVELOPING AND CONDUCTING HEALTH OCCUPATIONS EDUCATION PROGRAMS


Dr. Hamburg's paper highlights the dilemma of educators attempting to develop a "system" of education for the health occupations and professions which must support a "non-system" for the delivery of health care. To his two "C's" of coordination and cooperation I would emphasize three others - communication, concurrency and continuing education.

I join in his plea of "guilty" for the educational system and the educators for at least a share of the current problems in the delivery of health care, but the failure is not one of a lack of good intentions. Rather there is a great deal of wasted and misdirected effort. Lack of communication and adequate awareness of what is being and has been accomplished in education for the health professions and health occupations has many of us daily "re-discovering the wheel".

We are slow in responding to the demands of our new health care technology. There is a principle of meshing a new technology with the required education system necessary for its support called "concurrency". This is simply the concurrent development of educational facilities and programs for development of personnel for each major technology or technological system as it is developed. This principle has not been applied in health care technology; and as a result, we find ourselves developing needed programs and people after the fact.

If we are to respond to the demands now being placed upon the health care system, we will not only need a change in our delivery system but also a change in our educational system which will make it more responsive to the support of new technologies as they arise. One of my concerns is that with all the present emphasis on shortages etc. we will overlook the fact that, because of the very nature of the pressure of new technology, we may be developing personnel now who will be rendered obsolete by this very technology we hope to serve. I have a strong feeling that the health care system that will evolve over the next ten to fifteen years will be markedly different from the currently existing one.

I do not share Dr. Hamburg's faith in the ability of the various health professions to react positively and affirmatively to his charge of "continuous curricula review of its own particular specialty with a goal towards permitting greater career mobility within its own ranks". The history of a number of the professions in this regard stands as rather damning evidence, that such internal self-policing is more honored in the breach than in the observance.

I do share his belief that there appears to be a more comfortable relationship among the vocationally oriented occupations, but this may simply be that they have not been in existence long enough to develop the same concern with restrictive practices and self-protective activities that seem to typify the more professional groups.

3-9
The system of health care currently developing calls for the introduction of an increased number of so-called "technicians" as well as a parallel development of "assistants" who would be used within the framework of the health care team to provide a multiplier effect for the professional skills of physicians, dentists, nurses, etc. For this reason, even greater stress should be placed on the concepts of interdisciplinary education for the health professions and health occupations, and we should continue to look for an educational design which would promote personnel development within the health care team concept.

A final note which was touched on lightly by Dr. Hamburg is the urgent need for the development of adequate continuing education programs. In many cases, the bulk of the practitioners who will provide the essential health services over the next decade are already out of the schools and into the health system. There is a need to concentrate on the upgrading, elevating and sharpening of their present skills and developing a system that will assure the input of adequate new information to keep them abreast of current developments. This, too, should be an interdisciplinary development. The current process of continuing education is a fragmented, uncoordinated and unrelated effort with varying degrees of success and adequacy ranging from excellent to poor and there again I feel that the educational system must share with the professional groups the burden of the guilt for the inadequacy of the current system. The councils proposed by Dr. Hamburg are a step in the direction of the discussions required. I would simply propose that the interdisciplinary concept be carried now to the lowest level and that various professional elements be subordinate to an interdisciplinary executive group, providing the needed leadership to assure coordination, cooperation and communication between the diverse groups within the health care system. Such a group should provide a sound basis for mounting an effective effort to meet the challenges Dr. Hamburg has put to us.
SUMMARY REACTION TO POSITION PAPER II

COORDINATION AND COOPERATION IN PLANNING, DEVELOPING AND CONDUCTING HEALTH OCCUPATIONS EDUCATION PROGRAMS

Harry E. Davis, Associate Director, Allied Health Professions, Bi-State Regional Medical Program, St. Louis, Missouri

Upon reading Dr. Hamburg's remarks, I find myself nodding in agreement.

During my experience of implementing allied health programs into a junior college district, I often found myself frustrated by the absence of coordination among the various programs and between levels of the same program.

In the beginning, I made attempts to coordinate the programs with each other and with the senior institutions. The disinterest of the senior colleges, and the need to establish an operating program, worked against these attempts.

At that time, the Junior College District had been in existence some two years and served some 2,000 students. The two universities were 147 years and 112 years old. They served some 20,000 between them. By 1969 the junior college presented 10 allied health programs and had a total student capacity of 18,000 - increasing each year.

I would like to say that what happened late in 1969 was completely a result of enlightened thinking and indeed it might have been. However, I'm sufficiently cynical to wonder if the foregoing might not have provided some motivation. In any case, the result is good.

At the instigation of the senior universities the Inter-institutional Committee for Allied Health Programs was formed.

The committee is composed of representatives from the following: Belleville Area Junior College, St. Louis-St. Louis County Junior College District, St. Louis University, State Community College of East St. Louis, University of Missouri at St. Louis, and Washington University. Represented in this group are many Allied Health Programs, two medical schools and an overall load of 50,000 students. In addition to the educational institutions, committee members are also drawn from the Medical Society and Bi-State Regional Medical Program.

In general, the primary objectives of this committee are conceived as follow:

1. Provide communication among the participating institutions.
2. Coordinate curricular offerings with regional allied health manpower needs.
3. Maximize vertical and horizontal student mobility within and among programs.
4. Expedite faculty and/or student exchange to make maximum use of faculty manpower.
5. Coordinate use of available clinical training bases.
6. Develop common definitions of general education requirements in "core" curriculum.
7. Design and coordinate student recruitment program.

I believe this effort serves an additional example of the type of coordination deemed desirable by Dr. Hamburg, and an example of needed voluntary cooperation between private and public institutions. Dr. Hamburg, we believe you are right.
SUMMARY REACTION TO POSITION PAPER II

COORDINATION AND COOPERATION IN PLANNING, DEVELOPING AND CONDUCTING HEALTH OCCUPATIONS EDUCATION PROGRAMS

Arch Lugeneel, Chairman, Allied Health Program Division, Richland Technical Education Center, Columbia, South Carolina

Problems and Issues - From the Standpoint of the Local Program Administrator

The limitation of the law distribution of funds at the local level for health manpower development has consistently caused limited program development.

There is a lack of teacher-oriented programs for health personnel on regional and state levels. Even national programs are minimal.

It is difficult for health professionals to take or be able to give the time needed for advisory or task force groups when it relates to a single institution.

Health professional standards or essentials, in general, are mainly geared to their health institution operational pattern of service first and research and education a toss-up for second and third. This brings about difficulties when educators try to assist in program development from their view point of education first with research and service a toss-up for second and third.

Higher education and health professional groups tend to make it difficult to work out arrangements for transfer of practical work for upward mobility of health workers.

Multiple accreditation visitations by health professional societies tends to disrupt the administrative and the health program pattern.

Accurate and even adequate data are highly limited on health manpower needs and utilization.

Curriculum development in the health field tends to depend more on the individual responsible for the program, than the entry level needs of the job.

Should the less than baccalaureate health education program be generalist type or specialist type programs?

Principles and Practices

A change that should be studied and evaluated is -- that many health facility based practical experience requirements could be accomplished on a 60% to 80% basis within an educational lab setting.

Stimulation techniques should become a high priority item in health manpower development.

Health practitioners must demand life education, professional and personal, from all sectors of the community, whether it be health facility based, educational institution based, or elsewhere.

Flexibility in minimum requirements of professional groups must be considered, if imaginative and cooperative program development is to reach national health care needs.

3-12
Health facility administrators must recognize that the educationally trained health worker at time of graduation is at the career-entry level and not a veteran worker with O.J.T. background.

A three to six month concentrated in-service and work program is a must, if entry level workers are to function to capacity and develop the veteran's skills and techniques.

A broad scale high school program similar to distributive education, office practice, etc. needs to be developed in the health field -- an 11th and 12th grade concentration is a must.

Realistic professional organization guidelines, similar to the American Dental Association and the American Society of Pathologists needs to be developed for educators and health professionals to use.
SUMMARY REACTION TO POSITION PAPER II

COORDINATION AND COOPERATION IN PLANNING, DEVELOPING AND CONDUCTING HEALTH OCCUPATIONS EDUCATION PROGRAMS

Katherine L. Goldsmith, Deputy Director, Division of Vocational Education, Los Angeles, California

It isn't easy to react to Dr. Hamburg's paper primarily because in the time that I have been associated with educational ventures related to the Allied Health Professions, I find that I know less and less about solving the problems of coordination and cooperation in the training of allied health personnel.

First, let me say something about our particular involvement. The Allied Health Professions Projects at UCLA are concerned with the development of curricula and instructional materials for a number of the Allied Health Professions which require education or training up to or including the Associate Degree. We are charged, in addition, with making maximum provision for upward and lateral mobility and career development.

After exploration of several fields, it is my feeling that cooperation and coordination in the generally thought of sense, with course building upon course, is not going to be feasible in the Allied Health fields. In all probability, we will have to go to equivalency testing and to permitting students qualified by examination to be exempt from portions of required courses for the next step or next degree they may wish to pursue.

I think we're finding that the practicum engaged upon in the lower level job in part meets the requirements of the practicum required for upper level jobs (e.g., the practical training for LVNs or LPNs may to a great extent meet the requirements for the practical training of the RNs; or even that the training and experience of the RN may meet some of the clerkship requirements of the medical student). This is not wholly true, since the RN student is expected to bring to the practical training somewhat different background, concepts and ideas and to take from the training somewhat different experiences than the LVN or the medical student. It seems unreasonable to expect an LVN who wishes to become an RN to repeat an entire practicum, and yet there may be concepts we wish her to gain that may have been overlooked in or are not part of the lower level training. There must be provision for this additional work without repeating an entire course.

Similarly, in another field with which we are working, the pharmacy technician will have accomplished much of the practicum or internship of the pharmacy student in the course of technical training and work, yet in some ways he will be lacking some of the background and experience required of the pharmacist.

In addition, we are finding with pharmacy that the chemistry required for the pharmacy technician covers only a small portion of the chemistry a pharmacist may need. How then does one obtain credit for the pharmacy tech who wishes to move up?

We don't have the answers yet, but we're finding the problems a little larger than we though they'd be in the beginning.

Moving on, is there or should or can there be a true merger of occupational education and a liberal arts education? It appears that at the lower level of
Allied Health training entire "courses" of the various academic disciplines are not needed. This may be true of upper level Allied Health Professions courses, too. We, therefore, need to review with biology teachers and chemistry teachers how they may bring their courses or their information into line with the needs of specific students or programs.

I think what I'm saying here is that if the two year or four year college wishes to conduct a full year chemistry course as a liberal arts venture or as one of the courses which lead to specialization in chemistry, that's fine, but most people in the Allied Health fields do not need this amount of chemistry. We may have to get totally away from "academic discipline" oriented education for the Allied Health occupations, and then permit the students to obtain credit for total courses, by examination, in each of these academic fields if they wish to move up the academic ladder.

Can the college be all things to all people? To meet the needs of Allied Health personnel, the college or upgrading institution must move to individualized instruction and to individual evaluation of whether the student has met specific course requirements, with professional training very specifically pointing towards the occupation the student wishes to enter and general education a requirement in which students pick up those additional pieces of knowledge deemed necessary by the faculties of the various institutions to which they go.

I agree with Dr. Hamburg that the student should not have to repeat work. It will not be easy to eliminate this repetition. A tutorial system or a system in which a student moves at his own pace and completes "courses" by examination in his own time may be the only solution to the coordination and cooperation of which we speak.

To go back to Dr. Hamburg's presentation for one moment: I agree in a sense with his concept of councils: an overall council for the Allied Health Occupations, and individual professional councils. We are trying this; we are dealing with it in our project. Each occupational group has its own National Technical Advisory Committee made up of members of the occupation, teachers in that occupation, consumers of the products, which in the long run are the students trained in that occupation. In addition, we have requests for and will implement an overall Technical Advisory Committee made up of a representative or two from each occupational Technical Advisory Committee, so that we may effect some coordination between the various occupational groups.

Let me be somewhat of a maverick, however, in saying that I think there may be a breakdown of some of these occupational groups or professional groups. As we re-evaluate and adjust the delivery of medical care, we may find new types of Allied Health personnel replacing some of the professionals we now know. This will be somewhat difficult, with each professional group an entity unto itself. As we come to new delivery systems, we may come up with a combined person or multiple combined people and may need to seek a breakdown of individual professional empires.

I have no answers at this point. Fortunately, Dr. Hamburg suggests several solutions. All I can do is question some of them and open up some areas of discussion.
CHAPTER IV

OCCUPATIONAL EXPLORATION AND ENTRY LEVEL PROGRAMS IN HEALTH OCCUPATIONS

Session Speaker
Lawrence Borosage

Reactors
Sandra H. Noall
Albert Pitts
Jerry C. Olson
Bob Jobes
OCCUPATIONAL EXPLORATION AND ENTRY LEVEL PROGRAMS IN HEALTH OCCUPATIONS

by
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My responsibility, as I understand it, is to take you on a mental tour in which we will discuss some aspects of exploratory and entry level programs on the elementary and secondary level. I can think of no better source to get us started than to quote Rollo May, the eminent psychotherapist, when he makes the provocative statement in his work, Man's Search for Himself.

One of the few blessings of living in an age of anxiety is that we are forced to become aware of ourselves. When our society, in its time of upheaval in standards and values, can give us no clear picture of what we are and what we ought to be, we are thrown back on the search for ourselves. The painful insecurity on all sides gives us new incentive to ask: Is there some important source of guidance and strength we have overlooked?

Certainly those who owe allegiance to the health profession in one capacity or another are in a state of anxiety with the manifold forces that are now brought to bear. You have heard the litany recited many times so I will spare you the agony.

I, too, spent some agonizing moments attempting to arrive at a thrust to my remarks particularly after I reviewed the awesome list of registrants several weeks ago. Weighing both the agenda and the participants at this national conference, I sensed that this assemblage would be unique and distinctive without the possibility of replication in the future. Both quantitatively and qualitatively, there are islands of diversified competence present. Furthermore, a healthymix from the public and private sector is evidenced. Add to this the geographical dispersion and one can extrapolate a concentrated power potential. We can answer Rollo May's question in that we have a source of guidance and strength in the collective mind here present today.

I am certain that you must understand the dilemma that a speaker is confronted with when he is expected to strike a responsive chord from each person represented. There were three criteria, however, that guided me in determining direction:

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4-1
What is the Achilles' heel in health occupations at the elementary and secondary level?

Can each individual attending the conference help resolve the issues involved at these levels?

Would the information presented provide some new direction for the future?

What, then, will be the focus of our discussion?

There will be two main threads. The first will deal with the consultative role of the health occupations educator. Parenthetically, my definition of health occupations educator is any individual in the profession who has an impact on individuals either being prepared for the health profession or who are already employed. This means everyone in this room. In the second thread of discussion, I hope to nudge you into thinking about some new ways in which to exercise your consultative role.

It seems to me that health occupations educators have two major roles to perform. The first is a training role in which attention is directed to the preparation of individuals for employment or to provide continuing education. In the performance of this role it would be safe to say that a commendable job has been done considering all of the constraints. So much so that one hears comments made that the health occupations field may well serve as a training model for other occupational areas to emulate. The second role is the consultative role in which the health occupations educators have a responsibility for obtaining assistance from others who deal with youngsters at the elementary and secondary level. The health occupations educator thus finds himself in a sense once removed from direct contact with the student. It is in the exercise of this role that one can detect some serious weaknesses or cracks in the educational window of the health occupations educator. This then is the first thread of the discussion.

The second strand deals with reflective thinking. Fredrick Kappel delivered a series of lectures at Columbia University some years ago which were later compiled in a fascinating book entitled, Vitality in Business Enterprise in which he defines vitality as the power that any social organization generates today which will assure success tomorrow. He also sets down seven symptoms which are indicants of declining vitality. Permit me to share them with you:

A. The first is where people cling to old ways of working after they have been confronted with new situations.

B. A second symptom of declining vitality is the failure to define new goals that are both meaningful and challenging.
C. A third and closely related sign of danger is decline in reflective thinking as distinguished from active thinking.

D. A fourth warning is the growth of institutionalism.

E. A fifth appears when an organization gets the reputation of being a secure and stable outfit, but not a venturesome one.

F. A sixth is the way wisdom is passed on to new people.

G. A seventh is a low tolerance of criticism with such penalties on thoughtful and responsible critics that criticism is stifled in the whole organization and independent thinking is discouraged.

It is with the third symptom that we will address ourselves to as the second strand of our discussion, i.e., the decline in reflective thinking as distinguished from active thinking. Further definition may be necessary.

Health occupations educators need plenty of action thinking everyday. This is the kind of thinking that is concerned with setting up plans, making the decisions, keeping the pace brisk and exercising the controls required for successful operation under the prevailing pattern. Reflective thinking on the other hand, covers the mental activity to ask searching and embarrassing questions about the adequacy of the current operation. This kind of thinking can be disturbing to some individuals at the center of successful action because they may be seeing it as dealing with remote abstractions that seem to be impractical and visionary speculations about the future.

With this as a backdrop, I would like to raise certain issues for discussion which will enable us to look at the consultative role and then I would challenge you to do some reflective thinking to push back the frontier of our present behavior.

Issue #1. Given the fact that parents are important determinants of the occupational choice of their children, what can be done to provide adequate guidance for parents as it relates to health occupations?

The Advisory Council on Vocational Education in its evaluation of vocational education in 1968 indicated as one of the urgent and immediate tasks: develop pre-vocational orientation to expose those of limited experience to alternative occupational choices.

When does pre-vocational orientation begin? Who are those of limited experience who need exposure to alternative occupational choices? At first blush one would focus on the child; however, as I shall try to show, the parents and others need some understanding of the field of health occupations.

If there are lessons for all of us to learn as a result of the research in Head Start and other early childhood education, it is that parents do and can have an important role in determining a young child's educational
development. Kirk, Brazziel, and Terrell, Crow, Fusco, Karnes, Liddle, Weikart are a few of the researchers who have reported out some interesting findings. I cite one conclusion by Karnes, et. al. who have conducted extensive research with intervention programs at the University of Illinois with low income families.

Those comments suggest that this pilot endeavor did indeed foster attitude change, develop self-help skills and promote a feeling of dignity and worth in mother participants. Surely these changes would extend from mother to child. If alteration in the organization and direction within the home can be achieved through training programs involving mothers of infants, the ghetto child will be given the background of experiences which prepares him for the educational and thereby, the economic opportunities of a democratic culture.

I would submit, therefore, that parental perception, parental attitude, and parental readiness regarding occupational awareness can be wholesomely developed if and when deliberate attempts are made through early parent education programs. Please note that I did not say occupational choice at this early age. However, review of parent education programs which attend early childhood education reveals a paucity of information or concern to assist the parent in the development of insight into this crucial area. The controversial sex education ranks higher in the scheme of things.

This dearth was reinforced the past several months ago when I participated in two conferences for parents and teachers in pre-school programs. The first was the Michigan Council of Cooperative Nursery Schools which held its annual convention in Detroit. The second, sponsored by Oakland University drew its clientele from Michigan and other states as well. Would you like to know the topics discussed? Science, Art, Music, Creative Play, Cooking, Family Communication, Developing a Creative Environment in the Home, The Home as a Learning Center, Sex Education. I was struck by the fact that no topic nor any portion of a topic dealt with the need for occupational awareness for the parent. And yet, what concerned parent does not begin to set goals, rightly or wrongly, for the youngster even at this early point in the child’s life? In many instances the environmental press begins to function and the child’s perception and self-concept begin to take shape by the experiences provided or avoided.

When one visits with trained pre-school teachers, they are the first to indicate, "Yes, we are interested in the youngster learning about role models. We take them on field trips to the police station, to the fire station, etc." Are visits made to the hospitals, nursing homes, universities where children may catch a glimpse of health occupations? Can the child and parent learn more about the physician, the nurse, the technician on a very rudimentary level?
If other subject matter areas can be a matter of concern in pre-school education, shouldn't occupational awareness be a concern as well? As you can see, we now introduce a third person into the learning environment, the teacher.

The only way in which this triumvirate, the parent, the child, and the teacher will become aware of health occupations is going to be dependent upon what you people want them to know. This is what I mean by the Achilles' heel in health occupations. What is available through your consultative role to improve the situation? I hope you do some reflective thinking on this point in your discussion.

Of even greater gravity is the fact that the majority of youngsters do not have the advantage of Head Start or pre-school education. But then you say, well, children go on to elementary school and parents and children both have an opportunity to develop some notions about occupational awareness. One hears a great deal these days that health occupations education must have its beginnings in the elementary school since it is at this period that the youngster develops attitudes toward work and the world of work. But this presupposes that systematic planned learning will take place. Who is to serve in a consultative role to the elementary school teacher about health occupations? What resources are available to her? Several new functionaries enter the picture of whom we have certain expectations. It may be the guidance counselor or guidance director if such is available. Or it may be the vocational director. Now we are entering into the whipping boy, pass-the-buck stage. In the meantime, we see the interesting phenomenon taking place where the chasm between parent and the teacher begins and widens throughout the educational life of the youngster.

It is a wonder that Kingman Brewster, president of Yale University, in a recent commencement address and in testimony before a congressional committee said one of the great contributors to campus unrest and protest is the involuntary student who because of parental pressure finds himself in pursuit of the college diploma as the open sesame to success against his will.

What would you have of the elementary school teacher who finds herself the target of the mathematician, the scientist, the language arts specialist, the physical educator and others, each vying for more time in the curriculum day? I am not sure I can answer that question. However, I do know this, that unless someone has the responsibility for parent education as well as attitudinal development on the part of the child, realistic outcomes will not eventuate. I can envision the time that every elementary school will have a
parent educator as part of the staff. The poor people in this country, if they are not thwarted, may yet show us the way. As you probably know, the tragic part of the longitudinal studies of the Head Start program indicate that once the child enrolls in regular elementary classes, retrogression takes place, whereas those who continue in the controlled environment show continued increase.

To assume that the presence of a guidance director and/or a director of vocational education is tantamount to providing assistance on health occupations to teachers, parent, and youngster is exceedingly dangerous. It may be your responsibility as a profession in carrying out your consultative role to educate these individuals regarding the health field. So I would challenge you to reflect on these responsibilities and how they can be accomplished.

In the junior high school or middle school years, one begins to catch some glimpses of systematic guidance and pre-vocational activities. Despite this fact the problem of assisting students remains. In a recently conducted study in Michigan by our State Department of Education in which parents, teachers, principals, and superintendents participated, the following finding was reported:

In richer and poorer districts, in rural and urban areas, even in elementary and senior high buildings, all four (parents, teachers, principals, and superintendents) predominately identified vocationally oriented students as having the most critical needs.

The contemporary scene reveals that we have pre-vocational activities at the junior and middle school level as manifested by such courses as general agriculture, general business, home and family living, and industrial arts. The objectives of these areas invariably include an exploratory component. However, when one thinks of health occupations, there is a note: worthy deficiency. Supplementing these pre-vocational efforts are such promising practices as occupational courses, counseling and career days, but with very little parental involvement. Studies by Wagner, Campbell, Ebert, Baily, and others point up clearly the haphazard manner in which individuals make occupational choices in the health occupations field.

Many of you present are here not only in your professional capacity but as concerned parents as well. If one can make the assumption that pre-vocational activities begin at a very early age and that parents are significant others who share in this development process, we must truly admit that recognition of this fact is clouded in obscurity. It is for us to get at this unfinished task.
Issue #2. Should preparatory programs at the secondary level in health occupations be general or specific?

Dr. James Altman, Director of the Institute of Performance Technology, American Institute of Research, made an interesting observation some years ago when he said:

It seems to me that vocational education in the United States has for some time, been pulled at least six ways at once. Vocational education is caught on the horns of at least three separate dilemmas.

A. The specificity-flexibility dilemma. On the one hand, vocational education is criticized for not providing broad enough training to permit ready adjustment to the flux and change of our modern society.

B. The career-choice dilemma. As it has been traditionally defined, vocational education has been aimed at preparing students for a rather specific occupation. Yet, the best available data suggest that career choice during the years when much vocational education takes place is quite unstable (Flanagan, 1965), with males showing only about 19 percent and females 27 percent stability between a career choice made in the ninth grade and a choice indicated one year following high school graduation. Another recent study (Eninger, 1965), has indicated that only about half of the graduates of high school trade courses report going into a highly related trade.

C. The education-training dilemma. Vocational education has had as its major focus the preparation of youth for work. It is not surprising that there have been murmers from general educators concerning the added importance and difficulty of passing onto new generations the essence of our cultural heritage, of preparing students for their increasingly complex roles as citizens in our troubled world and changing society, or of providing sufficient avocational development that increasing leisure can be an enriching experience.

The Advisory Council on Vocational Education in its 1968 report stated as one of the operational principles:

The objective of vocational education should be in the development of the individual, not the needs of the labor market. One of the functions of an economic system is to structure incentives in such a way that individuals will freely choose to accomplish the tasks which need to be done. Preparation for employment should be flexible and capable of adapting the system to the individual's need rather than the reverse. The system of occupational preparation should supply a salable skill at any terminal point chosen by the individual, yet no doors should be closed to future progress.

These are not new pronouncements since critics of vocational education have been with us from the earliest of times. Setting vocational against liberal education goes back as far as Aristotle who regarded all paid employment as degrading. Liberal education was that education suitable for free men, men of leisure; vocational education was designed for slaves. This
dichotomy has existed ideologically ever since and provides fertile soil for controversy between liberal and vocational education which continues to rage unabated. Dr. Hutchins, an extremist, made two controversial statements about education when he said, "Education designed for the whole people will be the same at any time, in any place, and under any political and social or economic condition." His second statement, "The thing to do with vocational education is to forget it. Vocational education is a fraud on the individual and an even worse fraud on the country."

In the past we have and still do train individuals for specific occupations. The programs under the Manpower Development and Training Act are examples, I suppose, as presently constituted. Many vocational education programs including health occupations would be one step removed from these MDTA programs. The argument of whether public education should or should not provide vocational education is academic and makes for nice intellectual ping-pong.

Today, the American educator and the enlightened vocational educator suffer from wholesome restiveness. Disquietly, he is thinking in democratic terms to a greater degree than any previous generation of educators. To him, democracy means increasingly providing equality of opportunity to all people of the community both young and old, black and white, male and female, to grow and achieve to the extent of their powers. It means to grow physically, intellectually, morally, spiritually, aesthetically and vocationally and to achieve in all these areas as far as one desires and is able to achieve. It means not identical opportunities, but equal opportunities.

Brookover and Nosow, a sociologist and economist, spank contemporary vocational education programs on the secondary level as contributing to the perpetuation of social stratification in our society when they say:

Over-zealous efficiency in allocating personnel to various occupational levels early in the educational program may drastically interfere with such freedom of choice and reduce the opportunity of many to achieve higher status position. Current practices in many schools and the extension of differentiated curricula to lower school levels tend to deny many students access to these basic values. Placement of students in differentiated curricula or tracks in the elementary and early secondary school years on the basis of achievement and aptitude test scores denies those who are placed in curricula leading to early vocational training and low-status occupations, the opportunity to try for other occupations and a free choice based upon mature judgment. When differentiations in curricula are made in the early secondary or elementary years, only those students with higher test scores are given a curriculum designed to lead to high levels of education and
opportunity to enter occupations requiring such education. Although the differentiation in curricula may not be so identified, it is generally understood that those with lower levels of early school achievement will be provided a curriculum which can lead only to a restricted range of occupational choices. Such students are, therefore, directed into "vocational" curricula designed to prepare them for low-skilled occupations comparatively early in their educational years. In contrast, those who go into "academic" curricula will be provided extensive periods of general education before any vocational education is inaugurated. By this program such students achieve greater maturity and a wider range of choices before occupational selection is appropriate.

It is clear that early differentiated and/or segregated education denies to many, largely from the lower social economic strata, equality of opportunity and the possibility of upward mobility. It is also apparent that any specialized vocational training or differentiated curricula leading to vocational training in the elementary or secondary school years must be evaluated in relation to the traditional and important democratic values--freedom of choice and equality of opportunity--discussed earlier, as well as to the contemporary needs of the expanding labor market.

It goes without saying that minority group militancy, the spectacle of unemployment and the plight of the poor and civil rights are teaching us a deeper meaning of democracy.

As a result of the ferment in education we have recently seen a spate of innovational plans come off the drawing board. I wish I could say that the most courageous and exciting one had been designed in the United States. Unquestionably, the province of Ontario in Canada has enunciated a formulation in the Hall-Denison report which provides the most open system of individual progression I have ever seen. Formal differentiated curriculum has been eliminated, grade levels have been discontinued and conventional evaluation practices such as grading, as we know it, have been discarded. An integrated program of general and vocational education has been created which eliminates the dichotomous relationship of the past.

Vocational educators are beginning to march to a new drum beat, but as yet we are out of step. We now are through talking and are seeing some action in regard to integrated programs as proposed by Altman, the Greater Cleveland Education Council and others. The big beat now is the "cluster concept" aimed at the development of skills and understanding related to a number of allied fields. Students trained under such an approach are prepared to enter a family of occupations rather than a specific occupation. Programs operative under this concept exist in Detroit with its Galaxy Approach, Gary and its Career Areas, Quincy, Massachusetts and the University of Maryland.
each having a different formulation. As someone has said, we are now in the "cluster, cluster, who has the cluster stage."

As most of you are already aware, the field of health occupations has also been touched by the same innovational brush. Holloway and Kerr in their Review and Synthesis of Research in Health Occupations report on the state of the art as of May, 1969, when they report:

One of the most popular topics in health occupations is the possibility of developing the "care concept". As educational institutions develop multiple programs in health occupations, they see commonalities in the curricula and look to the desirability of combining certain aspects of these programs to provide better and more economical course offerings. Another frequently discussed topic that can be considered a subset of the core concept is vertical mobility, or the "ladder concept" training for individuals in vocational programs is planned so that trainees will not end up in dead-end positions.

They go on to say that "within the health occupations education field there are no fully operational care programs but there have been studies done in this area."

Tomlinson has prepared and presented models on commonalities in the allied medical fields.

As you can see, the vocational educator as he looks at this task of reorienting training programs on the secondary level is faced with a formidable task. One can again, as Kapnel states, ask some searching and embarrassing questions:

A. If advisory committees, which are so highly regarded as instrumentality for information to be reflected in curricula, are truly functional, why is it that employers were not the chief architects of the core, ladder and lattice approach?

B. Are we certain that employers are willing to accept the consequences of broadly trained individuals interested in upward mobility?

C. Is it possible that we are entering an era in which vocational educators and employers will have differing expectations regarding the character and complexion of health occupations education? How are these differences to be mediated?

D. How does one bring about curriculum reform to provide more general vocational education into the already crowded curriculum on the secondary level? The extended school year? Elimination of any specialized training on the secondary level? Demand more curriculum space in junior high and early years of high school?

E. Are parents and the general lay public willing to support a more generalized approach to vocational education?
In conclusion, let me summarize briefly. It would have been relatively easy to take the simple route and discuss with you some of the exploratory and entry preparation programs on the elementary and secondary level. However, I chose two basic issues which are most crucial and of paramount importance not only to the lives of young people but to each of us in our professional commitment, two basic issues which cry out for more sophisticated refinements than we now have.

I hope that as we deliberate in our discussions, our collective mind will accomplish three things: first, that we heed the warning of Kappel and engage in some reflective thinking which will generate some innovative ideas that will advance our understanding of these issues; second, to serve well our consultative role to initiate a plan of social action in our respective states and communities utilizing all the communication strategies at our command; third, to assist in making the proposed Health Occupations Handbook a more viable instrument in helping individuals understand the importance of health occupations education. Let us generate the power today to assure success tomorrow.
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SUMMARY REACTION TO POSITION PAPER III

OCCUPATIONAL EXPLORATION AND ENTRY LEVEL PROGRAMS IN HEALTH OCCUPATIONS

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Every child is entitled to an education which will prepare him to live effectively in his world. This includes academic education and education for the world of work.

Education for the world of work should begin in the elementary grades as an integral part of general education and be continued through the post-secondary grades.

There are two outstanding needs in the employment area as it relates to the health field: (1) The need for a greater number of workers in the health field; and (2) The need of students for information concerning employment opportunities in the health field. Too many students and their parents are not aware that health careers extend beyond the doctor, nurse, and dentist.

There is a definite need for recruitment materials such as posters, bulletins, etc., which are geared to the interest of the high school student.

The lack of effective teachers who have both experience in the health occupations and experience in teaching remains one of the biggest problems in supplying education for the health occupations.

An overview of health careers is a program that introduces the health field to the high school student, offers him the opportunity to explore the many areas involved, and thus helps him make the important decision as to the career he will follow. This program also acts as an effective recruitment tool in interesting qualified persons into the health field.

As most health occupations require a degree of maturity for successful practice, it is more desirable to offer programs at the post-secondary rather than the secondary level. A cooperative arrangement between these two types of educational institutions involving summer sessions or adult education classes and built around a curriculum using the core, lattice, and ladder concepts would better serve the needs of all concerned.

High school students should be helped through adequate counseling and experience in class to realize that there are approximately 15 sub-professional career opportunities in the health field for every professional opportunity.
SUMMARY REACTION TO POSITION PAPER III

OCCUPATIONAL EXPLORATION AND ENTRY LEVEL PROGRAMS IN HEALTH OCCUPATIONS

Albert Pitts, Consultant, Vocational-Technical Education, Union High School, Union Grove, Wisconsin

**Present Need:** To assess the nature and scope of the needs of the health service industry so that suitable plans of action can be prepared to orient learners in elementary and secondary schools to opportunities and requirements of this field of work to increase the quality and numbers of high school graduates entering the health occupations.

**Present Status:** Curriculum development in health occupations orientation is now mainly fragmented and lacking in direction below the 12th grade. Whatever opportunities exist are mainly integrated into general careers orientation courses below the 12th grade.

**The Task Ahead:** What is needed are action programs of orientation to the health occupations, starting on the primary grade level, reinforced through middle-junior high and secondary school years, culminating in specific orientation to the health occupations on the 12th grade level through cooperative training programs.

Experiences should be selected, arranged, and sequenced from primary through secondary levels, through the joint cooperation of health occupations consultants, vocational education coordinators, parents, teachers, and guidance counselors.

Educational partnerships with health institution personnel should be developed in cooperative training-survey programs combining students from area schools where possible and necessary. In expanding the walls of the school into the larger community, waivers on minimum wage requirements for learners, or stipends to health institutions to offset lower productivity of the learner should be granted.

**Outcomes:** Learning outcomes of careers orientation to the health occupations should be clearly defined in behavioral terms to include the student's evaluating his interests, abilities, values, needs and other self characteristics as they relate to occupational roles in the health occupations; the student's exploring broad areas of the health occupations in terms of opportunities, potential satisfactions, and the required roles of workers in this field of work; the student's understanding institutional organization as it relates to health institutions; the student's learning to plan for his occupational choice; the student's acquiring a concept of self as a productive person in a work-oriented society.

**Programming** for these behavioral objectives should include four major determinants: the nature and needs of the health service industry; the nature and needs of the learner; the nature of the learning process; and the nature and role of the teacher.

**Instruction** should be learner-centered, not teacher-centered, geared to meeting psychological needs of students, including the need to have a positive view of oneself; to identify with others; to have an openness to experience; to having a wide perceptual field. School should be success oriented.

4-15
Current Assumptions About Vocational Education Must be Re-examined: Primary responsibility below the 12th grade level should not be job training - it should be career planning and learning about occupations, dealing with clusters of occupations. Survey, not training, should be central on the level below the 12th grade.

Choosing an occupation and learning about an occupation are inseparable parts of the same process. Priorities should be set on orientation to those occupations having the greatest need of exploration. Needs of the occupations should be equated with needs of learners in school programming.
OCCUPATIONAL EXPLORATION AND ENTRY LEVEL PROGRAMS IN HEALTH OCCUPATIONS

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Appropriate exploratory and entry level health occupations programs can be planned and developed, can be implemented in grades K-14 and beyond, and can be managed. There are examples of exemplary programs at all grade levels. In a look at vocational education generally, the National Advisory Council on Vocational Education states:

"Each city in the country succeeds every year with some of its students, in even the most depressed parts of the city. Why is success not universal? Why is the failure rate so high? The reasons are attitude, program, and money."

These same three restraints are particularly relevant for the health field and two are important for this topic -- attitude, program.

Some Educational Considerations

I. External forces and factors
   A. Maintaining standards and quality in response to indeterminate quantity demands. (Occupational licensing - protection for whom)
   B. Avalanche of knowledge growth in all areas.
   C. A study of housing, pollution, nutrition and their effect on health and health careers.
   D. Management advances: The degree of success in the health field is and will continue to be directly related to its ability to recognize obsolescence in its own organization and facility.
   E. Impetus provided by Government in their role in vocational education -- Vocational Education Act of 1963.
   F. Governmental influences in the health areas (conceivably over the next ten years, the government will be paying up to half the nation's medical expenses).
   G. Increase in the sociological upheaval and struggle for a human-oriented society.
   H. The generation gap dissolved by adults performing positive and supporting roles of reassurance and assistance, e.g., a hotline telephone service for young people in crisis.

II. Internal forces and factors
   A. Planning and development
      1. Attitude
         - Planning for the continuum in the human system -- discovering "people" relationships first.
         - Public education is discovering the emotions.
      2. Programs
         - The need ... more daring and innovative programs in schools.
         - There are many indices of development to consider -- reading level, mathematical ability, physiological, social and emotional maturity.
         - Ecology: A hybrid science unifying specialists from medicine, life and physical sciences and engineering.
Harnessing Vocational Education for human causes.

Kenneth B. Clark's call for a "reading and arithmetic mobilization year."

B. Implementation
1. Attitude
   - Teachers viewing their role as facilitators of learning.
   - The affect of individual self-determination of youth in search of self-identity, security, love, power and the revolt against society.
   - Students will perform better in a health career if they "feel good" about themselves.
   - At its highest level, the purpose of teaching is not to teach, it is to inspire the desire for learning.
   - A group process teacher has a most difficult task.
   - Peers roles in the teaching-learning transactions.

2. Programs
   - Implementation providing -- flexible and modular scheduling at all grade levels, cooperative work experiences to supplement the educational program, modular subject offerings which can lead to individualized programs and instruction.
   - Marshall McLuhan: "Our school systems are not programmed for teaching perceptions, only concepts."
   - Does everybody need a high school diploma? Job ladders and the spin-off concept.
   - Behavioral scientists now know they can raise a child's I.Q. by as much as 25 points through a program of intellectual enrichment.
   - Use of educational technology (hard and software innovations).

C. Management
1. Attitude
   - Grouping pupils by grades doesn't make much difference but we continue to do it.
   - A strong streak of conservatism makes it very difficult for educators to teach in the wider context. (The teacher's perception of her role and accountability to self, students and society.)
   - Sensitivity training: laboratory training approaches in human relations, group dynamics, organizational development to seek awareness and release human potential.

2. Programs
   - New careers in teaching can lead to differentiated staffing; guidance via the track system vs individualized programming.
   - Teachers can share facilities.

Resource:


Overhead transparencies to be used:
1. Educational Engineering
2. Teaching Counseling Methods and Techniques
3. The Program Continuum
4. Program Commonalities
SUMMARY REACTION TO POSITION PAPER III

OCCUPATIONAL EXPLORATION AND ENTRY LEVEL PROGRAMS IN HEALTH OCCUPATIONS

Robert Jobes, Assistant Director of Health Careers, Texas Hospital Association, Austin, Texas

Occupational exploration in health occupations is tantamount to success in all entry level programs as well as the highest level of education. This statement has been recognized only recently by the health occupations educator as reflected in the dearth of "new" health careers programs, "new" health careers media (literature, audio, and visual), and "new" health occupations legislation. Yet all of these new activities are "spin-offs" and rejuvenations of past projects that somehow fell by the wayside—possibly caused by the decline in reflective thinking. Whatever the cause, health occupations educators now realize that they have a responsibility to provide health occupations exploration in their role as a consultant.

What is health occupations exploration? It could be defined in any number of ways, but I contend that it is image building. Exposing people to experiences, both real and vicarious, that allow them to imagine themselves in a physical setting or a living situation. For those of you who do not believe that "the image" is a prime criteria for occupation selection:

Why is it that N.A.S.A. has no problem in finding astronauts, and medical schools have students entering who have been waiting for years to enter?

These are only two extremes but one can readily imagine himself in the glamorous situation of having the eyes of 150 million people focused on him as he gets kicked in the seat of his pants with a million pounds of thrust—or see himself conversing as a young doctor with the person who he holds in the highest esteem, his family physician—or traveling in some far-off land because his salary allows it. True, these are extremes but they give you patterns to follow which are proven successful. Since occupational exploration is your responsibility in the consultative role it therefore becomes your responsibility to provide the image building necessary.

The physical setting of image building, that is, a clinical laboratory, a hospital computer room, radiologic equipment, is available to you through your local resources. Your greatest challenge is building the image of the practitioner—the nurse aide, laboratory technician, the health occupations educator. These are the people with whom prospective students can identify and once interest has been sparked, the prospective student will then explore the occupational opportunities that have been pleasing to his "image". As irrefutable proof of the image building concept look at the world of television advertising—all of these vicarious situations propose a pleasing or challenging setting for the products. They are "selling" someone on trying their products.

Bearing in mind that the primary thrust of image building should be at the prospective student, it behooves the health occupations educator to recognize parents and teachers as important factors in occupational selection.
CHAPTER V

PERSONNEL RESOURCES DEVELOPMENT FOR
HEALTH OCCUPATIONS EDUCATION

Session Speaker
Robert E. Kinsinger

Reactors
Leonard Berlow
Lewis D. Holloway
Frederick G. Adams
Joseph Kadish
PERSONNEL RESOURCES DEVELOPMENT FOR HEALTH OCCUPATIONS EDUCATION  

by  
Robert E. Kinsinger  
Program Director  
W. K. Kellogg Foundation  

There once was a nation distressed  
Though with medical skills it was blessed  
Health care was perfected  
The way was selected  
But there weren't enough teachers with zest  
Without plenty of mentor-  
To man training centers  
The plan wasn't put to the test.  

I would like to suggest in the time I have been allotted how we might add some additional and more hopeful lines to that doggerel. In the United States today we have mustered a formidable body of knowledge in relation to preventive medicine and health care. We have allocated vast resources for the delivery of health care to our citizens. In recent years the people of the United States have, through their representatives in Congress, made a commitment to health services that is without precedent. Medical research has been supported and our knowledge has burgeoned. Mr. Hill and Mr. Burton and others have helped to assure that we have the buildings and equipment to practice our carefully perfected skills. Through medicare and medicaid we have assigned vast sums of tax dollars to purchase health services. Prepaid health insurance and rising personal income also have added to the purchasing power individuals have available for health care. Then why can't ailing Mrs. Smith down the block obtain the care she needs when she needs it?  

Aren't the ingredients all there? The knowledge gained through scientific research, the laboratory and treatment center buildings, the money to pay for the services are available; but who do we buy from? As the general level of expectation for health care has soared throughout the nation, along with a rapid growth in population and changes in its demographic characteristics, the government and the public have responded to the rising demands with an unbalanced equation. It goes something like this:  

$ FOR RESEARCH + $ FOR BUILDINGS AND EQUIPMENT + $ FOR PERSONAL SERVICES =  
VAST PERSONNEL NEEDS - TEACHERS TO TRAIN HEALTH PERSONNEL  

Our efforts to pay for a system to provide adequate health care are prodigious  

Presented at National Conference for Health Occupations Education  
February 4-6, 1970  
New Orleans, Louisiana  
5-1
but our priorities are faulty. It is well to remember how far we have come and to recognize our accomplishments but as John Gardner has stated so eloquently, "Where human institutions are concerned, love without criticism brings stagnation, and criticism without love brings destruction." We will try to criticize with affection.

As we look at the problem with the clarity of hindsight, it seems almost ludicrous ever to have believed that it would be possible to respond to the pressures from the public for more and better health care by making available increased sums of money to purchase additional services without a balancing increase in resources to train more health workers. Of course, the whole problem was simultaneously complicated by changes in our uncoordinated provisions for the delivery of health care. New medical knowledge and technical sophistication have resulted in techniques and procedures which call for an ever increasing labor force per patient. The complex problems we face in connection with the contamination of our environment have created a demand for yet another broad category of professional and technical workers in the field of environmental health services.

Latter day responses to the health manpower imbalance have provided some encouragement but they still fall far short of the needs. We now have the federal physician augmentation program to support the addition of 1,000 first-year places in medical schools. This program will supplement the provisions of the Health Professions Educational Assistance Act, the Allied Health Professions Educational Assistance Act, the Nurse Training Act, the Vocational Education Act, the Health Manpower Act and several others. However, in most instances the legislation cited provides primarily for student stipends, buildings and equipment, and teachers' salaries. The expansion of the woefully meager national supply of educational leaders and instructors available to prepare physicians, dentists, nurses, pharmacists, and a long and growing list of additional categories of skilled workers in the allied health field is almost totally ignored. The result is blatant faculty raiding, crash programs in instant pedagogy to convert practitioners into professors overnight, in-a-jiffy curriculum construction (its done with a pile of school catalogs, scissors, and a paste pot) and a general atmosphere of "make do" faculty recruitment. The problem is further aggravated because the great pressures for the expansion of educational programs for health workers have come at a time when the responsibility for training many categories of workers is shifting from agencies primarily concerned with the delivery of health services to educational institutions.

It is one thing to identify a problem and quite another to suggest a realistic attack that will move us substantially closer to a solution, but we must at least
base our planning on a clear picture of the difficulties we face. To avoid unnecessarily laboring the case, which has been well documented by a great many extensive studies, I will at this point assume the validity of the following quotation from a recent health manpower report to the President and to the Congress. "The shortages of competent faculty training programs at all levels probably constitutes the greatest obstacle to the improvement and enlargement of educational programs for the allied health professions. As educational programs enlarge and new programs are added, the demand for teachers mounts".¹

Now, based on this sweeping statement, let me narrow my focus to concentrate specifically on the allied health field and on some ways in which it may be possible to alleviate the teacher shortages identified so dramatically by the Bureau of Health Professions Education and Manpower Training of the National Institutes of Health. There is little to be gained from an extensive analysis of the dilemma if it does not help in formulating some specific suggestions for an attack on the problem around which to center our thinking. First, however, let me offer a rationale for concentrating on the problems of the "allied" health professions. "The more clearly recognized and longer established health professions of medicine, dentistry, and nursing have received serious attention for a number of years. However, only recently has the broad range of other professional and technical functions essential to all types of health services been recognized for its significance and attracted the attention of educators, practitioners, managers of health services, and the consumers of health services".² It is true that the process by which physicians, dentists and nurses are prepared to enter their chosen field is still the subject of continuing study and change. The allied health fields on the other hand are, in many cases, still primarily engaged in identifying the body of knowledge and skills that must form the basis for curriculum development. Thus, educational leadership for the field at this time is of particular significance.

Briefly stated we lack an adequate national manpower pool of curriculum specialists and instructors for the allied health field or even a plan to create such a pool. The dimensions in outline form might be viewed as follows:

**A. The problem** - How to create an adequate supply of educational leaders and prepared faculty personnel for the allied health fields.

**B. The proposed response** - A series of university-based regional centers specifically created for the purpose of preparing instructors and program directors for the allied health field.
C. The primary educational setting necessary to develop such centers - University medical centers with a commitment both to the importance of education for the allied health field and to the need for the development of an educational system for the preparation of instructors to function at several educational levels.

D. The combined educational resources necessary to develop such centers -
1. A medical center clinical staff willing to accept the objectives of the teacher preparation program and to provide clinical experiences for trainees as required.
2. A university department of education willing to accept the objectives of the teacher preparation program and to provide instruction in curriculum development, teaching techniques and the use of instructional media.
3. Nearby four-year colleges, community-junior colleges, and other educational institutions offering allied health programs and willing to provide settings for practice teaching and leadership internship experience for trainees.

E. The financing - Additional funding will be necessary for planning and inaugurating regional centers for allied health instructional personnel during the formative years but once under way and enrolling a substantial student body, existing funds from federal, state, and institutional sources should carry the program.

The national impact of such regional centers for allied health instructional personnel would be a massive breakthrough in providing adequate numbers of allied health personnel for the nation's health service needs.

It should be carefully noted that the suggested regional centers for Allied Health Instructional Personnel (AHIP) would be concerned with the preparation of both teachers and leadership personnel. In the light of the rapid and almost frantic expansion of educational programs for the allied health field, preparation of program directors and other leadership personnel is of highest priority. Faced with the inevitable development of "crash" health manpower training programs throughout the country a supply of well-prepared program directors strategically placed could at least provide inservice education in teaching methodology to faculties often staffed entirely by practitioners with no previous background in the educational process.

The conceptual picture of the proposed regional AHIP Center must necessarily be drawn with broad strokes because the existing structural framework into which
a center must fit is everywhere different, as are the skills, personalities and prejudices of the individuals who must make it function. There may be other equally suitable organizational patterns. However, to give some measure of concreteness to the concept, one might envision an administrative unit most appropriately placed within an existing university structure, perhaps most ideally a school of allied health professions, which would provide a mechanism for:

a. overall coordination of a regional faculty preparation program; b. selecting trainees; c. counselling students; d. devising the curriculum in cooperation with institutions offering health-related programs; e. selecting and arranging for learning experiences in the university medical center, the university department of education, and, to provide a setting for practice teaching at cooperating colleges in the vicinity of the university; f. offering a general seminar for all trainees and as necessary providing special courses not otherwise available in the university; g. arranging for placement of graduates; and h. providing for continuing education of instructors already teaching in health-related programs.

Ideally, the center should be placed within the regular university structure because the potential for granting graduate degrees will be crucial to the success of the effort. The prior existence within the university of a school of allied health professions or similar educational arrangement would not only assure the commitment of the university to education for the allied health field but would provide a ready-made source of teacher trainees from selected graduates of the program.

Before proceeding to a consideration of some of the educational problems that plague the allied health field and that would inevitably be faced by an AHIP Center, it might be helpful to look diagrammatically at how such a center might be structured.
THE ANATOMY OF A UNIVERSITY REGIONAL CENTER FOR ALLIED HEALTH INSTRUCTIONAL PERSONNEL

University Vice President for Health Affairs

↓

AHIP Regional Center

Director
Full-time faculty
Field coordinator

Categories of Students
I. Teacher trainees for schools of allied health professions.
II. Teacher trainees for community college health technician programs.
III. Leadership trainees for allied health educational programs.

University Medical Center
Part-time instructors
Clinical experience

Nearby colleges with allied health programs
Practice teaching
Leadership intern experience
Center Advisory Committee Personnel

University Department of Education
Part-time instructors in curriculum development, teaching techniques and use of instructional media.

Nearby community colleges with health technician programs
Practice teaching
Leadership intern experience
Center Advisory Committee Personnel

CONSORTIUM
Why, one might ask, must the proposed center be so all inclusive regarding "levels" of instructional program for which it is preparing teachers? Why must it work with community colleges, institutes and baccalaureate granting institutions offering so many varied programs ranging from aides to technicians to technologists and supervisory personnel? The answer is, I believe, contained within the very fabric of the evolving pattern for the delivery of health care across the nation. An AIIP Center would be thrust into a leadership role in shaping the future curriculum for the entire health-related field. It would be unable to ignore the spectacular growth of technical and assistant level workers who can be prepared in half or even one third of the time it takes to prepare the professional to whom the technicians and assistants report. The development of these new levels of service may be described pictorially in the case of nursing as follows:

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATIENT</td>
<td>PATIENT</td>
</tr>
<tr>
<td>NURSE</td>
<td>NURSE'S AIDE</td>
</tr>
<tr>
<td>DOCTOR</td>
<td>PRACTICAL NURSE</td>
</tr>
<tr>
<td>ca. 1940</td>
<td>NURSE TECHNICIAN</td>
</tr>
<tr>
<td></td>
<td>PROFESSIONAL NURSE</td>
</tr>
<tr>
<td></td>
<td>DOCTOR</td>
</tr>
<tr>
<td></td>
<td>ca. 1969</td>
</tr>
</tbody>
</table>

The patient, as we know, has become more and more removed from the physician. The number of individuals to be prepared for health careers has expanded enormously and the problem of coordinating services to the patient has become increasingly complex. As the nurse's traditional functions are taken over by technical specialists, each medical specialty has also developed its own particular group of technicians. The nurse's role is changing as patient care becomes more complex. This requires her to take more responsibility for coordination of patient care and to develop her own nursing specialty. Some of the changes in function can be illustrated as follows:

<table>
<thead>
<tr>
<th>Traditional RN Function</th>
<th>Allied Health Worker Now Also Providing The Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet Therapy</td>
<td>Dietician</td>
</tr>
<tr>
<td>Social Service</td>
<td>Medical Social Service</td>
</tr>
<tr>
<td>Central Supply Service</td>
<td>Central Supply Technician</td>
</tr>
<tr>
<td>Rehabilitation Therapy</td>
<td>Physical and Occupational Therapist</td>
</tr>
<tr>
<td>Traditional RN Function</td>
<td>Allied Health Worker Now Also Providing The Service</td>
</tr>
<tr>
<td>-------------------------------------------------------------</td>
<td>-----------------------------------------------------</td>
</tr>
<tr>
<td>Medical Records</td>
<td>Medical Record Librarian</td>
</tr>
<tr>
<td>Scrub and Circulating Nurse</td>
<td>Operating Room Technician</td>
</tr>
<tr>
<td>Bedside Nursing</td>
<td>Practical Nurse, Nurse Aide, Orderly</td>
</tr>
<tr>
<td>Administration of Oxygen</td>
<td>Inhalation Therapist</td>
</tr>
<tr>
<td>Recreation Therapy</td>
<td>Recreation Therapist, Volunteers (such as candy stripers, gray ladies, etc.)</td>
</tr>
<tr>
<td>Monitoring Devices</td>
<td>Biomedical Engineering Technician</td>
</tr>
<tr>
<td>Emergency Service</td>
<td>Medical Emergency Technician</td>
</tr>
<tr>
<td>Employment Interviews</td>
<td>Personnel Director</td>
</tr>
<tr>
<td>Administration</td>
<td>Ward Clerk</td>
</tr>
</tbody>
</table>

The physicians and dentists too have a new role and must learn to use most effectively the personnel available to aid them in providing health care. A partial list of allied health personnel now serving medical and dental specialties includes the following:

<table>
<thead>
<tr>
<th>Physician Specialist</th>
<th>Allied Health Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. General Practitioner</td>
<td>1. Nurse (including institutional activities)</td>
</tr>
<tr>
<td></td>
<td>2. Medical office assistant (who may have a modicum skills in laboratory and x-ray routines, secretarial sciences)</td>
</tr>
<tr>
<td>B. Surgeon</td>
<td>1. Operating Room Nurses</td>
</tr>
<tr>
<td></td>
<td>2. Operating Room Technician</td>
</tr>
<tr>
<td></td>
<td>3. Biomedical Engineering Technician</td>
</tr>
<tr>
<td>C. Cardiologist</td>
<td>1. Cardio-Pulmonary Technician</td>
</tr>
<tr>
<td></td>
<td>2. Inhalation Therapy Technician</td>
</tr>
<tr>
<td></td>
<td>3. Electrocardiograph Technician</td>
</tr>
<tr>
<td>D. Ophthalmologist</td>
<td>1. Ophthalmic Dispenser</td>
</tr>
<tr>
<td></td>
<td>2. Optician</td>
</tr>
<tr>
<td></td>
<td>3. Orthoptic Technician</td>
</tr>
<tr>
<td>E. Orthopedist</td>
<td>1. Orthotist</td>
</tr>
<tr>
<td></td>
<td>2. Prosthetist</td>
</tr>
<tr>
<td></td>
<td>3. Physical Therapist</td>
</tr>
<tr>
<td></td>
<td>4. Occupational Therapist</td>
</tr>
<tr>
<td></td>
<td>5. Orthopedic Technician</td>
</tr>
<tr>
<td>F. Anesthesiologist</td>
<td>1. Anesthetist</td>
</tr>
<tr>
<td></td>
<td>2. Inhalation Therapy Technician</td>
</tr>
<tr>
<td>G. Radiologist</td>
<td>1. X-Ray Technician</td>
</tr>
<tr>
<td></td>
<td>2. Radio-Isotope Technician</td>
</tr>
<tr>
<td>H. Psychiatrist</td>
<td>1. Psychologist</td>
</tr>
<tr>
<td></td>
<td>2. Psychiatric Nurse</td>
</tr>
<tr>
<td></td>
<td>3. Psychiatric Social Worker</td>
</tr>
<tr>
<td></td>
<td>4. Mental Health Worker</td>
</tr>
<tr>
<td>I. Pathologist</td>
<td>1. Medical Laboratory Technologist</td>
</tr>
<tr>
<td></td>
<td>2. Cytotechnologist</td>
</tr>
<tr>
<td></td>
<td>3. Certified Laboratory Technician</td>
</tr>
<tr>
<td></td>
<td>4. Bacteriologist</td>
</tr>
</tbody>
</table>

5-7
<table>
<thead>
<tr>
<th>Physician Specialist</th>
<th>Allied Health Personnel</th>
</tr>
</thead>
</table>
| J. Public Health and "Environmental" Physician (M.D. - M.P.H.) | 1. Health Physicist  
2. Public Health Nurse  
3. Sanitary Engineer  
4. Radiologic Health Technician |
| K. Hematologist | 1. Serology Technician  
2. Blood Bank Technician |
| L. Ear, Nose, and Throat | 1. Audiologist  
2. Speech Therapist  
3. Hearing Therapist |
| M. Neurologist/Neuro-Surgeon | 1. Electroencephalograph Technician |
| N. Dentists | 1. Dental Hygienist  
2. Dental Assistant  
3. Dental Technician |
| O. Metabolic Disorders Specialists (Nutrition, et al) | 1. Dietician  
2. Dietary Assistant  
3. Food Supervisors |

This seemingly unending proliferation of technical specialties continues as more and more sophisticated health care is perfected in the experimental laboratory, tried by the physician, and promptly demanded by the public. However, rather than try to supply a seemingly insatiable demand for more and more technicians for clinical specialists in response to the development of new procedures, and the invention of more complex therapeutic and diagnostic equipment, a radical departure from the traditional response to manpower needs for the health services may be required. The emphasis may have to shift from more manpower to differently prepared manpower. An AHIP Center working with institutions preparing persons for health careers at all levels and with physicians and dentists and other practitioners utilizing the services of many ancillary personnel would have an opportunity to provide the kind of broad curriculum analysis which will be needed. Such wide-ranging considerations are generally not possible at educational institutions limited to instructional functions at only one level and constrained by prescribed guidelines set forth by accrediting and certifying agencies. Therefore, the university-based AHIP Center to function as a change agent should be engaged broadly in the preparation of instructors and curriculum specialists to teach and provide leadership in the community colleges, technical institutes, baccalaureate-granting institutions and even on the graduate level.

It is generally recognized that the two most promising concepts in curriculum reform in the allied health field are those intertwined proposals frequently referred to as the "career ladder" and the "core". Much study and discussion has been centered around the ways in which it may be possible to arrange for individuals seeking a career in the health field to build consecutively each series of educational experiences upon his immediately preceding education without penalty for having joined the labor force during an interim period. A student shifting periodically...
over many years between the status of health worker and student should have a number of levels of entry into the health field available to him as he acquires an appropriate fund of knowledge and set of skills to function at each succeeding entry level. He should be able with equal ease to take up his studies where he left off in order to prepare for the next level of his career. This seemingly simple plan has not been broadly implemented for many reasons but chiefly due to the rigidity growing out of vested interests of the health specialties groups, schools and colleges, and the general resistance to change that afflicts all human arrangements.

Each institution offering education in the allied health field tends to set its admission requirements and course prerequisites unilaterally without reference to other programs being offered elsewhere, thus obstructing the student transfer process. Certification requirements are often developed with little consideration for any needs except those of the medical or dental specialty group seeking ancillary personnel. Professional standards set by accrediting agencies in some cases still reflect requirements for the apprenticeship type programs operated typically in hospitals for limited numbers of students upon which the requirements were originally based. Even the most promising development of special examinations to permit students to challenge by examination the often repetitious courses that may block upward mobility does not get at the heart of the problem. It only protects some students from the most glaring inequities which they presently face. The entire system or rather nonsystem needs the kind of statesmanlike study, revision and coordination that can come only from some organization such as an AHIP Center responsible for curriculum development and teacher training at all levels and for all specialties.

Two charts serve to illustrate the complexity of the task. In order to move toward planning that will make ladders and bridges possible within and between the allied health fields there must be consideration of all of the following educational and training routes presently available to the bewildered student seeking a health career.
<table>
<thead>
<tr>
<th>Profession or Occupation</th>
<th>Educational Route to Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>AI DES</td>
<td>On-the-job training in hospitals and other health care facilities or - Special secondary school programs or - Red Cross and other voluntary training programs or - Private training schools</td>
</tr>
<tr>
<td>ASSISTANTS</td>
<td>Short courses (a year or less) given by health care facilities or - Special government sponsored training programs or - Community junior colleges or - Private training schools</td>
</tr>
<tr>
<td>TECHNICIANS</td>
<td>Two years or more offered by hospitals and other health care facilities or - Community junior colleges leading to an associate degree or - Some university affiliated medical centers or - Private training schools</td>
</tr>
<tr>
<td>ALLIED HEALTH PROFESSIONALS</td>
<td>Colleges and universities leading to a baccalaureate or in some instances a masters degree</td>
</tr>
<tr>
<td>PHYSICIANS and DENTISTS</td>
<td>Post-graduate program following collegiate curriculum often concentrated in the biological sciences. A hospital internship for physicians following graduation from medical school is usually required for state licensure.</td>
</tr>
<tr>
<td>RESEARCH SCIENTIST</td>
<td>University postgraduate program culminating in doctoral degree in one of the physical or biological sciences.</td>
</tr>
</tbody>
</table>

Any serious consideration of curriculum reform in the allied health field also must take into account the great need for a broader initial educational experience for all those seeking careers in the field. Just as medical education has prepared its aspirants with a common background of knowledge and skills, technicians and technologists likewise should be provided initially with background common to all allied health specialties. The debate that rages about the possibilities of implementing such a curriculum revision may be referred to as the "core debate". We recruit a medical student for a program leading to licensure as a physician not offering him at the time of recruitment specific training as a pathologist, radiologist or anesthesiologist. In the allied health field, however, we recruit a
student to be a medical laboratory technician, radiologic technician or inhalation therapy technician. Why can't we recruit more broadly for a career as an allied health technician?

A recent review of the efforts to develop a core curriculum within a particular School of Allied Health Professions which has enjoyed some success starts from the presumption "... that within this collection of health-related professions there is a commonality of information and skills which is relevant to all students. Further, that these can be presented to them conjointly or coordinated in some meaningful amalgam." Many technician groups claim there are not enough commonalities to make it possible to prepare all allied health students in a common program during the early phases of their education. This has yet to be fully explored. However, as a start, there should be at least some grouping of common technologies by service functions that could almost certainly provide for more efficient use of faculty resources, and flexibility for the student choosing his specialty as he learns more about the general field as well as gaining more insight into his interests and aptitudes. The health worker with a broad educational base underlying his specialty can more easily move from one field to another as demand, interest, and technological changes dictate. He should be provided with an occupational bridge. Perhaps of greatest importance is the concept that the patient is served today by a team of workers and those who will eventually earn together ought to learn together. Health related workers can be grouped in two possible ways. First, quite broadly as follows:

Direct patient care - nurse, physical therapist, occupational therapist, speech pathologist and audiologist, inhalation technologist, dental hygienist, optometrist

Laboratory medicine - medical technologist, cytotechnologist, nuclear medical technologist, hospital pharmacist

Facilities administration - hospital administrator, medical record librarian, medical office assistant, medical librarian, dental assistant

Environmental control - health educator, biostatistician, sanitary engineer

and alternately in more discrete service clusters:

A. Diagnostic Services

1. X-Rays and Related Roentgenographic Techniques
2. Examinations of Body Media (almost all laboratory activities come under this - including pathologist and hematologist, et al.)
3. Organic function tests and examinations (including EKG, EEG, BMR, pulmonary function, etc. This whole area would take in the new field of biomedical engineering and electronics instrumentation)
The twin concerns of career ladders and core curriculum have been the subject of extensive discussion and only spotty experimentation for a number of years. It now appears that only a major study and action program such as could be mounted by an AHIP Center can adequately implement these ideas on a broad scale along with the underlying need to work with professional health agencies, other employer groups and educators to develop a clear definition of the term "performance criteria". For without some agreement between practitioners, employers and educators on the identity of those skills and knowledges required by workers to accomplish the established performances, curriculum development is an exercise in pure frustration.

Of great assistance in planning a national system of articulation and priorities for new educational programs will be the information that is currently being compiled as part of a plan for a continuing inventory of allied health occupations education programs in two-year and four-year institutions. Hopefully hospital based programs will also be inventoried. The Association of Schools of Allied Health Professions is developing the continuing inventory for four-year colleges which is so essential for planning and implementing training programs for allied health workers to meet future manpower needs. The American Association of Junior Colleges is compiling a similar directory of current health occupations education programs conducted by or under the direction of community junior colleges in the United States. The type of information being collected includes general characteristics
of the two-year college that offers these programs and a glossary of terms and definitions relevant to health occupations basic educational programs.

Another substantial contribution that an AHIP Center could make to the rapid expansion and improvement of the quality of educational programs for the allied health field relates to the more effective use of educational technology. It is discouraging to observe students still being led through the lecture-reading assignment-class discussion-examination syndrome in this day of continuous loop single concept films, computer-assisted instruction, sophisticated simulation devices, instant video-tape replay, dial access learning centers and programmed instruction. Industry has long ago learned that its survival depends upon constant utilization of new technological developments to increase productivity. Too many teachers either do not believe that technology has the same relevance for education or they lack the ability of initiative to adapt developments in educational technology to their particular instructional responsibilities.

Teaching as the teacher himself was taught is comfortable and can be considered a "sure thing". It has worked for centuries and is therefore safe and proven. This kind of thinking ignores the fact that we have developed techniques and devices that frequently make it possible for the student to teach himself sometimes even more effectively than possible in the traditional classroom setting. The teacher is our most limited educational resource. He should never be used to do something that can be done better or even as well in some other way. Rote teaching and repetitive drill is a particularly unnecessary use of an instructor's time. A teacher can capture an explanation or demonstration on film or video tape to be made available as often as necessary to students without involving additional time of the instructor and paced to the individual student's learning speed. Laboratory experiments do not have to be set up over and over again. We can bring the best minds in the world to our students for little more than the price of a long distance telephone call through the use of telelectures. Improved simulators are rapidly freeing educators from total dependence on the clinical setting for some types of learning experiences. Through the miracle of closed circuit television as many dental hygiene students as the instructor wishes can have chair side seats simultaneously and a magnified view of an intraoral procedure superior even to the instructor's view.

If most teachers know all this (and most of them do) why do they still spend an unnecessary portion of their working hours lecturing, giving demonstrations, and hearing recitation. The reasons are probably many, some more logical than others. Among them are (1) the uncertainty that comes with change, (2) unwillingness to

5-13
experiment educationally when the welfare of students and patients might be put in jeopardy, (3) a lack of detailed knowledge about new techniques or the source of new materials and devices, (4) an uneasy feeling that one is paid to teach (meaning lecture and lead discussions) not plug in gadgets and plan happenings, (5) rigid institutional budget restrictions that make it easier to add a budget line for a new instructor (probably not available) than to use the money instead for technical resources that could at the same time enrich the program and make possible a greater expansion of the student body.

As the role of the teacher changes from lecturer to instructional media manager and student counsellor, the instructor must be given assistance in shifting to this new responsibility. Time spent reviewing or producing films, video tapes, and programmed instruction units can be more productive than conducting drills but the teacher and his administrator must be convinced of this fact. Time spent with a single student planning individualized prescribed instruction (IPI) may seem inefficient when compared with conducting a large class but the eventual results will be superior. The proper orchestration of a vast array of multimedia and diverse and imaginative field and clinical experiences is an art just as demanding as any classroom performance. In addition the most important traditional role of the teacher, which only he can perform, still remains as central to the educational process as ever, i.e., "to light the candle," to motivate and to inspire.

(Multimedia Demonstration)

Recruitment and preparation of personnel who can in turn effect changes in health related curriculums, improve instructional techniques and maintain their own technical skills and knowledge is a formidable challenge. It is not a nursing education problem, a laboratory technician problem, a physical therapist problem or a radiologic technician problem. The educational concerns for all health fields are inalterably interrelated. Attacking them separately as in the past has not proven effective. There are many approaches to this vital task. I have suggested but one way through the creation of Allied Health Instructional Personnel Centers. There are certainly alternative approaches, but by one method or another we must find a means to recruit and prepare vast numbers of instructors for the health occupations. Apprenticeships and on-the-job training adequate for a simpler day will no longer serve. The people of the United States have set their priorities. They have asked for more and better health care and have appropriated money to pay for it. To respond adequately, we must inaugurate fundamental changes in the largely uncoordinated efforts which presently characterize health occupations education and
in turn develop an articulated and effective system. It all starts with the faculty. A balanced formula should read:

\[ \text{$ FOR RESEARCH + $ FOR BUILDINGS AND EQUIPMENT + $ FOR PERSONNEL SERVICES = VAST PERSONNEL RESOURCES BEING PREPARED BY COMPETENT, WELL-PREPARED FACULTY THROUGHOUT THE NATION} \]

I started with the lines:

There once was a nation distressed
Though with medical skills it was blessed
Health care was perfected
The way was selected
But there weren't enough teachers with zest

May I now suggest these final lines to that doggerel?

But hopefully soon there will be a new tune
By putting the stress on the heart of the mess
We can have a teacher corps opportune
And all of the babies, plain folks, and the hippies
Will holler aloud at last we have health care
YIP YIP YIP YIPPIES!!!
FOOTNOTES


2. Ibid, p. 2.

SUMMARY REACTION TO POSITION PAPER IV

PERSONNEL RESOURCES DEVELOPMENT FOR HEALTH OCCUPATIONS EDUCATION

Leonard Berlow, Colonel, USAF, MSC, Chief, Department of Medical Support Services, Medical Service, Sheppard Air Force Base.

Assumptions (or perhaps questions)

1. There is presently an identifiable shortage of trained professional and paramedical workers in our health delivery systems and this deters preventive and active medical care?

2. If skills were available they would be used to eliminate or reduce shortages?
   a. Professional groups, societies, administrators, etc., enthusiastically support their use?
   b. Patients want these "middle men" as a part of their care?
   c. Workers are anxious to seek employment in the health care system under present or foreseeable future conditions?

3. Armed services training in medical and paramedical skills is considered "acceptable"?
   a. Approximately 30,000 of these individuals are discharged from the services each year.
   b. Only a relatively minor portion of this group continues in their specialty field in the civilian medical community.

4. Formal education programs produce a better equipped, more acceptable medical worker than those trained in the armed services?
   a. Individuals would be interested in pursuing formal courses in health care specialties?
   b. "Shortages" could be made up from "crash" education programs in medical skills?
   c. Formal trained individuals would "fit in" the civilian medical community in a more acceptable way than those only trained in the armed services?
   d. Patient care is of higher quality when rendered by formally trained individuals?
   e. There is a tendency to start veterans at the bottom of the career ladder?

5. Pay for either formal or military trained paramedical specialists is acceptable and therefore attractive to prospective employees?
SUMMARY REACTION TO POSITION PAPER IV

PERSONNEL RESOURCES DEVELOPMENT FOR HEALTH OCCUPATIONS EDUCATION

Lewis D. Holloway, Assistant Professor, Program in Health Occupations Education, University of Iowa

Dr. Kinsinger has done a commendable job of describing our number one problem in the health field today. The Allied Health Instructional Personnel (AHIP) Centers, if they are developed, will certainly have a great impact on our need for teachers and leadership personnel.

The Program in Health Occupations Education, The University of Iowa, has been working on the development of a similar program for some time and we hope that it will be in operation this fall. Our university is much like that described in the paper and has an additional advantage in that we presently have many ongoing consultative, developmental, research and teacher education activities for the health occupations education field. In addition to intra-organizational contacts, the Program has a working relationship with each community college and area vocational school in the State of Iowa, as well as with appropriate organizations and agencies.

I feel that there is a great need to give much more emphasis to short-term preparation activities. As Dr. Kinsinger indicated, we cannot fully prepare staff members in these crash programs. But since short-term, pre-service and in-service activities are all that the largest portion of our present and beginning instructional personnel are going to receive, let's give this area adequate attention. This past summer we received a grant from the U.S. Office of Education to conduct a project to approach this problem. A relatively large number of you at this conference were among the ninety participants and the staff of our summer institute. Hopefully those of you who attended and those who will be reached by the publications we are generating will have a significant effect on the development and expansion of such activities.

One factor which is causing a considerable degree of difficulty as some schools seek to staff their programs is an unwarranted emphasis on academic degrees for certain instructional personnel. In some instances a master's degree in the particular health specialty is required of instructors who will prepare students at the associate degree level and yet there is an insufficient number of instructors with such preparation to staff baccalaureate programs. We are preparing good associate degree nurses in Iowa with instructors who do not all hold master's degrees. Let's identify the "performance criteria" for the teaching role, and then work to change these arbitrary rules so that those who can do the job may be employed.

The compilations of allied health occupations education programs in two-year and four-year institutions which are presently being done will be of great assistance in planning a national system of articulation and identifying priorities, but I would suggest that in addition to the need for such a compilation of hospital programs, which Dr. Kinsinger identified, that there is also a need for comparable compilation of educational programs in such institutions as area vocational schools, secondary schools and private schools.

Dr. Kinsinger has suggested that AHIP Centers would be appropriate institutions in which to study core curricula, the ladder concept and in which to make greater
use of educational technology. Agreed, but we must not wait on the development of the Centers; we must move into these problem areas now. Also, let's share what we learn. There is a great deal of "research", both formal and informal, which very few people ever learn of because it isn't written up for "publication" and/or inclusion in retrieval and dissemination centers.
SUMMARY REACTION TO POSITION PAPER IV
PERSONNEL RESOURCES DEVELOPMENT FOR HEALTH OCCUPATIONS EDUCATION

Frederick G. Adams, Special Assistant to the President, Allied Health Model Development, University of Connecticut

I am privileged to respond to Bob Kinsinger's very rational and practical paper. I am basically in agreement with Bob's "Personnel Resources Developmental Thoughts", if you will, however. In keeping with my leader, I'll preface my remarks with love of the Gardner - Kinsinger tradition by offering the following:

He drew a circle,
that shut me out,
"heretic Stranger", a thing to flout,
But love and I had the will to win,
We drew a circle that took him in.

Therefore the Allied Health Instructional Personnel (A.H.I.P.) Center concept is in.

Obviously, the questions that evolve when one begins to access the dilemma of Personnel Resources Development, the challenge is not merely to determine the role of a senior or junior educational institution, but rather to determine the relevancy of Health Related education at all levels throughout any given state without stripping anyone of their authority, (legally or otherwise) status, or professional reputation. It's quite clear throughout Bob's most realistic document that the baccalaureate programs and graduate programs that could be feasibly offered at the "senior colleges or university" would be insufficient and totally inadequate in dealing with instructional Personnel manpower gaps on a regional basis. In order to develop realistically, we must understand and appreciate the workability of Bob's Anatomy of A University Regional Center for A.H.I.P. We must snap out of the professional lethargy which prevents us from sharing, sharing, sharing -- yes, professional sharing that can remove obstacles and allow for joint planning with equal status, regardless of the educational level one represents as a part of the partnership, and thus, accomplishment of such centers as A.H.I.P.

It is my personal opinion, now the Gardner - Kinsinger love emphasis please, that such A.H.I.P. Centers should be an inherent part of Regional Information and Consultation Centers to allow for a broader role definition that might entice the involvement of medical programs, comprehensive health planning agencies, the Division of Higher Education, U.S. Office of Education, and private foundations, if you will, to offer provocative incentives for tangible and realistic joint planning efforts to accomplish what Bob has spelled out so eloquently in his delivery. Such an A.H.I.C. Center might have the latitude to delve much deeper into demography determinations, Allied Health priority needs, including instructional personnel, but not excluded to that concern, wage equity, licensure, accreditation, legislative needs, health education programs initiated at the primary school level developing the intriguing and exciting story of health and humane service, as well as contemporary continuing education programs where needed. It is my belief that this would impactfully relate to much more viable instructional personnel resource development. The kind of meritorious funding on the basis of the dynamics
and worth of proposals should allow for monetary spin-offs between the participating institutions, regardless of educational level. By so doing, tangible partnerships will have an opportunity to become a reality and sharing may have a chance.

I will close with perhaps an appropriate original: "In the health related professions, we can accomplish whatever we set our minds to accomplish, not short of the epitome of sharing and cooperation, as long as we don't worry about who gets the credit."
SUMMARY REACTION TO POSITION PAPER IV

PERSONNEL RESOURCES DEVELOPMENT FOR HEALTH OCCUPATIONS EDUCATION

Joseph Kadish, Bureau of Health Professions Education and Manpower Training, National Institute of Health, Bethesda, Maryland.

Dr. Kinsinger has presented not only the needs for teachers in the allied health professions and occupations but also a logical plan for preparing teachers.

Current programs in the Federal government are helping to meet some of the personnel needs and presented here are relevant programs in the U.S. Office of Education (OE) and the Bureau of Health Professions Education and Manpower Training of the National Institutes of Health (BEMT, NIH).

In the Office of Education, the Bureau of Educational Personnel Development administers legislation which is intended to provide opportunities for experienced vocational educators to spend full time in advanced study of vocational education for a period not to exceed three years; to provide opportunities to update the occupational competencies of vocational education teachers through exchanges of personnel between vocational education programs and commercial, industrial, or other public or private employment; and to support programs of in-service teacher education and short-term institutes for vocational education personnel. The efforts of this Bureau are directed towards teachers, teacher educators, administrators, supervisors, coordinators and others including those in the health professions and occupations. For information, contact the Chief, Vocational and Technical Education Branch, Bureau of Educational Personnel Development, O.E.

The Bureau of Health Professions Education and Manpower Training, National Institutes of Health, provides funds to qualified educational institutions for advanced traineeships. These awards support advanced training to prepare persons as teachers of health service technicians, administrators, or specialists. A total of 60% of these awards made for FY 1967 through FY 1969 were to persons planning to teach. For information, write to the Division of Allied Health Manpower, BEMT, NIH.

Support for teacher education can also be found in a broad range of research and development projects which are administered by the Division of Comprehensive and Vocational Education Research in the National Center for Educational Research and Development, O.E. Projects are supported for research and development, demonstration, evaluation, and training activities directed to such target populations as those in secondary school vocational education; post-secondary junior and community colleges, area vocational schools, and technical institutes; and those in adult continuing education. This division has supported vocational personnel training institutes throughout the country, some of which have been in teacher education in the allied health field.

Research projects which influence the quantity and improve the quality of education of allied health manpower are supported by the BEMT, NIH. The program for allied health manpower is combined with that of physician manpower and is located in the Division of Physician Manpower.
CHAPTER VI

OPERATIONAL STRATEGIES AND RESOURCES FOR EXTENDING HEALTH OCCUPATIONS EDUCATION PROGRAMS

Session Speaker
Rupert N. Evans

Reactors
John E. Bean
Mary L. Ellis
Edwin Rumpf
Harry F. Davis
OPERATIONAL STRATEGIES AND RESOURCES FOR EXTENDING HEALTH OCCUPATIONS EDUCATION PROGRAMS

by Rupert N. Evans, Professor
Vocational and Technical Education
College of Education
University of Illinois

In this presentation I will attempt to pull together some of the ideas I have gleaned from formal presentations and reactions, and from informal discussions before, during, and after our regular meetings. The goal is to suggest ways in which we can more effectively serve the people whose care is our responsibility. I will try to report accurately some of the things that I think I've heard you say, but the responsibility for the ways in which I report them can be blamed exclusively on me.

A constant theme through the last three days has been that changes in health occupations education require changes in the delivery system, and that changes in the delivery system require changes in health occupations education. Now this is certainly true; but we can't separate these two programs. It is very easy just to say, "Well, we can't do anything because the rest of the system needs changing," and I'm afraid that too often in the past this may have happened. If educators wait on administrators to make changes and if administrators wait on educators to make changes, nothing is going to get done. But if people both in education and in the delivery system push for changes, then each will push the other and our patients and society will benefit.

One unique thing about this Conference is that it's the first educational conference with which I've been associated in which I have heard more solutions than I've heard problems. I've been running a tally on this, and I've identified seventeen problems that various people have reported, and I've identified twenty-one solutions that have been proposed. This is a record. Usually it's about seventeen problems and zero solutions. It seems clear however, that the biggest unresolved problem, the one for which nobody seemed to come up with a solution, is the problem that revolves around the relationships among health occupations specialists. People talked a little bit about it, but they never really got to it, it seems to me.
Now, I'm not going to list these problems that I heard, and I'm not going to list the solutions that I heard. You got some of these from the daily summary of summaries, and you'll get more from the final report. But I did hear one area of disagreement which it seems to me need not continue, and I heard a couple of areas of apparent agreement which seemed to me to mask real disagreement. So let me talk first about those.

First, the area of controversy which seems to me not to need to be controversial at all. This draws out of the discussion of relationships between the civilian and the military labor markets. I don't think there is any question in the world that health occupations personnel who are leaving the military are not well utilized in the civilian labor market. We recognize that we have a low civilian pay structure, though it seems to be going up. We recognize that the civilian groups do not have as good a knowledge as they ought to have of the skills that are possessed by military people who come out. And it seems clear that the obsolete licensing systems often stand in the way of efficient utilization. It also seems clear that when military people do come out and want to continue in civilian health occupations work, they often are required to repeat courses unnecessarily. But on the other hand, it was made abundantly clear to the military representative that civilian associate degree nurses aren't accepted as they ought to be in the military, and that health occupations personnel of all types who go into the military don't get credit for previous work that they have completed so they end up repeating courses unnecessarily. It would be awfully easy here to just let the pot call the kettle black, and get nothing resolved. It's clear that our tax dollars and our health care dollars are wasted both ways, and that something needs to be done about it. Maybe, one of the things that ought to be done about it is that Project Medic, or Re-Med, whatever name it's under, ought to be looking at the flow both ways, and trying to resolve some of the problems holding up effective utilization of both types of flow.

The point was made that each year we have thirty thousand people who leave the military and who have health occupations backgrounds that could be utilized in the civilian market. And the statement was made that we should not start any crash programs in health occupations education until we got that problem resolved. But look, if every blessed one of those thirty thousand people was utilized effectively, we still would have large unmet needs for health occupations personnel. So here is an area of disagreement that just not need to continue. If we can make effective use of these people leaving the military, fine, let's do it. It will help us meet out needs, but is not going to meet our needs anywhere nearly in their entirety, and we still need crash programs in health occupations education.
Now let's look at the apparent agreement which seems to mask real disagreement. We have said a great deal about the accreditation of institutions, certification of programs, and licensure of individuals. Clearly these need improvement, and in some cases they may need abolition. But we haven't said much about how they ought to be improved, and in talking to people, listening over shoulders as I hear people talking outside (and that's very often where you get better statements than you do in a more formal setting), it seems that very often, the agreement is reached in general principle that we should change these things. But when we get down to the specifics that affect a person's own particular professional or occupational speciality, then it isn't quite so clear as to what changes are to be made. Everybody else ought to liberalize, but in our case, we've got to maintain standards. So it looks to me that this might be an area of apparent agreement that masks real disagreement and we need to delve into it further.

But a much more important area that masks real disagreement, I think, is the one that has to do with career ladders and lattices. I haven't heard anybody say that they disagree that we should have career ladders for vertical mobility, and we should have lattices for horizontal mobility. Again, everybody says this until you start talking about their own speciality. When you start talking about the person's own speciality, you hear comments such as, "Well, now, if we get into this, we'll run into problems with malpractice suits," and, "We'll run into problems with position papers that are prepared by national organizations," and, "After all, this conference group doesn't represent the guild, so this group ought not to take any action on anything that affects us."

Closely related to this is the statement that we need core and cluster programs. Again, there's beautiful agreement on the general principles. We have statements that people ought to be able to start in a general program and then specialize later on. But what ought these cores be? The only positive suggestion that I heard on the cores really was the one that Dr. Kinsinger proposed, and I didn't hear wide agreement that either or both of his proposals were desirable ways to go about getting at the core. I think that again, what we're saying is, "Let's get a core program for everybody else. But for us, for my speciality, we've got to have a program designed specifically for our team. The anatomy that we teach is really different from the anatomy that somebody else studies, because in this anatomy course, we're teaching people to make judgments that can't be taught elsewhere."

Now some comments about some proposals that have been made during the discussions of the past few days. We all agree that we need occupational information
about the health occupations which can be presented generally to the public, to parents, and to prospective students. I have a suggestion that whatever occupational information we develop ought to tell it like it is instead of trying to glamourize what we are doing. The view of the health occupations that is presented by the Reader's Digest is not a realistic view. The view of the health occupations that is presented by Marcus Welby, M.D. is not, in my opinion, a realistic view. Some of the public information that we ourselves put out for recruitment purposes is not a realistic view. I'd love to tell you a personal experience here. The general public, you know, thinks that Candy Stripers is an occupational information program, that it presents a view of nursing that is accurate. Well, you know that is not true. It presents a picture of one tiny part of nursing, and it actually conceals from the Candy Stripers major portions, key portions, of the nursing occupation. Too many of our students drop out before completing the program, and even worse, they'll go ahead and complete the program, just because they've been committed to it, but they won't work at the occupation because they found out during the training program (which is dog-done late) that the occupation is not for them. It may well be that some of our high dropout rates among both trainees and graduates is due to the fact that the students were completely unprepared for, and could not adjust to some of the necessary duties of the occupation.

I had the pleasure Monday night, of seeing a film called The Hospital. It's an hour and a half documentary produced by National Education Television, in a metropolitan hospital, that really tells it like it is. This is a videotape of what actually goes on, though it has been thoroughly edited. It has a tremendous impact. You folks come through just smelling like a rose in this picture, but it is not a pretty picture. It shows the trauma, the exhaustion, the tremendous impact of problems that must be faced by the people in each of the health occupations, and yet the ideal of public service, helping humanity, and the dedication also comes through. This kind of information, presented as public information that tells it like it is, will, I think, do you a great deal of good. I hope that each and every one of you not only can see it, but arrange to show it again and again.

Let's use this type of accurate reporting in addition to advertising campaigns of the "Join the Navy and see the world" type, which is what we're doing mostly in the way of advertising health occupations. When you join the Navy you do some things other than see the world, and you ought to know at least some of these things in advance.

Another comment that has come up several times in discussions: it seems to me that we need at the high school level and maybe even earlier, some kind of
a youth organization, something like the Future Farmers of America. It could be called Health Occupations Career Club, or some such name that covers the entire field of health occupations, that would give people a view of what actually goes on, and give them some idea as to which one or which small group of health occupations is of most interest to each club member.

There has been some discussion about challenge or proficiency examinations here during the last couple of days. I am for challenge examinations, because they're better than an outright refusal to recognize previous experience. But you know, when I heard Whitney Young yesterday noon, it reminded me that challenge examinations are a little bit like the examinations we use to select people for employment in the Urban League and in other organizations. They discriminate against those who are not from that culture. Challenge examinations discriminate against everybody who has come out of a culture other than the course for which that challenge examination was designed. Surely this is wrong.

During our discussions of the past couple of days, I have not heard mention of a Labor Department study which compares academic completions or graduations in seven health occupations with the annual job openings in each of these fields. Did you know that the Labor Department has estimates of annual job openings through 1975 for at least seven different health occupations? This study is full of holes. It has problems. But it is the first study that the Labor Department has ever made, and to my knowledge the first study that has been made by anybody, which attempts to look at a cluster of related occupations to find out how many people are being prepared, not just in reimbursed vocational programs, but in all types of programs. Moreover, it compares the completion rates with the essential job need rates. They found that in one of the health occupations (if their figures are correct) we are preparing enough people right now. And they found other areas where it's clear we're not preparing one tenth as many people as we ought to. It seems to me that as we look at the health occupations education field as a whole, we ought to be asking ourselves some questions about priority of assignment of funds. If you're only preparing a tenth enough people in one area and you're preparing enough in another area, you'd better start looking at shifting the use of some educational funds.

Closely related to this is the general assumption that job vacancies determine the need for educational programs. I feel that this is true, but it's only part of the truth. Educators have an obligation to tell students the truth about their jobs. We have an obligation to prepare people for jobs which are attractive to them. It's up to employers to make jobs attractive to people. Now think about this for a little bit. As educators you have an obligation to tell students
about jobs and to prepare people for the jobs that are attractive to them. But employers have the obligation to make jobs attractive to people. There's still another part to this truth. And that is that the availability of skilled, effective workers, in any field, generates the need for more skilled and effective workers. Now this is often overlooked. There just would be no demand for people in the health occupations right now if you had been turning out people who were ineffective. There just would be no demand for them. As you get more and more effective in turning out skilled and effective workers, you're going to generate more and more demand. I suppose this job market isn't completely elastic, but I'm guessing that at least in the field of geriatrics there is absolutely an insatiable demand for skilled and effective workers in health occupations.

Now let me turn to some strategies. Let's recognize that our eighty-five percent of the need for health occupations personnel can be met through programs which are eligible for, and should be receiving vocational education funds. By all means, go out and get all the research and demonstration and pilot project funds that you can use effectively. But for continuing long term programs, you'd better look to public education funds allocated for secondary schools, for community colleges, and for vocational education, because if you do a good job, you can depend on these funds coming in regularly. Soft money is good, but hard money is better.

Secondly, when you're after money, ask for exactly what you need and don't inflate your reports. Don't be beggars crawling in the dust, but don't be wild eyed wastrels. Ask for exactly what you need. Pound on the table until you get it, and be sure that you use effectively what you do get. More programs have been damaged, I think, by getting too much money, too soon, money that couldn't be used effectively, than have not been damaged by not getting the money that was needed. You may not believe this, but I think it may be true. Ask for exactly what you need and be doggone sure it's used well.

Then be sure that in every institution that you have at least one person who knows the law and the administrative regulations at least as well as the people in the agencies with which you deal. This avoids the problem of being put off by "the law doesn't allow this" or "our rules don't permit it." And if a particular section of a law or of a state plan has not been implemented, you ought to pound on the table until you find our why. There's no way to do this better than to have one individual in every institution who knows the law and administrative regulations better than the agencies with which you're dealing. You can do this.

I very much like the idea of the organization of health occupations councils that has been proposed here. These could include people from a wide variety of
of backgrounds. Almost always in our meetings, we're talking to ourselves, then we wonder why the meeting hasn't been particularly productive. You need to use these health occupations councils to advise educational institutions, legislators, and administrators, and the public, as to your needs. Don't forget that these councils carry a lot more weight than an individual or a single institution or a professional association which has an obvious axe to grind.

I like the idea of a self-destructive device. I think one way of doing this would be to design every committee, every council, maybe even every educational group and every professional association with a clause that says this this group is automatically disbanded in two years or three years, unless two thirds of the membership or two thirds of the students tell folks that it needs to be continued. This might be a way of getting rid of some useless appendages.

When you go about organizing an instructional program (I could talk about this one all day, but I'll just say one thing), plan this instructional program with the recognition that while instruction can be carried on in a group, learning can take place only in an individual. If you keep that one thing in mind, that instruction can be carried on in a group, but learning can take place only in an individual, then you're going to make a big improvement in any educational program that I've ever seen.

Next, evaluate your activities regularly and use both internal evaluators and external evaluators. Look at the products you're producing and the methods you're using to produce them. But also, and this is the thing that is almost always forgotten, in educational evaluation, look at the people you are excluding. Who are you failing to admit? Who are you forcing to drop out? Don't just look at the graduates.

And the last step that I'd suggest in strategy is this: Don't drop a good idea. Have a conference just like this one about once every two years to review programs and to plan for the future. This conference is unique, as I said on the first day of our conference. It's unique in representing planning for a large cluster of closely related occupations, and it ought to serve as a model for occupational education of all sorts. Billie Kerr, in our first paper, said that there is challenge with promise at every level. The truth of that statement is exactly what makes work like this exciting. On the first day of the conference, I said that I was optimistic. I'm still optimistic, after listening to some of the best papers and the best discussion that I've heard in an educational conference anywhere, of any type. It's been a pleasure to be associated with the conference and with you.
SUMMARY REACTION TO TOPIC V
OPERATIONAL STRATEGIES AND RESOURCES FOR EXTENDING
HEALTH OCCUPATIONS EDUCATION PROGRAMS

John E. Bean, National Center for Educational Research and Development, U.S. Office of Education

Approximately 35 projects related to the health occupations have been funded through the Division of Comprehensive and Vocational Research of the U.S. Office of Education during the past five years. They cover a wide range of activities: curriculum development, program planning, instructional materials, program evaluation, institutes, demonstrations, conferences, and research in areas such as pupil characteristics, teacher competence, professional fields, occupational analyses, and program transferability. Within this list there should be something of interest to everyone. In fact, probably every person at this conference ought to be doing his job better today than five years ago because of those projects which are relevant to his field. Has this been so? Has the considerable expenditure of funds and professional time really made an impact on the health occupations? Have the projects made a difference where it really counts—in the quality of education provided in our schools? If the answer to any of these questions is "no", then a consideration of the further questions listed below would seem to be in order.

1. Availability of project reports.
   Do you have access to ERIC project listings?
   Have you ordered any project reports from ERIC, either microfiche or hard copy?
   Do you have access to a microfiche reader? If so, have you used it?
   Have you corresponded with any project principal investigators?

2. Utility of project reports.
   Have you been discouraged by the language of research reports?
   Is the organization and format of project reports appropriate for your purposes?
   Do the reports contain too much detail? Too little?
   Have the abstracts provided through ERIC been adequately representative of the reports?
   Do the projects address significant problems in the health occupations?
   Is the project work of a sufficiently high quality?

Following logically from a consideration of project report availability and utility is the question: How can the work of the National Center for Educational Research and Development of the U.S. Office of Education be made more responsive to your needs?

How can you make your problems and recommendations known to Federal funding officials and research institutions?
How can you become usefully and creatively involved in significant project development?
How can the ERIC dissemination and clearinghouse function system be made more useful?
How can you best be kept informed of ongoing projects in the health occupations which are not yet incorporated into the ERIC system?
What other suggestions would you like to make?

6-8
SUMMARY REACTION TO TOPIC V
OPERATIONAL STRATEGIES AND RESOURCES FOR EXTENDING
HEALTH OCCUPATIONS EDUCATION PROGRAMS

Harry F. Davis, Assistant Director, Vocational Education, State Department of Education, Columbus, Ohio

I. The Problems

Though the resources are easily identified, there is difficulty in bringing them together to work harmoniously toward realistic goals in health occupations educational programs. These resources represent health professional groups, hospitals, nursing homes, clinics, public health agencies, licensing boards, public and private schools.

There is much work to be done in the area of public relations, both for recruitment into the health occupations and for development of greater understanding and cooperation of concerned health groups.

There is a lack of agreement among educators and professionals as to the educational level on which health occupations programs may be offered. Is it realistic to believe that successful practitioners cannot come from in-depth secondary programs?

The apparent fragmentation of the health occupations needs a hard look. Even though federal funds are available for "research and experimental projects designed to identify new careers in such fields as mental and physical health," we should ask the following questions:

What does the job analysis of this vocation really indicate?
What is currently being offered that would cover many of these needs?
Should it be a separate career?

It is necessary to have state and local funds to supplement those coming from federal sources. Finances are a problem.

There is a paucity of prepared personnel to direct and supervise health occupations educational programs.

II. Strategies

Advisory Committees of varied representation can be used to advantage in overall planning.

Individual craft committees are essential for early planning and guidance for a beginning health occupations program.

Direct contact and involvement of local resources is needed.

Grouping of programs in a health occupations educational center leads to more efficient utilization of personnel and facilities. With one center for basic instruction, it is possible to have clinical experience in agencies of surrounding cities as well as the city of the center.

Cooperation with involved state boards should be continuous.
Explanatory programs to the world of work should be available to all students in the elementary and middle schools. Such programs should cover health occupations.

A central information agency for all types of health occupations educational programs should be supported. This would include listing of approved programs, suggested curricula, guidelines, and instructional materials.
SUMMARY REACTION TO TOPIC V
OPERATIONAL STRATEGIES AND RESOURCES FOR EXTENDING
HEALTH OCCUPATIONS EDUCATION PROGRAMS

Dr. Mary L. Ellis, Director, Technical Education Research Center, TERC, Washington, D.C.

Problems and Issues

1. Current federal legislation authorizes programs for health occupations which are administered by several different agencies. (For example, U.S. Office of Education, Public Health Service, Department of Labor, Office of Economic Opportunity, etc.) How does this affect your state and how does the diffusion of administrative control at the federal level affect your ability to plan, develop, and implement programs?

2. Who shall administer health occupations education programs?

3. Who shall establish priorities for health education occupations programs?

4. Should health occupations educators be involved in establishing needs for health occupations personnel or should this be a function of another agency?

5. Should administration of health occupations programs be lodged in one agency? If so, what agency?

6. The current fiscal posture of the Nixon administration is to "hold the line" on budgetary expenditures. The recent hassle between the President and Congress concerning appropriations for health, education and welfare may establish an undesirable precedent for development and implementation of critically needed health occupations education programs.

Principles and Practices

1. Expanded research activities should be undertaken to design and develop curricula in emerging health education occupations technologies.

2. Health occupations educators should seek policy-making positions at all levels--federal, state, and local--in order that policies and programs established will have maximum social and economic benefits to the Nation.
SUMMARY REACTION TO TOPIC V
OPERATIONAL STRATEGIES AND RESOURCES FOR EXTENDING
HEALTH OCCUPATIONS EDUCATION PROGRAMS

Edwin Rumpf, Chief, Development Branch, Bureau of Vocational & Technical Educa-

Problems, Issues, Roadblocks

Health careers exposure, with purposeful experiences in the field of health
services, is almost completely lacking for youth in schools and for young
adults. These experiences would greatly benefit both the learner and the
health manpower field; however, both the school curriculums and health facil-
ities are heavily loaded with educational activities at present. Youth have
the time and the needs, but how can schools and health professionals provide
for this additional activity?

In health services and education, the division of responsibility has often
been made, not on the basis of logic, but rather in accord with individual
interests and immediate feasibility. Education has the capability to shoulder
more responsibility for education and training, but service agencies have
seemed reluctant to transfer this function to the educational systems.

The planning function needs to be defined, carefully structured, developed
and implemented at all levels and on a continuum all essential components of
education and health should be involved in the process utilizers of health
personnel, educators, standards setting groups, recipients of services, occupa-
tional representatives, and consultants in specific areas as needed.

Changing or improving the educational process can help but is not the sole
answer to problems of the health services. There is need for a concerted
direct attack on employment problems, on poor quality and high costs of health
services. Too often, the proposed answer to these problems is an attack on
the educational programs which are vulnerable and cannot defend themselves.
However, education should and can be more helpful to the health community in
its efforts to provide both quality and quantity in health services.

Principles and Practices

Broad-based courses of study on health, with emphasis on career exploration
and skill development, are being introduced into junior and senior high schools.
Such programs should be strengthened and expanded, so that they will be brought
within the reach of every young person.

The goal of greater career mobility can be achieved only if both education and
employment simultaneously attack the problem; employers must create the oppor-
tunities for career mobility and educators must develop the vertical and
lateral articulation between courses of study in such a way as to encourage
career development to the highest potential of each individual.

The most effective coordination between the health field and education can be
achieved through each carrying out, to the best of its ability, its particular
primary functions. Education should and will assume its full share of respon-
sibility for the education of health workers, thus freeing the health service
agencies from this responsibility and allowing them to use their resources in
concentrating on problems in health services delivery.

6-12
More effective planning techniques must be utilized both in education and by the health services, with each communicating to the other their goals, plans, accomplishments and needs in such a way as to be mutually supportive rather than competitive. Duplication of effort is costly and unnecessary.

The multiplier principle must be applied if the necessary numbers of prepared health personnel are to become available. This principle is applied most effectively where local and state initiative is developed and the federal program moves quickly toward the role of a junior partner.
CHAPTER VII

Summary of Discussions, Recommendations and Conference Evaluation

Summary of Summaries - Wednesday and Thursday

Summary of Discussions, Questions and Recommendations

Summary of Recommendations for Directions in Health Occupations Education

Table I - Positions and Employment of Participants Completing Evaluation Form

Table II - Conference Evaluation Form
CHAPTER VII

SUMMARY OF DISCUSSIONS, RECOMMENDATIONS AND CONFERENCE EVALUATION

The Conference was planned and developed to precipitate and facilitate the maximum exchange across the diverse representation of individuals and groups. The prepared position papers were to provide a structure for each topic and a framework from which succeeding activities could take place. Reactors were selected to initiate a transition from the position papers to the discussion groups and to provide applications and implementations for various aspects of the topics. Discussion sessions were then to proceed with an interchange among the participants for the identification of questions, input of examples to be used as means of achieving goals or overcoming problems, and for making recommendations for further actions and program development. The sequence of activities in the discussion groups followed essentially the sequence outlined above.

Each discussion group contained a prior identified chairman, recorder and two resource persons to facilitate the exchange during discussion sessions. An attempt was made to have each of the four persons represent a different area of experience and competency. This team also provided feedback to the Conference staff for making adjustments that seemed desirable and maintained a record of their groups' discussions and recommendations. While each discussion group was somewhat larger than desired, (approximately 30 persons), it was felt that this size was necessary to provide for adequately representing the various views, activities and heterogeneous nature of the participants. Three graduate students at the University of Illinois served as Conference recorders; they summarized the reports of the discussion group recorders each evening, prepared a summary of summaries, and reported back to the general session on Thursday and Friday mornings.

A working session was scheduled on the Tuesday preceding the Conference for discussion chairmen, recorders, resource persons, Conference staff and other interested individuals. The overall plan of the Conference was discussed at this time and duties of each person outlined.

7-1
In the first discussion session, there was a direct attempt to identify problems, roadblocks and alternatives encountered in making progress toward the development of health occupations education programs. During the intermediate session, these problems were summarized or grouped to gain a fix on the more common difficulties. In a continuous flow there were many suggestions and comments relative to means that had been found successful in overcoming problems or difficulties and in making progress. By the latter sessions, the participants were well under way in arriving at common recommendations or guidelines in meeting the need for development.

In many respects the position papers and reactors had identified and proposed many of the areas of agreement and common guidelines. Interestingly enough, there was relatively general agreement with the positions and recommendations presented in the position papers. In reviewing the following recommendations it is necessary to keep in mind that there was a significant body of agreement as reflected in the position papers and reactor statements. The identified group recommendations in many respects are supplemental to the suggestions of the position paper presentors. With this large area of relatively common agreement, it is not surprising that the participants focused more on details or supplemental problems and needs in addition to those suggested by the position papers and extended their discussions from them rather than taking major issue with the positions presented.

This chapter comprises three major sections. Section I contains the summary-of-summaries presented on Thursday and Friday mornings, which were developed by the Conference recorders-reporters. Section II is a summary of the reports of the discussion group recorders including the primary questions and recommendations; section III, a Conference evaluation, is provided from the evaluation form completed by the participants at the close of the Conference.
SUMMARY OF WEDNESDAY'S SUMMARIES FOR TOPICS I AND II*

I. A major issue that was identified and discussed by most of the ten groups was that of accreditation, registration, licensure, certification, etc. For the most part, there was no resolution, but it may be useful to summarize here some of the questions raised and opinions expressed.

There was, indeed, general dissatisfaction displayed with the present system, if it can be called that. The question, in fact, was raised in a few groups as to whether certification is really necessary, using the term "certification" as a generic one. Then, if necessary, at what level should certification be granted? Would a national level be useful? State autonomy and lack of reciprocity between states were seen as barriers within the present system. The possibility of regional certification was raised, in part because of special needs that prevail in sections of the country. Several groups expressed a felt need for some over-all advisory members to oversee the entire certification operation. While potential members of such a council were not specified, cautions were expressed regarding the membership to guard against the common bugaboo of special interests.

Another specific concern was expressed over the existence of so-called "commercial" schools and how their "graduates" might be evaluated.

More specifically, one group acknowledged that accreditation requirements would surely be affected, to an unknown degree, by hospitals going out of the education business. The question was raised then: "Why should an exam be necessary to validate the integrity of a program that should have inherent validity?" The point was made that status, salary, and job security are basic to formulating a certification program. Further, with much ado, groups asked themselves if certification can really be a point

* This summary was based on the frequency or number of times an item was mentioned or listed by Discussion Group Recorders.
to start total revision.

II. A second major issue discussed by several of the groups was that of concern for what the health-services industry is contributing toward employing the 50% of people who fall into the category of disadvantaged, high-school dropouts, etc., and what should be done. Considerable concern was expressed over the lack of publicity that countless health job categories have, and the lack of "role models". That is to say, many a youngster still dreams of becoming a doctor, dentist, or nurse -- but how many have enough information to wish to become an inhalation therapist, or a home health aide? Apparently, then, a massive public education effort needs to be undertaken to apprise of these major changes and opportunities in the health-services industry, so that high school counselors, parents, and the prospective employers, not to mention all others affected, can become familiar and "easy" with these innovations.

These acknowledgements of contributions to the disadvantaged -- both ongoing and proposed -- were made:

(1) Hospitals take them in and take responsibility for teaching them the job and how to keep it, cooperating with education agencies also.

(2) Labor organizations demand career opportunities, training programs and benefits that give dignity and serve to motivate.

(3) Boards of education bring supplementary education - elementary and secondary - to employees where they are working.

III. Across groups, the puzzle of general education vs. training was raised. While a few statements were recorded that noted the usefulness of a fuller "education" for any member of the health occupations forces, there was considerable discussion that related more to the strictly "training" part of vocational education. There were observations made concerning the existence of dead-end jobs and their probable continuing existence. But much attention of this sort was paid to the need for job redefinition, using a systems approach, e. g., time and motion studies, to find out exactly what is required of a job category. Some worry was vented over the proliferation -- without concomitant understanding -- of job
titles, and the hope was voiced that certain jobs could be combined, some phased out, etc., to make the most efficient use of employees and make some sense of these 200-plus U.S.P.H.S. job categories.

IV. From a number of discussion groups came a passing word concerning "core curriculum" with a kind of consensus that one is needed for health workers but with few suggestions as to where to start. Perhaps a more specific mention was that, at least, at the post-secondary school level, prenursing, predental, and premedical students might be lumped into a core curriculum. A specific suggestion from one group suggested a detailed task analysis in terms of specific requisite behaviors, to form the substance of curricula designed to follow the function which all individuals would be expected to perform.

The foregoing were the points of commonest interest gleaned from recorder reports collected after the group sessions. We add a fifth issue here since one group spent considerable effort working with it.

V. The fact -- or spector? -- of specialization was admitted as a phenomenon that is here to stay, probably caused by the increase in knowledge and duties and therefore fragmentation of jobs. These recommendations were offered as help in dealing with it:

1. need for change of image of subordinate health personnel
2. vested interest of separate groups must be broken
3. need for over-all advisory group
4. need to put power in politics to effect legislative changes

* * * * * * * *

We have tried to represent your efforts of yesterday afternoon fairly and hope that this summary will be informative to you.
SUMMARY OF THURSDAY'S SUMARIES

Described below are the major topics common to several groups. Subjects that were considered by individual groups will be discussed briefly in the morning presentation.

I. Group members expressed concern over the "image" of vocational education and noted the vast difficulties in persuading parents to allow children to pursue vocational health careers studies -- even when such studies are clearly related to the needs and abilities of the child. "Everyone must go to college" gets in the way.

Individual members of professional organizations probably should carry the bulk of the responsibility for changing the image of health careers with parents as well as prospective students. Parents must be convinced that one job is as honorable as another and greater dignity and respect for certain jobs should be fostered.

It was pointed out that, in many parts of the country, vocational programs are combined with and integrated into local community colleges. In such places, parents and students become more willing to pursue vocational curricula.

Parents do have a major influence in directing their children's career choices, but they are very often uninformed as to the job opportunities and job requirements in the health-care field. Parents know about the professions of doctor, dentist, and nurse, but about very few other job categories. Therefore, the need was expressed for means of disseminating information and inspiration to the parents and public through:

(1) PTA
(2) Newspapers
(3) Educational TV, TV spots, and TV plays
(4) Child study clubs
(5) Youth clubs
(6) Health Careers Day for parents
(7) Get doctors to sell health careers to parents
(8) State health careers councils
(9) Saturday "clinics" for interested high school students (e.g. Philadelphia Recruitment Program)
Many times high school counselors are not in tune with the labor market or the employers; and thus they cannot or do not guide students into the health field. Research shows that counselors' influence on career choices of high school students is not great. On the other hand, teachers and role models (school nurse) do exert significant influence on students.

II. Pre-specialized occupational education has as its objective career development rather than presentation of specific occupational content. Appropriately, it is directed to the elementary, middle-school and junior high school levels. Specialized occupational education should be determined by the readiness of the student, i.e., when he wishes to begin his specialization.

More specifics in job preparation for the health-care field might be placed at the secondary level. One group suggested a health occupations general program to give high school students the "basics"—something to "latch onto". Then when they have been employed, the specific job could be learned. A fear was expressed that time devoted to such vocational exploration might detract from basic studies such as chemistry or English also vital to entry into some health fields.

In another group the question of specific training versus general training at job entry level was raised. The main determinant here appeared to be the locale where the graduate goes to work. If he is employed in a small institution, more flexible (general) training is preferred; if he is employed in a large institution specific job training is better. Local needs and desires need to be considered in determining how personnel should be trained.

III. A need was expressed for a "national clearinghouse" for information concerning health occupations education programs. It was pointed out that there already exist some media of information exchange, such as the Occupational Bulletin of the American Association of Junior Colleges, the AJA Newsletter for allied health and nursing, and ERIC. Inventories should include not only two and four year college programs but also armed forces programs, proprietary schools, etc. The information available
through the U.S. Department of Education should also be consulted. Further it was suggested that the "Convener" technique be used. In this approach, one agency in each category is used to gather information from related agencies and act as spokesman for that category of agencies, (for example, health facilities construction; professional groups; health education) in a region.

* * * * * * * * * *

Concern with the patterns of delivery of health care was expressed by several groups. Problems of licensure, manpower, etc., were also considered by several groups. One group was concerned with problems of establishing, maintaining and funding continuing education programs.

Section II

SUMMARY OF DISCUSSIONS, QUESTIONS, RECOMMENDATIONS

This section has been developed from the written notes, oral reports and discussions with the Discussion Group Chairmen and Recorders. In the interest of brevity, clarity and usability, all reports were organized into one combined report. The major topics or headings were derived from both the frequency of mention and relative importance as indicated by the recorders. Comments by the participants on the evaluation form were also taken into account.

Statements in the summary section reflect relatively common agreement across the groups. Included in the Questions section are both common and specialized questions of concern to at least several participants. In some cases, recommendations are made which tend to answer the questions; and, in other cases, groups or locations have determined an answer that meets the needs of their situation. Each of the questions received the attention of one or more of the discussion groups with the members of that group feeling that it was of sufficient importance to be included in their report. Generally they indicate that further
exploration and some guidance in answering the questions, or at least
guidelines in dealing with the question, were needed.

By the close of the Conference, many participants felt that they
had reached a stage where they could proceed to develop such
guidelines if the time had been available. Thus, the strong feeling that
a follow-up conference composed of many of the same persons could be
quite productive.

The questions included in this section may very well serve as a
basis for structuring or providing a basis for discussion at future
state or regional conferences.

Included in the Recommendations section are those that appeared
to have the support of at least a significant number of the participants.
There may have been dissent of at least some participants to each
recommendation. No measured relative support or opposition was taken
at the Conference. Any participant may choose to disassociate himself
with any recommendation. Attempts were made to report the recommendations
as reflected across the recorders' reports from the discussion groups.

LONG TERM AND COMPREHENSIVE PLANNING

The need for long term and comprehensive planning is necessary to
(1) eliminate unnecessary duplication of effort, (2) provide for changes
in the health care delivery system(s), and (3) allow for maximum
utilization of all health resources. Planning is the responsibility
of all health workers and requires the cooperation of national, regional
and local units. Allowance must also be made for adequate representation
by the health consumer. The importance of cooperation and coordination
among all parties concerned with producing and consuming health care must
be stressed.

The present proliferation of health occupations and professions
confuses health planning. A reclassification of the many job titles
in existence may reveal that there are not as many different health jobs
as now appears. As job functions change with the changes in our health
care system, the classification problem becomes more acute. Specific
attention is merited by the lack of articulation between civilian and
military use of health care workers.

7-9
Questions

Can an independent professional development committee for long range and intermediate planning be established?

Why are vocational schools, junior colleges, and senior colleges subjected to strong local pressures to inaugurate health education programs even when employment capacities and clinical resources are weak or totally inadequate?

Who should be responsible for long-term planning and implementation of various proposals?

How far into the future should we plan and what are our goals?

What is the largest geographical unit which can be used in planning?

Should units be formed on the basis of similar or dissimilar needs?

What is the role of the advisory boards and committees, and who should serve on them?

What can be done to foster the needed articulation among employers, educators and the armed forces?

What are the differences and similarities in rural and urban health planning?

Recommendations

Traditional duties of the health workers need to be examined, and if necessary, changed.

An inventory of all allied health programs, including educational institutions, armed forces programs, private and proprietary programs needs to be made.

There is a need for the various agencies of the federal government dealing with health occupations education to coordinate their activities and make their resources known through a common source or system.

7-10
Both the health professionals and the public need to be educated if we are to effect the basic changes necessary to our health system.

Comprehensive health manpower planning should be used as an optimum solution to locate health programs.

Provision needs to be made for the continuing education of health occupations teachers in the field. Both teacher education and technical education programs should be established as teaching requirements in the health occupations area become more difficult.

Advisory councils and committees including consumer members, must be used in comprehensive planning.

There is a need for comprehensive health planning at the national, regional, state and local levels.

Knowledgeable persons must be placed in position of authority at the state level.

Greater identity for health occupations education programs needs to be obtained in educational institutions and associations.

The needs of health occupations education must be expressed to organizations such as the American Vocational Association, other educational associations, state and national government, and above all, Congressional representatives of each state.

ACCREDITATION, REGISTRATION, LICENSURE, CERTIFICATION

These topics were of concern to all participants, and in most cases not well understood. There is a need for further study of the purposes and procedures in light of current practices and desired changes. The validity of current approaches as a means of assessment was questioned and general dissatisfaction was voiced with the lack of flexibility. In many cases, the programs are subjected to approval of multiple accreditating associations leading to an inefficient, repeated checking procedure.

Interest was shown in the multi-disciplinary clusters of health occupations programs recorded with regional accreditation groups as being
proposed by the American Medical Association. The American Medical Association, The National Commission on Accreditation, and The Association of Schools of Allied Health, are also sponsoring a study of accreditation to be performed by an impartial research group. It appears that national accrediting associations are not willing to undertake program certification but will accredit cluster groups such as health occupations programs comprising a unit. Interest was also shown in the determination of performance goals and objectives as presently being studied by the UCLA Allied Health Project. These goals consider performance, judgmental and patient safety factors, and lead to a basis for relevant accreditation criteria and challenge examinations.

Further discussion centered about the role of the professional association. The association's role in preparation and utilization of health workers is to insure their graduates' professional acceptance and employment. In program development, vested interests of some associations have made interdisciplinary communications difficult. An example of such health interests negating effective communication and occupational mobility is the policy statement on nursing education.

Questions

Is certification really necessary? If so, for what purposes?

If licensure and certification is debilitating to the educational institution, what can we do to generate solutions?

Do these procedures affect quality programs, personnel status, salary and security?

At what level should certification be granted? Would certification at a national level be useful?

How should the graduates of commercial schools or proprietary institutions be evaluated - the same way, or differently?

How will accreditation be affected by the fact that hospitals are going out of the education business?

Is certification really the point at which to start total program revision?

7-12
What are the dangers in allowing professional organizations the power to dictate to state and local schools concerning vocational programs?

Could a graduate of an accredited program be considered competent without further examination as necessitated by licensing?

How can competency in emerging techniques and activities be assured?

Recommendations

Reciprocity and transferability of "credit" must be liberalized among employers, educators, the armed forces, legal agencies and associations.

More persons with health orientation must involve themselves in state licensure boards, state boards of vocational education and state advisory committees giving particular emphasis to non-physician members.

There needs to be education of the school personnel to the significance of voluntary accreditation in general.

The value of national accreditation in giving students nationwide mobility must not be overlooked.

Means must be found and procedures implemented to provide advanced standing and upward mobility on the basis of demonstrated competency.

Performance criteria and objectives must be used in program operation and completion rather than "time in training", and as the basis for approval of programs and individuals.

Accreditation, certifying and approval groups have the obligation to take the lead in reviewing and improving their procedures.
TRAINING NEEDS AND PROGRAM DEVELOPMENT

The discussion concerning program development stated a need for core curricula, open-ended curricula, the ladder concept, continuing education, and realistic training programs as determined by entry level job skills. The problem of shortages in the health field was felt to be a combination of poor salaries and lack of a career ladder. While the opportunity for advancement must be provided, it should not be encouraged to the extent that people must apologize if they are satisfied with their present position. There will always be dead-end people in any job. The dignity of labor at any level should be preserved.

An exemplary program was cited in the state of Iowa. This program contained nine months of core curricula completely integrating the preparation of practical nurses with those students working toward the associate degree in nursing.

Perhaps the best compromise is offered through the use of continuing education in its various forms. Both the necessity for continuing training and professional desire for upgrading can be met by bringing education to the health worker. Specific methods cited were the use of continuing education centers, community colleges, and a telephone system, Dial-Access.

Questions

What is the proper balance between specific and general training in our health occupations education programs?

What is the relationship between functions performed and the preparation necessary to perform them?

Can and should preparation be standardized on a national or regional basis?

Can we have a core program allowing for basic training in more than one area?

Can we have an open-ended program designed for a minimum of additional training in allowing for career mobility?
Can advanced standing be established through equivalency examinations providing for educational and professional mobility of the allied health worker?

What role do the various governmental agencies have in the preparation and utilization of health care workers?

What agencies should determine the content of continuing education for practitioners?

Can continuing education programs be efficiently and economically implemented?

What is the role of the clinical facility when health occupations education programs move to the campus?

Recommendations

Programs and curriculum development should follow job functions and be developed in light of expected job performance.

The length of training programs must be placed in perspective to the expected salaries acquired upon entrance into the job force.

Mobility upward and within the related health occupations must be provided.

Training should also be determined in part by the locale where the graduate goes to work. (Small institutions require a general preparation, while larger institutions can utilize specific training).

For relevance of any program to be maintained, there must be cooperation among the educators, employers, and professionals in the field.

Advisory committees should be used to maintain articulation.

In developing curricula for a number of programs, an analysis should be made to determine commonalities for possible core or combined experiences.

Health occupations students should be trained together so that upon entry into the work force, they may function as a team.
Programs need to be developed in light of the core and ladder concepts. Educational institutions, service agencies, or professionals should provide continuing education programs when they possess sufficient expertise.

Employees should have some voice in the type of continuing education offered.

Continuing education should be brought to the students.

Educational institutions, colleges and community colleges should develop various health occupations programs to provide greater student choice and flexibility as well as support to the teaching faculty and the educational program.

**SOURCES OF HEALTH MANPOWER AND RECRUITMENT PROCEDURES**

In addition to the general manpower pool three specific groups were cited as sources in helping to meet health personnel needs. (1) young students including secondary and elementary, (2) the disadvantaged, and (3) the middle aged woman. Each should be priority targets of recruitment. There is a lack of knowledge as to who goes into the health field and what types of positions are available. Children still envision themselves as doctors and nurses and not as inhalation therapists, nuclear medicine technicians, or even nurse anesthesiologists. They have no way of gaining insight as to the positions available, many of which do not require a college education. Occupational information should be available to all levels of our schools and the teaching of skills for entry level positions should be implemented at the secondary level when feasible. We must face reality however, in that high school programs cannot in fact develop all types of health workers.

The middle age woman was also identified as a source of potential manpower for health occupations education. Studies have shown that older hospital workers are more stable than younger ones. In a youth oriented society, we must not lose sight of potential health care workers in the over-forty age group. To date, only practical nursing has recruited extensively from this group.
A very definite feeling on the part of the groups presented the need to recruit talent among various minority groups. This includes students with a potential of serving not only as workers but also as instructors and administrators. The health service industry needs the services of the disadvantaged, and the disadvantaged need a place in the health industry. The problem is how may the disadvantaged gain entrance into the field. Collaboration between service agencies and the public school systems was suggested to eliminate inadequacies in elementary and high school education and to develop extensive remedial and supplemental programs by community colleges. The program of unions which are speaking for the disadvantaged and are demanding open-ended entrance to employment should be encouraged. In fact, many unions themselves provide basic education.

The vast potential manpower pool which exists among minority groups, women and the poor varies from one geographical area to another. These untapped manpower resources are in need of further study and clarification. Examples of utilization were cited from recruitment of Mexican-American youth in Watts and other California regions, Milwaukee, Texas, and other locations. We must not be afraid of the differences of the disadvantaged but must concentrate on their talents.

Questions

Will time devoted to occupational exploration at the secondary level detract from basic studies such as chemistry and English?

What are we going to do with the fifty percent of high school graduates who do not continue school after grade twelve? And, the thirty percent who never complete high school?

Into what positions can mature high school students enter directly into the work force.

Why do students enter into some health occupations and not others?

How may we provide information to parents?

How far should high school programs go in leading to employment in the health occupations?

Can the licensed practical nurse program be offered in both the high school and junior college?
How can guidance best be provided for parents and the community in general through the use of various mass media?

What are the legal implications of allowing high school students to train in various clinical settings?

How can the gap between the needs of the disadvantaged and the needs of the health field be bridged?

How can the gap between the secondary school and post-high school programs be bridged and provide continuity?

Recommendations

Occupational orientation and occupational information programs at the elementary and secondary school levels must be developed.

Exposure to health workers and opportunities by secondary school students should be provided.

The early childhood group must be worked with to provide accurate occupational information.

Occupational orientation at the elementary school level should be implemented through the use of: cartoons, occupational materials, career textbooks such as the World of Work series used in Detroit schools, and survey courses.

Professional organizations should encourage the teaching of entry level skills in the secondary schools.

"Honors" programs in the vocational education field should be established.

Counselors as well as the general public must be made aware of the breadth of positions available.

Programs allowing for vocational education that could be combined with and integrated into the local community college should be fostered.

State health careers councils must consider parents as well as children in their recruitment efforts.

The disadvantaged should be recruited to serve not only as workers but also as instructors and administrators.

7-18
TEACHER EDUCATION

The need for additional health workers is paralleled by the need for additional teachers in the health occupations education area. The problem comes into focus as we select experienced health workers interested in teaching and attempt to provide them with a working knowledge of educational methodology. It is both undesirable and impractical to remove productive health workers from the health field and require them to complete several years of formal education programs.

The Ford and Kellogg Foundations currently sponsor programs where persons with years of experience may prepare as teachers. A universal effort should be made to help occupational teachers work toward degrees and teaching competency. Such competency could be developed if individuals did not have to sacrifice long terms of unemployability. Consequently, resource materials for use in many locations must be developed. Each State Department of Vocational Education has an obligation to provide support for teacher education in the health occupations area.

Questions

Is the current student-teacher ratio of many health occupations education programs realistic?

Can and should national qualifications of teachers be established in the health occupations education area?

Can educational programs at the baccalaureate and masters level be designed to train students as health occupations education teachers?

What is the most effective balance between technical and educational content for the H.O.E. teacher?

Recommendations

Teaching staff requirements of associations and agencies need to be re-examined in light of actual requirements and staffing patterns.

A study is needed to see what can be done to utilize master teachers and teacher assistants in large group instructional settings.
Occupational teachers with practical experience should be provided the opportunity of securing formal education courses.

Short-term institutes need to be offered capitalizing on the clinical experience of many health occupations education teachers.

Continuing education needs to be implemented in providing background and direction for health occupations education teachers.

National and regional teacher education institutes, such as the one held at the University of Iowa in August 1969, should be sponsored by both USOE and USPHS.

A national mechanism for exchange and development of both teacher education and curriculum materials must be developed for the health occupations.

State agencies, including the Department of Vocational Education must give priority support to the health occupations.

SUMMARY OF RECOMMENDATIONS FOR DIRECTION IN HEALTH OCCUPATIONS EDUCATION

The immensity and diversity of the problems confronting health occupations education have been reflected in the general comments of the participants' evaluations and the recommendations from the discussion groups.

The individual recommendations for the next steps fall into three main categories: future action, specific problems with high priority, and general comments regarding the organization and functioning of the Conference. As might well be expected from a group representing levels of operations and decision-making, the action recommendations were manifold. All the recommendations require some financial base for implementing as well as a nucleus of individuals to carry the burden for initiation of planning and development.

Unanimous agreement was expressed on the existence of problems in health occupations education. The second most frequent comments reflected that the Conference had familiarized most individuals with the problems or increased awareness of some problems. The most encouraging observation from the comments was the prevailing mood to begin problem-solving and attacking problems relative to operational aspects.
The participants of the National Conference for Health Occupations recognized and agreed upon the following general statements regarding the relationships between health care delivery and health occupations education. Common agreements were found in:

1. Adequate and accessible health services must be available to all people by providing both preventive and curative care, but to promote effective and efficient care, there is a pressing need for prepared personnel at all levels within the growing specialties.

2. To accommodate changes which may result from technology, institutions and society, the health services must continue to incorporate concepts of flexibility and adjustment to changing situations, reflected now in the transfer of health occupations education to public supported educational institutions.

3. The focus of all health occupations education efforts should be directed to promoting effective educational programs and for preparing qualified personnel in health care delivery in the system commensurate with responsibilities in the employment setting.

4. A structure or base should be provided to encourage cooperation and coordination among the legal agencies, health professional associations, educational institutions, and health facilities across the various levels to promote uniform standards for the preparation and utilization of personnel.

5. Health occupations is a generic term including a wide range of specialties giving preventive and curative care in mental, physical and environmental health areas. With the rapid rise of specialties, it is now recognized that efforts must be undertaken to promote uniformity in titles, duties and educational programs within and among the specialties. Studies should be undertaken to promote methods for coordination to promote advancement within and transfer among the specialties.

6. Efforts must be expended and exerted to increase articulation, communication, and joint responsibility among the groups involved in the decision-making regarding qualifications, licensure, certification, and registration and those responsible for educational programs and the preparation of teachers and faculty for the health occupations.

7. There is a great need for cooperation between educational programs and clinical agencies for affiliating experiences.

8. Efficiency in the preparation of personnel and quality in health care delivery depends on occupational preparation programs recruiting new sources of personnel as practitioners. Similarly, programs for the preparation of faculty, staff and leaders must be promoted to provide better programs in health occupations education.
9. To bring forth a coordinated system of health care delivery continuing effort should be expended to promote workshops, seminars, and conferences including consumers, professional associations, medicine, nursing, dentistry, allied health professional educators responsible for programs at the elementary, secondary and post-secondary levels.

Recommendations for action which stated or implied group action were:

1. The Conference, as a forum of exchange, has extreme value in focusing attention upon national needs as they relate to the state and local areas of operation and relationships between levels of agencies and associations. It is recommended that the Conference, annually or bi-yearly, be given priority for funding.

2. Responsibility for more in-depth planning should be assumed by states or regions, whichever is more feasible, to encourage solutions to problems at the local and state levels unearthed at the Conference. The participants recommend that representation be similar to the larger Conference with added representation of minority groups, consumers, health workers and health career councils.

3. Responsibility should be assumed at the state or local levels for workshops or seminars to engage in dialogue and problem-solving of the immediate problems and concerns in program development and preparation of health personnel. It is recommended that involvement should include professional associations, educators from secondary and post-secondary and private institutions, health facilities with representation from the state directors of vocational education, health career councils and consumers.

In light of the interest expressed in promoting further action in health occupations at various levels, some initiative must fall upon those who participated in the Conference. Recognizing that finances are a vital part of any extensive action, you as promoters or "catalytic agents" if you will, can, as individuals or groups within areas or states, initiate and promote.

At this point in time, the most effective initiation points will probably be the following:

The State Director of Vocational Education to relate the need for health occupations programs -- or coordination which can be pursued with state funds.

Regional Medical Programs which can write proposals for funding for coordination. There are now 54 in the United States.

Health Careers Councils in the particular state to inform or seek cooperation for additional Conferences or Workshops at the state or local levels.
The National Advisory Council for Vocational Education to call forth attention as to the pressing need for coordination among educational institutions and health associations. The National Advisory Council in turn makes recommendations to the Commissioner of Education and his impact upon the legislative process in developing laws. State Advisory Councils for Vocational Education which provide input both to the State Director of Vocational Education and the National Advisory Council can be an effective means for increasing recognition and action for health occupations programs.

Director of the Division of Vocational Education, USOE, can be contacted to recommend that vocational funds be allotted for further coordinating and problem-solving vehicles for health occupations education programs.

Section III
PARTICIPANT IDENTIFICATION AND CONFERENCE EVALUATION

Precise identification of participants is difficult due to many persons who have responsibilities for multiple activities as in the case of an individual responsible for hospital administration, comprehensive medical planning, member of advisory committees and part-time instructor. Multiple involvements were the rule rather than the exception. The following tabulations, indicate minimal attendance from the given categories.

Sixty-eight persons responsible for community college administration and four responsible for instruction.

Thirty-six persons responsible for university or college administration and seven responsible for instruction.

Thirty-two state health occupations education supervisors

Six persons representing the Armed Forces

Thirty-two persons representing the Federal Government including national and regional offices

Thirty-one persons from state and national professional associations

Seventeen persons responsible for hospital administration

Eight persons responsible for secondary health occupations programs

Seventeen persons responsible for regional and comprehensive medical planning

Forty-five states and two territories were represented
Conference participants were asked to complete a Conference Evaluation Form at the close of the Conference. It is shown in Table I. One hundred and sixty-three (163) evaluations were returned and processed to provide the data given in Tables I and II. In all cases, some responses were left blank accounting for the difference in totals. Table I indicates the position and employer of 139 participants completing this section of the form. The evaluation form also provided for five categories ranging from strongly agree to strongly disagree for each of the sixteen statements used to evaluate the Conference. Table II shows the number of participants indicating the responses by statement. In addition, participants were encouraged to provide additional comments and recommendations.

Comments and Summary

The low response rate of the evaluation form is primarily due to time it was distributed for completion, at the close of the Conference when many participants were in the process of preparing to leave. One indication of the sustained interest is that 235 of the participants were in attendance for the final luncheon prior to adjournment.

Tallies of the Evaluation Form would indicate a relatively high degree of satisfaction with most aspects of the Conference. Least satisfactory were the Ad Hoc sessions. These sessions were not a formally structured part of the Conference but were scheduled upon request of a group. Therefore, participation was on a voluntary basis and comprised smaller sub-groups.

Discussion group activities could have been more successful although there was generally high support for these. Two factors helped to contribute to some limitations on the effectiveness of these groups: (1) they were larger than would have been most effective, and (2) the Thursday afternoon session was cancelled due to earlier sessions running over the scheduled time. For similar conferences, comprised of the widely diverse interests, somewhat smaller discussion groups would probably be more effective. Some questions were raised concerning the degree of structure to be used in the discussion groups.
In an exploration and exchange conference, a lower degree of obvious structure in the discussions appears necessary to permit the various interests and positions to emerge for discussion. Molding into a group may be delayed, but it is a necessary phase. A follow up conference should be much more structured in the discussions for focusing on identified issues and approaches. By the close of this conference the issues and tasks had been identified and a structured approval was then in order.

The exchange however, did reflect that after several years of talking about problems, the beginnings of solutions are emerging slowly. There was a general feeling that the rigidity of viewpoints is gradually breaking down and that conferences of this mix are particularly effective in this regard. Finally, there was a feeling that some concrete stand from the group should have been elicited, but that this was just not possible in the time allotted.

Several groups were not represented or under represented in the Conference. Consumers of health services were not represented as such. In spite of many attempts to gain a larger representation of minority groups, labor unions, and some other groups representing disadvantaged the participation of these groups was quite low. Since the budget did not include provisions for expenses, other than speaker and working staff members, invitations could only be extended to those who responded and could find some means of covering their expenses. Also, since notices were sent through the State Directors of Vocational Education and other associations and agencies, invitations were sent to those selected by others. Many units were operating on restricted budgets and consequently a low participant response resulted. In general, a highly desirable mix of participants resulted but some aspects were not adequately represented.

Hospital oriented programs and practitioners comprised the majority of participants and discussion. More recognition and attention probably should have been given to preventative, community oriented, mental health and specialized aspects as geriatrics, alcoholism, drugs, accident prevention and treatment, etc.

A hidden agenda item or objective of the Conference was to gain a sufficient commitment on the part of the participants to implement or stimulate new or additional activities as a result of the Conference.
A high level of involvement and concern appeared to be present at the Conference; the degree to which this resulted in future actions remains to be demonstrated.

The Conference staff feels it was a highly successful Conference; comments and the evaluation data tend to confirm this feeling. However, the ultimate criterion is the influence the participants may have in the improvement of health care provided to individuals as a result of the Conference, directly or indirectly.

Table I
Positions and Employment of Participants Completing Evaluation Form

<table>
<thead>
<tr>
<th>Employer</th>
<th>Educational Program Administrator</th>
<th>Institutional Agency Administrator</th>
<th>Instructional Staff</th>
<th>Practitioner</th>
<th>Consultant</th>
<th>Research Activities</th>
<th>Advisory Committee Member</th>
<th>Association or Agency Staff</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>College or University</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Junior College</td>
<td>18</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Secondary or Adult</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Professional or Related Associations</td>
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<td>1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>6</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Federal Agency</td>
<td>1</td>
<td>7</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>16</td>
</tr>
<tr>
<td>State Agency</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>17</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>3</td>
<td>34</td>
</tr>
<tr>
<td>Local or Regional Agency</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Private Business</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Regional Medical Program</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Other</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>19</td>
<td>9</td>
<td>2</td>
<td>25</td>
<td>5</td>
<td>0</td>
<td>23</td>
<td>11</td>
<td>139</td>
</tr>
</tbody>
</table>

7-26
Table II
NATIONAL CONFERENCE FOR HEALTH OCCUPATIONS EDUCATION
By University of Illinois, at New Orleans
Conference Evaluation Form

Part I
Please indicate (✓) your primary identification in each of the following two categories.

<table>
<thead>
<tr>
<th>1. Position</th>
<th>2. Employer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Program Admin.</td>
<td>College or University</td>
</tr>
<tr>
<td>45</td>
<td>22</td>
</tr>
<tr>
<td>Institutional or Agency Admin.</td>
<td>Junior College</td>
</tr>
<tr>
<td>19</td>
<td>25</td>
</tr>
<tr>
<td>Instructional Staff</td>
<td>Secondary or Adult</td>
</tr>
<tr>
<td>9</td>
<td>21</td>
</tr>
<tr>
<td>Practitioner</td>
<td>Prof. or Related Assn.</td>
</tr>
<tr>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Consultant</td>
<td>Federal Agency</td>
</tr>
<tr>
<td>25</td>
<td>16</td>
</tr>
<tr>
<td>Research Activities</td>
<td>State Agency</td>
</tr>
<tr>
<td>5</td>
<td>34</td>
</tr>
<tr>
<td>Advisory Committee Member</td>
<td>Local or Regional Agency</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Association or Agency Staff</td>
<td>Private Business</td>
</tr>
<tr>
<td>23</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>Regional Medical Project</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
<tr>
<td></td>
<td>11</td>
</tr>
</tbody>
</table>

Part II
Please circle the response that best indicates your overall reaction to each of the following statements.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Undecided</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Total Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. The purposes and objectives of the Conference are clear to me</td>
<td>19</td>
<td>90</td>
<td>21</td>
<td>12</td>
<td>2</td>
<td>144</td>
</tr>
<tr>
<td>4. The structure and organization helped to make the Conference meaningful and achieved the objectives</td>
<td>20</td>
<td>73</td>
<td>34</td>
<td>14</td>
<td>3</td>
<td>144</td>
</tr>
<tr>
<td>5. Participants were well selected in view of the purposes and objectives of the Conference</td>
<td>50</td>
<td>65</td>
<td>20</td>
<td>6</td>
<td>4</td>
<td>145</td>
</tr>
<tr>
<td>6. The material presented was too general</td>
<td>10</td>
<td>22</td>
<td>26</td>
<td>76</td>
<td>12</td>
<td>146</td>
</tr>
<tr>
<td>7. The reactions were valuable in facilitating a focus on the Conference goal</td>
<td>22</td>
<td>73</td>
<td>23</td>
<td>22</td>
<td>5</td>
<td>145</td>
</tr>
<tr>
<td>8. The available time was properly allocated among activities</td>
<td>13</td>
<td>58</td>
<td>26</td>
<td>42</td>
<td>7</td>
<td>146</td>
</tr>
<tr>
<td>9. I was stimulated to think objectively about the topics and comments which were presented</td>
<td>33</td>
<td>83</td>
<td>8</td>
<td>11</td>
<td>5</td>
<td>145</td>
</tr>
<tr>
<td>10. The sessions followed a logical pattern</td>
<td>25</td>
<td>81</td>
<td>29</td>
<td>6</td>
<td>3</td>
<td>144</td>
</tr>
<tr>
<td>11. The Conference schedule was too rigid</td>
<td>13</td>
<td>26</td>
<td>13</td>
<td>82</td>
<td>11</td>
<td>145</td>
</tr>
<tr>
<td>12. The time spent in discussion groups was worthwhile and productive</td>
<td>21</td>
<td>61</td>
<td>28</td>
<td>30</td>
<td>5</td>
<td>145</td>
</tr>
<tr>
<td>13. New acquaintances were made which will help in future H.O.E. program development</td>
<td>66</td>
<td>70</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>146</td>
</tr>
</tbody>
</table>
14. The luncheon speakers added to the value of the Conference
15. The Ad Hoc sessions were very helpful
16. Overall, conferences such as this will contribute to H.O.E. program development
17. This Conference will be of great help to me in my regular activities
18. Overall, the Conference was well worth my participation

Part III

In the space below, please give your recommendations for next steps that should be taken for development of the health occupations education field. Any other comments are welcome. (Use back of page if necessary).
APPENDICES
APPENDIX A
Conference Personnel

Staff

Dr. Robert M. Tomlinson
Project Director
University of Illinois
Urbana, Illinois

Mr. Chester S. Rzonca
Associate Director
University of Illinois
Urbana, Illinois

Mrs. Lois Langdon
Assistant Director
University of Illinois
Urbana, Illinois

Mrs. Rebecca Rzonca
Research Assistant
University of Illinois
Urbana, Illinois

Dr. John Gerde
Dean of Occupational Education
Chicago City College
Chicago, Illinois

Mr. Ralph C. Kuhli, Director
Department of Allied Medical Professions and Services
American Medical Association
Chicago, Illinois

Mr. Arch Lugenbeel, Chairman
Allied Health Programs Division
Richland Technical Education Center
Columbia, South Carolina

Mr. Levitte Mendal, Assistant Director
National Health Council
New York, New York

Miss Helen K. Powers, Program Officer
Secondary, Post Secondary and Health Occupations Programs
Bureau of Adult, Vocational and Library Programs
U. S. Office of Education
Washington, D.C.

Miss Muriel Ratner
Chief Consultant
Health and Medical Technology Occupations
American Association of Junior Colleges
Washington, D.C.

Planning Committee

Miss Patricia Amos
Education Director (ASCP-MT)
Schools of Clinical Laboratory Science
University of Alabama
Birmingham, Alabama

Dr. George L. Brandon
Professor in Residence
Advisor to the Director
American Vocational Association
Washington, D.C.

Mrs. Clara Brentlinger
State Supervisor
Health Occupations Education
Oklahoma City, Oklahoma

Mr. Henry Davis
Assistant Director
Division of Vocational Education
Ohio State Department of Education
Columbus, Ohio

Mr. L. M. Detmer
Bureau of Paramedical Education
American Hospital Association
Chicago, Illinois

Mr. John R. Elliot
Specialist in Health Manpower
Division of Planning
Department of Labor
Washington, D.C.

A-1
Dr. Edwin L. Rumpf, Chief
Development Branch
Bureau of Adult, Vocational and
Library Programs
Office of Education
Department of Health, Education and
Welfare
Washington, D.C.

Mr. Michael Russo, Chief
Planning and Evaluation Branch
Division of Vocational and Technical
Education
Washington, D.C.

Dr. Byrl R. Shoemaker
State Director of Vocational Education
Ohio State Department of Education
Columbus, Ohio

Discussion Group Personnel

Chairman
Easton R. Smith
Associate Clinical Director
School of Inhalation Therapy
Orange Memorial Hospital
Orlando, Florida

Resource Person
Marianne Bottner, Supervisor
Health Occupations Education
State Board for Community Colleges
and Occupational Education
Denver, Colorado

Group 1

Recorder
Donna Watson, President
Oklahoma Dietetic Association
Oklahoma City, Oklahoma

Resource Person
Phyllis Hebbel, Head
Health Occupations Education
Eastern Iowa Community College
Davenport, Iowa

Group 2

Recorder
Mary Lee Siebert
Health Occupations Coordinator
Mallory Technical Institute
Indianapolis, Indiana

Resource Person
James D. Burnett, Coordinator
Health and Public Service Technologies
Cuyahoga Community College
Parma, Ohio

A-2
Group 3

Chairman
David R. Terry, Chairman
Department of Health Technologies
Weber State College
Ogden, Utah

Resource Person
Clara Brentlinger
State Supervisor
Health Occupations
Oklahoma City, Oklahoma

Recorder
Pat Amos, Educational Director
School of Clinical Laboratory Science
University of Alabama
Birmingham, Alabama

Group 4

Chairman
Dwight Marshall, Dean
College of General and Technical Studies
University of Nevada
Las Vegas, Nevada

Resource Person
Margaret G. Horne
Assistant State Supervisor
Health Occupations Education
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Group 6

Group 7

Group 8
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CONFERENCE PROGRAM

Changes

Wed. Dr. Grant Venn was unable to attend the Conference due to illness. Dr. John S. Zapp, Special Assistant for Dental Affairs, DHHS extended a welcome to Conference participants from the U.S. Office of Education.

Dr. Rupert N. Evans delivered the presentation describing the "Roles and Opportunities for Health Occupations Education through Vocational Education."

Mr. Arch Lugeneel was unable to attend the Conference. Mr. Lenneth H. Mills, Assistant Director of Instructional Services, Kenosha Technical Institute, served as a reactor to topic II.

Fri. Dr. Byrl R. Shoemaker was unable to attend the Conference. Mr. Harry F. Davis, Assistant State Director of Vocational Education served as a reactor to topic V.

Substitutes for group chairmen (B-4)

Group II Mrs. Wilma B. Gillespie for Mr. Arch Lugeneel

Group VI Mr. Dale F. Peterson for Dr. John Grede
At Invitational

NATIONAL CONFERENCE FOR HEALTH OCCUPATIONS EDUCATION

New Orleans

February 4 - 6, 1970

Conducted by the University of Illinois at Urbana-Champaign under contract with the U.S. Office of Education, Division of Vocational-Technical Education

Conference Registration

Tuesday 3:00 - 5:00 p.m. Lobby
7:00 - 9:00 p.m. Lobby
Wednesday 8:00 - 9:00 p.m. Lobby

Tuesday, February 3, 1970

Tues. 2:00 p.m. Conference work and planning session for Conference personnel
Carnival Room

Wednesday, February 4, 1970

Wed. 9:00 a.m. General Chairman: Dr. Robert M. Tomlinson, Conference Director
Ballroom

Welcome: The Honorable Victor H. Schiro, Mayor, City of New Orleans

Introductions: Conference Staff, Planning Committee

Wed. 9:30 a.m. ROLES AND OPPORTUNITIES FOR HEALTH OCCUPATIONS EDUCATION THROUGH VOCATIONAL EDUCATION
Ballroom

Session Chairman: Miss Helen K. Powers, Program Officer, Secondary, Post Secondary and Health Occupations Programs, Bureau of Adult, Vocational and Library Programs, U.S. Office of Education

Speaker: Dr. Grant Venn, Associate Commissioner, Bureau of Adult, Vocational and Library Programs, U.S. Office of Education

Wed. 10:00 a.m. Coffee Break

Wed. 10:15 a.m. UTILIZATION AND PREPARATION OF PERSONNEL FOR THE HEALTH CARE SYSTEM(S)
Ballroom

Speaker: Miss Elizabeth E. Kerr, Director, Program in Health Occupations Education, Division of Health Affairs, College of Medicine, University of Iowa

Wed. 10:55 a.m. Reactors: Dr. B. E. Childers, Executive Secretary, Committee on Occupational Education, Southern Association of Colleges and Schools
Ballroom

Mr. L. M. Detmer, Director, Bureau of Paramedical Education, American Hospital Association

Dr. Israel Light, Dean, School of Related Health Sciences, University of Health Sciences

Mr. Benjamin C. Whitten, Area Superintendent, Vocational Division, Baltimore City Public Schools
Wed. 11:30 a.m.  Question and Answer Period
            Ballroom

Wed. 12:15 p.m.  Luncheon
            Pelican Room
            Chairman:  Mr. Levitte Mendel, Associate Director, National Health Council, New York
            Speaker:  Dr. William Stewart, Chancellor, Louisiana State University Medical Center, New Orleans

Wed. 1:30 p.m.  COORDINATION AND COOPERATION IN PLANNING, DEVELOPING AND CONDUCTING
                HEALTH OCCUPATIONS EDUCATION PROGRAMS
            Ballroom
            General Chairman:  Mr. Ralph C. Kuhli, Director, Department of Allied Medical Professions
                and Services, American Medical Association
            Speaker:  Dr. Joseph Hamburg, President, Association of Schools of Allied Health Professions
                and School of Allied Health Professions, University of Kentucky

Wed. 2:10 p.m.  Reactors:  Mr. Richard G. Allen, Director of Education, New England Hospital Assembly,
                N.E. Center for Continuing Education, University of New Hampshire

                Mr. Harry E. Davis, Associate Director, Allied Health Professions, Bi-State Regional
                Medical Program, St. Louis

                Dr. Katherine L. Goldsmith, Deputy Director, Allied Health Professions, Research and
                Instruction Projects, U.C.L.A.

                Mr. Arch Lugenbeel, Chairman, Allied Health Program Division, Richland Technical
                Education Center, South Carolina

Wed. 2:45 p.m.  Question and Answer Period
            Ballroom

Wed. 3:15 p.m.  Instructions for Discussion Groups
            Ballroom:

Wed. 3:25 p.m.  Coffee Break

Wed. 3:40 p.m.  Discussion Groups - Pre-identified as to members, chairman, recorder and resource personnel
                (For room assignments, see last page)

Wed. 5:00 p.m.  Adjournment

Wed. 5:00 p.m.  Attitude Adjustment Hour

Rooms will be available for evening Ad Hoc Sessions.

Thursday, February 5, 1970

Thur. 8:30 a.m.  Announcements
            Ballroom
            General Chairman:  Mrs. Mary Hume, Consultant, Health Occupations Education, Indiana
                Vocational Technical College, Indianapolis

            Report from Discussion Groups:  Gary Arsham, M.D., Carol Gibson, M.S., Lee Hertzman, M.P.H.,
                Fellows in Medical Education, Center for the Study of Medical Education, University of
                Illinois Medical Center

B-2
Thur. 9:00 a.m. OCCUPATIONAL EXPLORATION AND ENTRY LEVEL PROGRAMS IN HEALTH OCCUPATIONS

Session Chairman: Mr. Dale F. Peterson, Administrative Assistant and Research Coordinator, Program in Health Occupations Education, Division of Health Affairs, University of Iowa and Vice-President Elect, Division of Health Occupations Education, American Vocational Association

Speaker: Dr. Lawrence Borosage, Professor, Secondary Education and Curriculum, College of Education, Michigan State University

Thur. 9:40 a.m. Ballroom

Dr. Sandra H. Noall, Health Occupations Specialist, Utah

Mr. Jerry C. Olson, Assistant Superintendent, Occupational Vocational and Technical Education, Board of Public Education, Pittsburgh

Mr. Albert Pitts, Consultant, Vocational-Technical Education, Union High School, Union Grove, Wisconsin

Thur. 10:15 a.m. Coffee Break

Thur. 10:15 a.m. Discussion Groups - (Rooms and members consistent with original listing)

Thur. 12:15 p.m. Luncheon

Chairman: Mrs. Lois Langdon, Assistant Director, N.C.H.O.E.

Speaker: Mr. Whitney Young, Jr., Executive Director, National Urban League, New York

Thur. 1:30 p.m. PERSONNEL RESOURCES DEVELOPMENT FOR HEALTH OCCUPATIONS EDUCATION

General Chairman: Dr. Douglas A. Fenderson, Director, Manpower Utilization Research, National Center for Health Services Research and Development, U.S. Public Health Service

Speaker: Dr. Robert E. Kinsinger, Program Director, W. K. Kellogg Foundation, Michigan

Thur. 2:10 p.m. Reactors: Dr. Frederick G. Adams, Special Assistant to the President, University of Connecticut

Colonel L. Berlow, Chief, Department of Medical Support Services, Medical Service School, Sheppard Air Force Base

Dr. Lewis D. Holloway, Assistant Professor, Program in Health Occupations Education, University of Iowa

Dr. Joseph Kaddish, Bureau of Health Professions Education and Manpower Training, National Institute of Health

Thur. 2:45 p.m. Question and Answer Period

Ballroom

Thur. 3:15 p.m. Coffee Break

B-3
Thur. 3:30 p.m. Discussion Groups

Thur. 5:00 p.m. Adjournment

Rooms will be available for evening Ad Hoc Sessions.

Friday, February 6, 1970

Fri. 8:30 a.m. Report from Discussion Groups
Ballroom

OPERATIONAL STRATEGIES AND RESOURCES FOR EXTENDING HEALTH OCCUPATIONS EDUCATION PROGRAMS

General Chairman: Dr. Robert M. Tomlinson, Conference Director

Speaker: Dr. Rupert N. Evans, Professor, Vocational and Technical Education, College of Education, University of Illinois

Fri. 9:15 a.m. Reactors: Dr. Mary L. Ellis, Director, Technical Educational Research Center, Washington Office

Dr. Byrl R. Shoemaker, Director, Vocational Education, Ohio

Dr. Edwin Rumpf, Chief, Development Branch, Bureau of Vocational and Technical Education, U.S. Office of Education

Dr. John E. Bean, Research Associate, National Center for Educational Research and Development, U.S. Office of Education

Fri. 9:45 a.m. Question and Answer Period
Ballroom

Fri. 10:45 a.m. Overview of Handbook - Mrs. Lois Langdon, Assistant Director, N.C.H.O.E.
Ballroom

Fri. 10:45 a.m. Coffee Break

Fri. 11:00 a.m. Discussion Groups

Fri. 12:15 p.m. Luncheon

Chairman: Mr. Chet Rzonca, Associate Director, N.C.H.O.E.

Speaker: Dr. Fred N. Elliott, Assistant Director, American Hospital Association and General Director and Vice President, Mount Sinai Hospital, Chicago

Fri. 2:00 p.m. Formal Adjournment

Fri. 2:15 p.m. Optional Ad Hoc Handbook Session

ROOM LISTING FOR DISCUSSION GROUPS

<table>
<thead>
<tr>
<th>Group</th>
<th>Room</th>
<th>Chairman</th>
<th>Group</th>
<th>Room</th>
<th>Chairman</th>
</tr>
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<tbody>
<tr>
<td>1 Mezzanine Floor</td>
<td>Carnival Room A</td>
<td>Mr. Easton R. Smith</td>
<td>7 Ground Floor</td>
<td>Magnolia Room</td>
<td>Dr. Gary Dunn</td>
</tr>
<tr>
<td>2 Mezzanine Floor</td>
<td>Carnival Room B</td>
<td>Mr. Arch Lugeneeol</td>
<td>8 First Floor</td>
<td>Hawaiian Room</td>
<td>Dr. William H. Jepson</td>
</tr>
<tr>
<td>3 Mezzanine Floor</td>
<td>Napoleon Room</td>
<td>Dr. David K. Terry</td>
<td>9 Mezzanine Floor</td>
<td>Ballroom North</td>
<td>Dr. Lewis D. Holloway</td>
</tr>
<tr>
<td>4 Mezzanine Floor</td>
<td>Patio Room 1</td>
<td>Dr. Dwight Marshall</td>
<td>10 Mezzanine Floor</td>
<td>Ballroom South</td>
<td>Dr. Larry J. Bailey</td>
</tr>
<tr>
<td>5 Mezzanine Floor</td>
<td>Patio Room 2</td>
<td>Dr. Virginia Barham</td>
<td>11 Ground Floor</td>
<td>Pelican Room</td>
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<tr>
<td>6 Ground Floor</td>
<td>Creole Room</td>
<td>Dr. John F. Grede</td>
<td>12 Ground Floor</td>
<td>Pelican Room</td>
<td></td>
</tr>
</tbody>
</table>

B-4
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APPENDIX D

Self-Destruct: A Concept for Training Allied Health Personnel to Meet Immediate Problems
G. Fredrick Dunn

Health Services Survey and Training Program
Albert Pitts

Health Careers Guidance Clinic
Practical Nurse Work-Study Program
Lawrence Abrams

Exploratory and Entry Level Health Occupations Programs
Jerry C. Olson

Some Facts About Vocational and Technical Education
Helen Powers

PROGRAM AND PERSONNEL APPROVAL
Accreditation, Licensure, Registration and Certification
Self-destruct: A Concept for Training Allied Health Personnel to Meet Immediate Problems

G. Fredrick Dunn
Coordinator for Allied Health Sciences
Office of the Dean
School of Medicine
University of Washington
Seattle, Washington

Nothing else in the world...not all the armies...is so powerful as an idea whose time has come.

--Victor Hugo (1802-1885)
The Future of Man
Self-destruct: A Concept for Training Allied Health Personnel to Meet Immediate Problems

The concept of change as it relates to something as dynamic as health care is no longer valid. We need a new concept to solve the problems of today, and we need a concept that will self-destruct when the problem is resolved to avoid the impediment we face today, namely, licensing, accreditation, professional societies, and vested institutions.

The self-destructing mechanism does not mean we intend to destroy the present non-system and its supporting institutions, which have done an outstanding job in those areas for which they were designed: the eradication of most infectious diseases, discovery of extraordinary drugs, and innovations in surgical treatment. However, these institutions are not giving us the solutions for today's most pressing health care problems: alcoholism, population control, death by automobiles, problems of aging, and drug addiction. Institutions must play the role of providing leadership, manpower, and expertise to this concept. We need the establishment, but we also need an immediate problem-oriented concept that will solve health care problems and remove itself.

Although medical schools plan and legislate for more space and money, the great expense has been not for increased patient care but for their hobby shops. Cure has been the focus of the institutions, but care is what people need. We don't have what we want because those with vested interests resist change. Their commitment to what they have is based on principles less relevant to today's health issues. We suffer from our unwillingness to face reality not from lack of knowledge.

Change requires time, and we don't have time for institutions to tool up and change, as they will not be able to catch up with even today's problems. And what has to be done today may not necessarily need be done tomorrow.

Funding agencies serve as an impediment by describing the ground rules under which money is awarded without review to determine whether the rules are still valid. The largest health care funding agency in the nation today uses as its criterion for awarding money an escalation of health manpower along lines that are no longer valid for programs that are no longer relevant. This process encourages self-perpetuating bureaucracies.

D-2
The problem-oriented self-destructing concept can train a large number of allied health personnel to do a limited number of jobs in a short period of time. A short intensive training program followed by a period of production on the job and a return for further training or training in another area can provide manpower operable immediately.

The academic blind faith in curriculum and time requirements is part of the institutional commitment that stands in the way. An orthopedic assistant does not need a course in psychology or physics in order to do his job well, but he does need a course in asepsis procedures, surgical assisting, and in application of uncomplicated leg and arm casts.

The over-kill is the direct result of the unrelated curriculum to the job requirements. The 2-year RN can apparently do the same job as the 3- and 4-year RN. With today's advanced preparation of drugs, the pharmacist's job of reading prescriptions and counting out pills can be handled by less educated technicians. Dental hygiene and preventative medical education can eliminate many health care problems.

Hospitals are also guilty of the over-kill syndrome as they are designed as maximal care, crisis clinics. Would it not be better to have primary-care satellite clinics throughout the cities instead of giant medical centers. It is boils, fever, headaches, and ear, nose, and throat disorders that most people suffer from. These problems can be treated at a lower level before developing into a crisis.

Present accreditation and licensing are rejected for a new concept to provide health manpower. Accreditation is not based on task analysis and locks in course requirements, prohibiting innovation. The institutionalized accreditation is a form of academic-oriented thinking that is no longer valid. The Medex in the Northwest must necessarily not take the same courses as the Medex in South Carolina as the program is based on needs assessment relative to the area. A new kind of credential is needed that does not identify courses but levels of performance.

Let's admit to what the situation is and demand a new approach. But lest this new approach becomes part of the problem, it must be self-destructing. We must conduct a needs assessment, task analysis for each problem. And when the problem no longer exists, we must go out of business.
Health Services Survey and
Training Program

Albert Pitts
Program Administrator
Vocational - Technical Education
Union High School
Union Grove, Wisconsin
There is no thinking person here today who will not attest to a rather foreboding picture of the needs of the health occupations in the '70's and that we secondary school educators are doing an inadequate job of supplying sufficient numbers of recruits who know what their opportunities are in this field, and who are sufficiently motivated and psychologically ready to pursue such study or employment in the health occupations field.

As a secondary school vocational educator who has an opportunity of reacting to the picture Doctor Borosage has painted, I should like to sketch a scene of what we have done at a small high school in Wisconsin, to redress some shortcomings that we recognize in the same light described here today by our main speaker.

As one of 34 pilot schools in vocational education in Wisconsin in 1965, our high school was selected to participate in a three-year study by the Wisconsin Department of Public Instruction to "maintain, improve, or extend" vocational education opportunities among secondary school students. These results would be studied for possible adoption by some of the other 400 high schools in Wisconsin.

One of our programs focused on the needs of the Health Occupations. With the cooperation of the superintendent and staff of the Southern Wisconsin Colony and Training School, a state institution for the mentally handicapped, located close by, we set out to exposing interested senior students randomly selected according to ability and interest, in a program called, "Health Services Survey & Training Program." Noting that many of the 77 different job descriptions for the 900 employees at the institution of 1,300 patients were unfilled for want of qualified, trained personnel, we set out to closing the gap - in our way of developing an innovative, experimental program of exposing students to the health occupations, while striving to meet their psychological needs as learners, to encourage these learners to enter post-high school training or immediate employment in this industry.

The objectives we established for this program seem very much in line with Doctor Borosage's thesis that the needs of the health occupations should be learned as part of a more meaningful exposure to this field, while at the same time tending to basic psychological needs of learners.

These objectives in our program are:

1) to gain an awareness of different types of hospitals and medically-oriented institutions found in our society. Purpose: To gain an
understanding of the services rendered in the field of health.

2) To gain an awareness of the different types of positions available at these hospitals and medically-oriented institutions. Purpose: To learn of the opportunities and job requirements available in hospitals and medically-oriented institutions.

3) To accept all types of people. Purpose: To understand oneself to better understand others.

4) To focus on the field of mental retardation. Purpose: To gain understanding of the retarded as a person and as a patient. To learn of his needs and of the services available to meet those needs. (The program is focused on mental retardation in this area because of the availability of the Southern Colony as a laboratory.)

5) To provide training in Daily Living Care. Purpose: To provide employable skills, knowledge, and attitudes which could lead to employment upon graduation from high school as an institutional worker, or which will aid the student to make a better choice of post-high school training in the health occupations.

Basic assumptions of the program are:

1) The survey course is not intended to be a vertical training course, but rather exploratory in nature.

2) The resources of the larger community are utilized to afford maximum motivation for learning.

3) The laws of learning are implemented through experiences both in school and out, vicarious and direct.

4) Reinforcement learning is continued on a cooperative training program utilizing stations in the field of health in which observation not training is stressed.

Time does not allow an explanation of the mechanics of the program, other than to relate, in brief the following:

Senior students take instruction from a teacher-manager guidance counselor for two hours per day during the first quarter. Individual counseling precedes selection into the class. Class work consists of surveying job requirements and opportunities in the health service industry; studying normal and abnormal child growth and development; studying interpersonal relations; studying the mentally handicapped.

Following the first quarter of instruction at the high school, students are bused one mile to the Southern Wisconsin Colony & Training School. The second quarter work at the Colony starts with an orientation period of two weeks to institutional employment, conducted by the Colony staff. Students are then assigned to training stations there, including the hospital, school, the activity department, physical and occupational therapy, dental, pharmacy, laboratory, and individual cottages. A period of 2 1/2 hours per day is spent at the Colony from Monday to Thursday as a paid employee performing daily living care duties, all designed to expose the learner to a particular field.
of work in the health occupations.

The third quarter requires the student to be rotated to a different training station at the Colony to experience a different field of work. And the fourth quarter is spent at the Colony in a department of the student's choice, or the student has an option of selecting a health institution within a 30-minute driving distance of her choosing, including a curative workshop, school for the brain damaged, nursing homes, or a general hospital.

On Fridays during the three-quarters of co-op training and observations, the student receives group counseling at the high school by the teacher-manager, works on research reports, or is taken on field trips to other health care institutions.

Results of the program, now in its fifth year, are gratifying. Three out of four students enter either post-high school training in the health occupations or enter gainful employment in the health occupations.

Psychological growth experienced by these students is quick and lasting. An almost instant maturity becomes apparent when the student is first exposed to her new role at the institution for the mentally handicapped. Accrual of transfer value was hoped for in the design of the program, and can be explained as logically happening in our implementing the findings of psychologists whose research tell how students best learn and mature.

When structuring the program in 1965, we reviewed the report of the Association for Supervision and Curriculum Development in its work of 1962, in which the psychological needs of learners were expressed by the nation's leading educational psychologists in position papers submitted to the Association.

Four major findings were summarized in a framework of reference which is variously called "phenomenological" or "perceptual", "interactional" or "existential." They are fraught with significant implications for educational practice and became the basis for our program. The basic principles are:

1. Behaving and learning are products of perceiving.
2. Behavior exists in and can, therefore, be dealt with in the present.
3. All people everywhere have a basic drive toward health and actualization.
4. Much of a person's behavior is the result of his conception of himself.

We set out to implement these findings in a program which includes orientation to a field of work which will require more trained personnel than any other industry in the nation in the '70's, while also meeting psychological needs of learners. Partnerships would be formed with agencies of the health occupations to assist the learner as well as to bear down on the problem of
getting properly motivated recruits to enter post-high school training or employment in this field.

Our rationale was founded on the beliefs generated by psychologists Maslow, Kelly, Rogers, and Combs that the behavior of an individual is a function of his ways of perceiving. That the way a person behaves at a given moment is a direct expression of the way things seem to him at that moment. That people do not behave according to the "facts" as they seem to an outsider. That the behavior of a person at any given moment is a result of how things seem to him. That what a person does, what a person learns, is a product of what is going on in his unique and personal field of awareness. Finally, that people behave in terms of the personal meanings or perceptions existing for them at the moment of action. We set out to utilizing the laboratory made available to us to open up a new perceptual field unique to each of our learners.

This becomes the "stuff" of our new program to excite students to the opportunities which exist in the health occupations - a learner-centered approach to meeting their own psychological needs, while learning about opportunities and requirements for employment in the health occupations assisting the mentally handicapped.

Program efforts to meet the needs of learners: to be challenged, to be productive, to make decisions, to know themselves, including their strengths and weaknesses, to experience a sense of freedom and worth - these needs met in the service of others have given new meaning to these students to want to learn - the real purpose of any educational program.

The results of these efforts has been the beginning of the development of more adequate persons, more motivated to self-actualization, more capable of identifying with others, with a richer perceptual field, more open to experience, and more willing to enter the Health Service Industry.

Adoption of similar programs on the high school level - with more attention given on lower educational levels to opening doors leading to preorientation to the health occupations, in concert with closer articulation between health occupations consultants, parents, teachers, vocational coordinators, guidance counselors, school administrators, and boards of education will give rise to a brighter picture of orientation to the health occupations with improved quality and quantity of recruits to this field of work or study. And our students will be better people for the experience.
Health Careers Guidance Clinic

and

Practical Nurse Work-Study Program

Lawrence Abrams
Director of Admissions and Registrar
College of Allied Health Sciences
Thomas Jefferson University
Philadelphia, Pennsylvania

D-9
Health Careers Guidance Clinic

Jefferson's College of Allied Health Sciences established the Health Careers Guidance Clinic in 1968 from a grant of funds from the United Health Services of the United Fund and the Heart Association of Southeastern Pennsylvania as a community resource to motivate and guide high school students towards careers in the health fields. The Clinic fills important gaps in the recruiting and counseling services of school and employment systems, which often cannot or do not emphasize adequately the specialized areas of health careers.

There are three main features of the project: (1) One-day Student Clinics with separate dates designed specifically for junior high school students and for senior high school students; and (2) One-day Counselor Workshops for interested guidance counselors, teachers, school nurses, etc.; and (3) Data collection to improve future recruitment and guidance methods.

Student Clinics are held from 9 A.M. to 1 P.M. on Saturdays. At the Clinic, the student is introduced to the whole spectrum of health careers for students of all ability levels. Each student has a conference with a health-oriented Educational Counselor who discusses realistic health career possibilities with the student. This counselor listens to the student's career interests, answers his questions, and helps him identify a preference among several careers. The student then has person-to-person conferences with each of his three choices from among the many health professionals available. These professionals will tell the student everything from the content of a typical day's work, to educational and personal requirements, to the range of salaries. The student has the opportunity to see the professionals in their actual work settings, where he may participate in demonstrations. He is provided the opportunity to question and discuss, first with the professional and at the end of the Clinic session with the Educational Counselor, any points of further interest aroused by the session. Advice is given the student for appropriate follow-up which, for example, may lead the student to volunteer for service in an area hospital or matriculate in a hospital training program.

Counselor Workshops include a full-day session at Thomas Jefferson University where counselors visit clinical, laboratory, and business areas to see how the center works. Demonstrations, student case-histories, audio-visuals, and discussions support the counselors' experience in the medical center and answer their questions about health careers. The Workshops are held six times during the school year to give the counselors guidance information on health careers, and to
equip them for counseling a much larger number of students than can be reached
by the Health Careers Guidance Clinic alone.

The Health Careers Guidance Clinic has been an outstanding success. Since
October 1968, more than 900 students have participated in 32 clinics and 377
of these students have been from minority groups. These students represented
113 different area schools, including 8 local colleges and universities. Verbal
and written responses by student and counselor participants have expressed
overwhelming satisfaction with the program. The Clinic draws upon the assist-
ance and participation of the school systems of Philadelphia, Delaware, and
Montgomery counties as well as public service agencies, health and welfare
agencies, professional organizations and individual educators, health professionals,
and guidance personnel. Liaison has been established with these groups and
individuals, and a referral system is now in operation. The Health Careers
Guidance Clinic is seen as a continuing community resource which provides a
portal of entry for the student and others to further motivational, guidance,
educational and employment opportunities existing in Philadelphia and sur-
rounding counties. There is no charge for the Clinic.

Practical Nurse Work-Study Program

Beginning with the 1969 Fall term, the School of Practical Nursing has
offered a work-study program for students who for financial reasons need to
extend their Licensed Practical Nurse training over a 21-month period. The
extended time enables the student to earn while learning. Time off from studies
permits employment in related health services in the Thomas Jefferson University
Hospital or allows career-oriented mothers to spend afternoons at home guiding the
development of their children. Students may still elect to complete the tradi-
tional 12-month program, offered concomitantly, by attending classes full time.

The curriculum change opens new opportunities for high school students who
must remain self-supporting and who could not otherwise afford to enter the field
of Practical Nursing. It provides a new source for scarce hospital personnel and
thus helps to fill the urgent need for health workers who can provide vital
nursing skills.

The work-study plan offers new opportunities for the culturally, socially
and economically disadvantaged students of our urban areas, allowing participants
to be self-supporting during training. By working in part-time positions each of
the work-study students are able to earn enough to pay for tuition and other expenses of schooling, with a significant monthly income cleared for living expenses or savings. The extended training period also allows time to increase the maturity level of students just out of high school. The plan benefits students whose learning ability responds to a slower pace by allowing more time to absorb and master the course content. Both men and women are eligible for training under the new plan. It is expected that the program will interest more men with financial obligations and encourage more mature women seeking a new career after family responsibilities have lessened.

The new program is the first of its kind in Pennsylvania and has been approved by the University administration and by the State Board of Nurse Examiners. It will prepare the student to master skills and related knowledge needed to perform the duties as stated in the Practical Nurse Law. The program is designed to assure that students will be fully eligible to take the State Board Licensing examination required for all Licensed Practical Nurses in the Commonwealth of Pennsylvania.
Exploratory and Entry Level
Health Occupations Programs

Jerry C. Olson
Assistant Superintendent
Pittsburgh Public Schools
Pittsburgh, Pennsylvania
Exploratory and Entry Level Health Occupations Programs

The Pittsburgh Public Schools attempt to provide exploratory and entry-level Health Occupations Programs that are responsible to educational considerations centering around forces outside the system and factors within the system that allow for better program development, implementation and management. Internally, our efforts are centered on at least three major components: (1) developing a continuum; (2) researching commonalities; and (3) utilizing a systems approach in the implementation and management of programs.

Program Continuum (Charts 1 and 2)

The specific age a child becomes aware and responsive to his environment and the world around him varies from child to child and will depend a great deal on the socio-economic level, cultural background and the experiences the student is exposed to early in his life. Clearly, this awareness begins with pre-schoolers as they make observations about their environment. The first observations about the health field begin very early in life and continue through formal school experiences as the individual becomes more responsive to the world surrounding him and responsible for his own role in it. Charts 1 and 2 take the child from his pre-school experiences through post-graduate work in the 13th and 14th years in the health career field. A comparison is made between the type of student reaction that is expected by grade levels and the kind of educational experiences relating to the health field that a student could have in the Pittsburgh Public Schools today. For example, in grades K to 5 the purpose of the educational experience is for children to begin to develop "chains" about various occupations and relationships that they experience in the world of work existing around him. In grade 6, youngsters will be asked to make "identifications" with concrete experiences that relate to many fields, including the health field, as they have planned educational experiences which relate to human relations and communications, among others. In grades 7 and 8 children are asked to "respond" to hands-on kinds of activities relating to the home, health and community cluster as well as to nine other clusters. In grade 9 the student participating in a health occupations exploratory survey would be expected to develop and organize "concepts" that comprise the health occupations. In grades 10, 11, and 12 the student would
react to principles and structure in a specified skill-centered program designed to develop saleable competencies in the student. Clustered programs in business-health occupations, medical assistant health occupations, research laboratory health occupations upon graduation provide the student with skills to go to work or to continue their education. The purpose of the advanced post-graduate work would be to enable the student to study "problem solving" and "strategy-using" techniques and to apply these in the clinical aspects of the health career skill development program. The Pittsburgh Public Schools are presently conducting a number of health-related programs which are cited in Chart 2. In addition, itemized on this chart are several new programs which are presently being contemplated for implementation.

Commonalities (Chart 3)

To develop the clustered programs offered in grades 10, 11 and 12, it is imperative that commonalities between courses commonly taught as separate and discrete entities be examined carefully. An example of this technique of task analysis is presented in chart 3 for the fields of Practical Nurse, Nurse Aide, and Surgical Technician. The purpose in studying commonalities is to develop educational programs that are open-ended and allow students to develop saleable skills and competencies that are commensurate with their abilities. Such a design allows for the identification of spin-off levels within clusters of jobs. The identification of these levels is very closely tied to licensing and/or employment alternatives that are open to students that participate in the instruction in a specific cluster of occupations that show a wide range of commonalities.

The task analyses for the jobs comprising a cluster are then studied to determine the (1) theoretical knowledge; (2) technical skill; (3) applied math skill; (4) applied science skill; and (5) communication skill that is necessary to function at various spin-off levels within the cluster. A wide range of clustered programs are necessary to provide the flexibility to serve the range of individuals seeking opportunities in the health field and to meet the needs of the health community today.

System - Implementation (Chart 4)

Chart 4 describes the systems approach to the implementation of the entire range of exploratory and skill-centered programs that will first motivate the
student concerning the health career field; and secondly, prepare him with saleable competencies in the field. The starting point is to motivate the individual and stimulate his interest in the health field. The "input" revolves around curriculum, research, analyses and operational changes that are necessary to conduct health programs based on clusters, sub-clusters and commonalities derived from job analyses. The "procedure" is the heart of the entire process and involves the inter-personal relationship of teacher and student. It might be thought of as "education engineering". As a result of the preparation of competencies in the individual student, a consortium of student, teacher, counselor and employer can make a "decision" concerning an appropriate spin-off level. A health career would, in fact, be a significant "output" for the individual and for society if he were to become a productive member in the health community. The implementation of the pattern of commonalities and clusters described above negate a permanent stopping point for an individual but would merely provide only a temporary stop. The career ladder cluster system allows for vertical career mobility and the advancement of the individual in his chosen field to the best of his abilities.

The three components of the Pittsburgh Public Schools' program in the health fields are similar to the wide range of experiences that students would have in any one of ten career clusters beginning with pre-school students and going through the 14th grade. The health field has been a rather new entry into the total pattern of career opportunities provided at both the exploratory and the skill-centered levels in the high schools. The preparation of students in entry-level saleable skills has been productive and has led to successful careers for students participating in these clustered programs.
Program Continuum

Pre-School  
Awareness of the world around them

K-5  
Self-understanding of the world of work

Grade 6  
Concrete experiences: Human Relations  
Communication

Grade 7 & 8  
Home, Health, Community cluster area

Grade 9  
Health Occupations exploratory survey

Grades 10-12  
Business Health Occupations skills  
Medical Assistants Health Occupation skills  
Research Laboratory Health Occupation skills

Observation  
Chains  
Identification  
Response  
Concepts  
Principles  
Structure
PROGRAM CONTINUUM

Existing

Problem-Solving
Strategy-Using

Graduate

Medical Record Clerk
Nurse Aide
Nurse Refresher
Medical Secretary
Surgical Technician
Practical Nurse
Food Service Supervisor
Inhalation Therapist
Purchasing Agent Ass’t
Medical Lab Ass’t

13-14

Bio-Medical Equipment Tech.
Nurse-Physician Ass’t
Corpsmen
Anesthesiology Ass’t
Orthopedic Ass’t
Podiatric Nurse Practitioner
Child Health Ass’t

New
COMMONALITIES

EDUCATIONAL PROGRAMS

SPIN-OFF LEVELS

Licensing and/or Employment Alternatives

Practical Nurse
148 Tasks

Nurses Aid, 93 Tasks

Surgical Technician
136 Tasks
Individual with keen interest in Health Field

Curriculum: research, analysis, operational changes

Teaching-Learning process

Educational Engineering

Employment-spin off level

Rewarding of productive performance

Temporary "Career Mobility"
Some Facts About Vocational
and Technical Education

Helen Powers
Program Officer
Secondary, Post-Secondary and
Health Occupations Programs
Bureau of Vocational and Technical Education
U.S. Office of Education
Some Facts About Vocational and Technical Education

PRESENT STATUS OF H.O.E. UNDER THE VOCATIONAL EDUCATION ACTS

VTE is the largest single producer of trained health workers whose preparation is below the baccalaureate level. From its inception, VTE has supported programs in this field beginning with its first curriculum offering established in 1918.

The continuing growth in health occupations enrollments in programs using federal vocational funds is shown in the figures below:

Enrollees in Health Occupations for Selected Years (under Vocational Education Acts)

<table>
<thead>
<tr>
<th>Year</th>
<th>Enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>175,000* (following VEA 1968)</td>
</tr>
<tr>
<td>1968</td>
<td>141,251</td>
</tr>
<tr>
<td>1966</td>
<td>83,677</td>
</tr>
<tr>
<td>1964</td>
<td>59,006 (following the '63 VEA...)</td>
</tr>
<tr>
<td>1957</td>
<td>7,101 (first year of earmarked HOE funding)</td>
</tr>
</tbody>
</table>

Some 18,447 schools, including secondary schools, community colleges, universities, and vocational-technical schools, offered vocational programs in 1967, with about 1200 of these schools offering health occupations curriculums.

Examples of curriculum offerings, together with enrollment data, will serve to show some of the program's emphasis and scope:

Enrollments by Instructional Area for Selected Years

<table>
<thead>
<tr>
<th>Instructional Area</th>
<th>1966</th>
<th>1968</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dental Assistant</td>
<td>6304</td>
<td>8374</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>935</td>
<td>1545</td>
</tr>
<tr>
<td>Med. Lab. Assistant</td>
<td>976</td>
<td>3994</td>
</tr>
<tr>
<td>Nurse, Assoc. Deg.</td>
<td>4215</td>
<td>14,812</td>
</tr>
<tr>
<td>Food Service Supervisor</td>
<td>186</td>
<td>1380</td>
</tr>
<tr>
<td>Med. X-Ray Technician</td>
<td>541</td>
<td>1982</td>
</tr>
<tr>
<td>Voc. or Prac. (LPN)</td>
<td>47,990</td>
<td>62,743</td>
</tr>
<tr>
<td>Other</td>
<td>22,530</td>
<td>46,430</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>83,677</strong></td>
<td><strong>141,251</strong></td>
</tr>
</tbody>
</table>

*Estimated
In 1968, disadvantaged and handicapped students comprised 2,556 of the total vocational health enrollees. Placement on jobs for those who completed a post-secondary program in health occupations education in 1968 was reported by the States as very high - in fact over 94% of the available graduates were employed. Schools report that the demand for all their graduates remains consistently high, and exceeds the number available.

Vocational funds, comprised of Federal, State, and local education monies, provided a total of $46,625,000 for the education of health workers in 1968. The Federal share of this total was $11,550,000. Expenditures per trainee in this program were computed on the basis of total Vocational health enrollments, completions, and placements. The average expenditure per completion was $1,036.49. On the basis of placement in the occupational field for which students were prepared, the expenditure was $1,519.39 per graduate.

In FY1969, an estimated 175,000 persons were enrolled in health occupations curriculums under vocational funding. Even if Federal appropriations for VTE remain at the 1969 level, some program growth is expected. However, if the 5-year projected plans of the States are fully implemented, there should be considerable increase in programs and in enrollments, both at high school and post-secondary levels.

Many more trainees qualified for admission to the programs would be admitted if space and faculty were available. The critical shortage in both these resources is not easily overcome. Construction programs under VEA '63 have increased space to some extent, but the short supply of teachers requires not only more time to resolve, but a considerable investment in experimental and developmental activities. Programs under the Vocational Education Acts, and under the Educational Personnel Development Act are working on the problems of teacher education.

CONTRIBUTIONS THAT VTE MIGHT MAKE

The "system" or "systems" of education can be an effective force in meeting today's crisis in health manpower. The capability of the system to develop, organize, operate, and expand occupational education has been well demonstrated as exemplified in the growth of practical and associate degree nursing curriculums. The potential of VTE in this regard has not been matched. No doubt much of this capability is due to the Federal/State/local partnership. Another factor is the program's availability to the people who need and want training - the school population.
Under VTE legislation and with the cooperation of the health industry, Vocational and Technical Education has the capability to do the following:

- Greatly expand existing programs, particularly those that serve emerging occupations.
- Assist the health industry with functional analyses that are basic to curriculum development as well as to job structuring.
- Encourage and support articulation from one level of education to the next, or laterally between occupational curriculums. Although education cannot restructure employment in this field, it can help employers in their development of career ladders and worker mobility, and can adapt education programs to such changes as they occur.
- Provide remedial education to those who lack the required education to enter upon programs that prepare for a health occupation, and thereby increase the pool of potential workers in this field.
- Support studies and demonstration projects that will develop mechanisms for measuring work experience and knowledge gained elsewhere than in the traditional educational setting.
- Extend vocational programs relating to health down into the high school, junior high school, and the elementary school so that career information and orientation to this field will be made available to young people. Only 24,350 high school students were enrolled in HOE in 1968. Some 13 million young people in grades 9 - 12 need greater exposure to the field of health; many will need to have occupational training and experience in health occupations before completing high school. This will be meaningful only if employers have jobs for them and agree to employ them.
- Assist in establishing a National Youth group for the area of health occupations. The success of such groups is largely the result of the relationships established between teacher, student, and parents.
- Post-secondary enrollments in community college programs, in technical schools, and other post-secondary institutions can and will be greatly increased.
- Teacher education programs enrolled 6,508 health occupations teachers in 1968. This was the smallest percentage among all occupational areas served by Vocational Education. Vocational teacher education is a high priority area in all vocational education.
VTE alone cannot solve any part of the health industry crisis, but through cooperation and coordination with other programs and with the health community, our efforts will result in better serving the people who need jobs in the health field and, at the same time, remove much of the burden of education and training from the health service agencies.
Questions concerning program and personnel approval activities proved to be one of the more difficult areas for discussion and understanding throughout the N.C.H.O.E. Gaining a clear delineation of the purposes and procedures for program and personnel approval is difficult in all fields, but particularly difficult in the rapidly emerging health area. It had been anticipated that we would attempt to develop and include an outline of procedures in health fields in this report. However, on further investigation, it appeared to be beyond our resources to reach agreement and develop such a statement. Further, at least two projects and one national conference are being devoted directly to this topic. References to these sources will be given at the end of this section. Therefore, this brief review is being provided for reference purposes. 1

A general distinction may be drawn between accreditation, and licensure, registration and certification. Accreditation is generally used to denote program approval, possibly including facilities and staff. Licensure, registration and certification refer to the individual and an assessment of his competency in a given occupational area. All procedures are established to provide guidelines for quality programs and to insure the individual competence of the worker. The terms and definitions can be given only on a general, or most common usage, basis. Exceptions and examples of each term being used with a different definition may be cited in one or another field.

Accreditation

Accreditation may be defined as the procedure undertaken by a voluntary group or association, or a combination of associations, for the purpose of establishing minimum standards, essentials for the programs in a particular field of interest and certifying that individual programs or institutions meet or exceed those minimum standards. Accreditation has gained more significance in recent years since the federal agencies have
required that a program be accredited to be eligible for certain categories of funding. Consequently, a number of associations and groups have entered the field to establish accreditation procedures for meeting the purpose of federal agency acceptance.

Accreditation provides for leadership, program development and evaluation on a voluntary basis by institutions or programs seeking formal program approval. Continual evaluation is stressed and research and evaluation projects are encouraged which will result in the benefit of all members of the association(s). In the health field, many organizations are actively involved in the voluntary accreditation procedures.

Health organizations active in the voluntary accreditation procedures include:

The American Medical Association, in cooperation with affiliated associations, currently offer accreditation for thirteen specialties of allied health personnel.

The American Dental Association, in cooperation with affiliated associations accredit educational programs for dental supportive personnel.

The National League for Nursing offers accreditation for nursing education programs.

Other associations either independently or cooperatively among two or more associations accredit a number of educational programs for supportive personnel in the health field.

Educational associations active in voluntary accreditation procedures include:

New England Association of Colleges and Secondary Schools

The Middle States Association of Colleges and Secondary Schools, Commission on Institutions of Higher Education

North Central Association of Colleges and Secondary Schools, Commission on Higher Schools

Northwest Association of Secondary and Higher Schools, Commission on Higher Schools

Southern Association of Colleges and Schools

D-27
Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities, and Accrediting Commission for Junior Colleges

A somewhat different type of accreditation is offered by the Joint Commission on Accreditation of Hospitals. This voluntary association publishes standards for and carries out accreditation of hospitals and extended health care centers, including nursing homes. The Joint Commission surveys and accredits institutions which have been accepted for registration by the American Hospital Association.

Registration, Certification and Licensure*

About twenty-five health professions and occupations are licensed by one or more states, according to a survey of State licensing provisions conducted by The Council of State Governments in cooperation with the National Center for Health Statistics of the U. S. Public Health Service. The survey covered those occupations in the health field for which the licensing, registration, or certification procedure is provided by State Law, is administered by an agency of the State, and meets the following criteria:

(1) The license, certificate of registration, or other credential is issued to an individual, rather than to a company or organization;
(2) The license authorizes an individual to practice or engage in an occupation or profession or to use a particular title;
(3) To secure a license, the applicant must (a) have certain educational qualifications, or (b) serve an apprenticeship or have other experience, or (c) pass an examination as to his knowledge or skills, or (d) meet any combination of these requirements.

The following section has been taken directly from a U.S. Department of Health Education and Welfare publication; a summary of State Licensing of Health Occupations, Maryland Y. Pennell, M. S. & Paula A. Stewart, M. P. H. Health Manpower Statistics Branch, National Center for Health Statistics. (Consult references)
Two exceptions have been made to criterion 1 above, by the inclusion in this report of (a) eight States that set requirements for clinical laboratory personnel within the laboratory licensing law, and (b) two States that license individuals and firms to engage in the business of a dispensing optician.

Legislation usually establishes educational, experience and personal qualifications; it requires successful completion of an examination, and provides for issuance of a license as a prior condition for entrance into the occupation. The administration of the statute is entrusted to a department of government or to an independent board which is usually composed of members of the occupation who have been selected from lists of nominees submitted by associations representing the occupation.

The main objectives of licensing laws are to control entrance into the occupation and to support and enforce standards of practice among licensed practitioners. The accomplishment of these objectives usually involves such activities as:

(1) Examination of applicants' credentials to determine whether their education, experience, and moral fitness meet statutory or administrative requirements.
(2) Investigation of schools to determine whether the training programs meet requisite standards.
(3) Administration of examinations to test the academic and practical qualifications of applicants to determine if pre-set standards are met.
(4) Granting of licenses on the basis of reciprocity or endorsement to applicants from other States or foreign countries.
(5) Issuance of regulations establishing professional standards of practice; investigation of charges of violation of standards established by statute and regulation; suspension or revocation of violators' licenses, and restoration of license after a period of suspension or further investigation.
(6) Collection of various types of fees.3
Mr. M. S. Miller, a Program Advisor in the National Affairs Division of the Ford Foundation, wrote an article on "Breaking the Credentials Barrier" in the March issue of Training in Business and Industry. Mr. Miller says "we have become a credential society, in which one's educational level is more important than what he can do ... We have a new guild system of credentials, licenses, certificates - largely built on the base of education - which keep people out of many occupational channels..." He concluded: "All of us know of individuals who cannot get jobs that they would be able to perform well because they lack the appropriate credentials - whether it's a high school diploma or a Ph.D."

How does this relate to the news that here in Southern California malpractice insurance rates doubled, effective October 1st? In our discussion of credentials, we are concerned with licensure, registration and certification. Each person seems to use words like registration or certification ( and licensure! ) to mean what he says they mean, and does so quite emphatically. I'm told that a license is permission to do something, and that it's granted by a government. I understand that registration/certification is usually a function of non-governmental organizations. Incidentally, the word "accreditation" is reserved for the approval of educational programs or of institutions, and should not be used as applying to persons.

Liability, Legislation, and Licensure

Of course, the practice of medicine includes activities ranging from the routine and repetitive to those which require advanced training, skill, and judgment. Obviously, it's wasteful and inefficient to require ten or more years of college, medical school, internship, and residency to qualify a person to perform routine duties which can be learned in a few

* This section has been taken from a presentation, Education of Health Manpower for the 1970's. by Ralph Kuhli, M. P. H., Director, Department of Allied Medical Professions and Services, Division of Medical Education, American Medical Association. (Consult references)
months or years of specialized technical training. Many routine medical functions are generally delegated to laboratory and X-Ray technologists and technicians, to medical assistants in doctors' offices and to many other allied medical workers. During recent decades, we have seen the development of dozens and even hundreds of allied health occupations.

As Dick Bergen of the AMA Law Division points out: "The difficulty arises from the fact that the health and well-being of a patient is not something that can be divided. Even the most routine procedure may be critically important. It may cause a crisis which requires the training, skill, and judgment of a physician to save the patient... Accordingly, for the protection of the patient, medical functions can be delegated to paramedical personnel, only if they are performed under the direction and supervision of a physician... If a physician knows that an assistant is qualified to perform the particular procedure and if it is under his direction which is sufficiently close and detailed to prevent harm to the patient in the event of untoward developments, he may properly delegate complicated and delicate procedures to the assistant."5

There is understandable concern about the possibility of increased liability for damages which may arise from extended use of allied medical personnel. An employer physician is liable for an injury caused by the negligence of his employee, even if the employee is another physician. This liability extends to all subordinate levels of employees as well. The physician accepts this burden of liability for his assistants, and the lack of registration, certification, or licensure does not generally impose a serious legal risk on the physician employer.

As Dick Bergen points out: "Possession of a license or certificate ...is no guarantee against negligence"6 It is the physician's responsibility to see to it that his patients are in safe hands when receiving care from allied medical personnel. A physician can delegate to competent allied medical workers under physician supervision virtually any medical procedure which does not, on a scientifically-determined basis, require the personal knowledge, skill, and judgment of a physician.

California presents a particular problem because this state has a larger number of official allied health classifications than any other state and has a strict Medical Practice Act.

D-31
New kinds of allied medical personnel are assisting physicians in new ways - Dr. John Niebauer's "Orthopaedic Assistant" program in San Francisco is one example - and it seems inevitable that such medical innovations must increase risks. Of course, the risk is lessened if the assistant is thoroughly trained and carefully supervised. It is reduced even further if a formal educational program is established and operated effectively, preferably in conjunction with a medical school or a teaching hospital. It is minimized further if appropriate medical specialty and allied medical professional associations collaborate with the AMA Council on Medical Education to establish "Essentials" (standards for education), and there is a program for private certification/registration of students who satisfactorily complete the approved training. Compulsory state licensing does not further reduce the risk for the employing physician.

Certification/Registration

There are several health manpower problems which might have a surprising common denominator - problems concerning:

1. Discharged military medical corpsmen - 30,000 a year.
2. Graduates of proprietary schools and of innovative programs (shorter educational programs, some with teaching machines, simulated lab work, and home study courses).
3. Foreigners
4. People who have had long experience in the health occupations, but who lack the currently recommended or required formal education.

The registry is emerging as an increasingly important solution to a number of major problems. It would be most helpful for foundations and the Federal government to make the substantial grants necessary for registries to work with others and to develop examinations which would measure any applicant's competency to perform these tasks for allied occupations. Then the registries could determine the proficiency of anyone - a discharged military medical corpsman; a graduate of a foreign school; a graduate of a school which is not currently accredited by the AMA, including proprietary schools; a person with long experience; etc.
The registries could, and I think should, register or certify without further examination all graduates of AMA-accredited educational programs. Such registries would stimulate innovation, help solve manpower problems, minimize over-education and provide registration/certification which would be much more desirable than state licensure. I re-emphasize how important it is for foundations and the Government to grant registries the sums needed to develop proficiency examinations.
References

(1) The American Vocational Association
1510 H Street N. W.
Washington, D.C. 20005
"The National Study for Accreditation of Vocational and Technical Education." (Study)

The American Association of Junior Colleges
One Dupont Circle N. W.
Washington, D.C. 20036 (Study)

National Conference on Accreditation of Public Post-Secondary Occupational Education, June 10-12, Atlanta, Georgia. Sponsored by the Center for Occupational Education, North Carolina State University at Raleigh. (Conference)

(2) The following associations may be consulted for further information:

The American Medical Association
535 North Dearborn Avenue
Chicago, Illinois 60610

The American Dental Association
211 East Chicago Avenue
Chicago, Illinois 60611

National League for Nursing
10 Columbus Circle
New York, New York 10019

National Health Council
1740 Broadway
New York, New York 10019

(3) United States Department of Health, Education and Welfare
"State Licensing of Health Occupations",


