THE INSTITUTE, SPONSORED BY A FEDERATED CHARITY REPRESENTING 78 NONPROFIT VOLUNTARY HOSPITALS IN NEW YORK CITY, WAS ATTENDED BY 43 HIGH SCHOOL AND EMPLOYMENT SERVICE COUNSELORS. THE NEED FOR SUCH INSTITUTES WAS DOCUMENTED BY A PRE-INSTITUTE QUESTIONNAIRE TO LICENSED GUIDANCE COUNSELORS. TO EVALUATE THE INSTITUTE, THE PROFESSIONAL EXAMINATION SERVICE DEVELOPED AND ADMINISTERED THREE PARALLEL EXAMS TO A CONTROL AND AN EXPERIMENTAL GROUP. A COMPLETE SUMMARY OF THE EVALUATIVE TESTING PROGRAM IS INCLUDED. THE PURPOSE OF THE INSTITUTE WAS TO UPDATE VOCATIONAL GUIDANCE PERSONNEL TO THE RANGE OF CAREER OPPORTUNITIES EXISTING IN THE HEALTH FIELD BY (1) PROVIDING CURRENT MATERIALS, (2) CREATING AN AWARENESS OF THE PROBLEMS IN RECRUITING ADEQUATELY TRAINED PERSONNEL, (3) PROVIDING KNOWLEDGE OF THE DIVERSE OPPORTUNITIES AND SATISFACTIONS OF HEALTH CAREERS, (4) DEVELOPING PROCEDURES FOR THE CONTINUING EDUCATION OF GUIDANCE PERSONNEL TO MANPOWER REQUIREMENTS OF THE HEALTH FIELD, AND (5) ASSISTING OTHERS IN PLANNING INSTITUTES. MAJOR SPEECHES PRESENTING MANY OF THE PROBLEMS CONFRONTING THE HEALTH SERVICE INDUSTRY AS WELL AS UP-TO-DATE FACTUAL INFORMATION ON MOST OF THE HEALTH PROFESSIONS, A BIBLIOGRAPHY OF ALL LITERATURE DISTRIBUTED, AND A LIST OF HEALTH CAREER FILMS ARE INCLUDED. (PS)
FINAL REPORT
Project No. 6-2209
Grant No. OEG-1-6-062209-0713

GUIDANCE COUNSELOR INSTITUTE
FOR HEALTH CAREERS

July 7 - 22, 1966

United Hospital Fund of New York
New York, New York
The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education and Welfare. Contractors undertaking such projects under government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not therefore, necessarily represent official Office of Education position or policy.

United Hospital Fund of New York
3 East 54th Street
New York, New York 10022
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ADVISORY COMMITTEE

GUIDANCE COUNSELOR INSTITUTE FOR HEALTH CAREERS

Mrs. Herbert Greenberg, Chairman
Mr. John Stookey, Vice Chairman
Mr. Grant Adams
Mr. Caesar Branchini
Dr. Alva C. Cooper
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Mr. Philip W. Morgan
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Health Careers
INTRODUCTION

The perennial manpower shortage in the health field has been compounded in recent years by the proliferation of jobs created by new knowledge and treatment techniques, and by growing public demand for health services brought about by increased use of prepaid health insurance plans, recent government health legislation, and increased awareness of the public concerning health care.

In addition to these factors, the need for more and better recruiting efforts for health personnel is evidenced by existing difficulties in attracting qualified people. Some of these difficulties are due to lack of knowledge about the broad range of opportunities in the health field, and misconceptions about working conditions, salaries, advancement opportunities, and fringe benefits.

Recognizing that high school guidance counselors are in a strategic position to stimulate interest and disseminate information on health careers, The United Hospital Fund's Advisory Committee on Health Careers decided to sponsor a demonstration project.

The objectives of the 12-day Guidance Counselor Institute for Health Careers which ensued were:

- To increase awareness of the range of career opportunities existing in the health field;

- To provide guidance counselors with current health careers materials (e.g., literature, visual aids, etc.);

- To create an awareness on the part of educators of the problems faced by utilizers (hospitals, industry, public health agencies, etc.) in recruiting adequately trained personnel for health careers;

- To create a dialogue between representatives of the various health professions and guidance counselors to develop ways of stimulating and adequately preparing people for careers in health;

- To aid guidance counselors in their consultations with students regarding the diverse opportunities and satisfactions of health careers;

- To develop procedures for the continuing education of guidance personnel toward manpower requirements of the health field;

- To aid others in planning similar guidance counselor health institutes by developing a guide of the steps followed in organizing this institute.
The Institute focused upon the full range of health careers including professional and ancillary categories. This focus was reflected by major addresses, visits to various types of health facilities, classroom and small group discussions and by the literature distributed.

Sponsoring the program was the United Hospital Fund of New York, a non-profit federated charity representing 78 non-profit voluntary hospitals in New York City. The major financial support (Grant number OEG-1-6-062209-0713) was provided by the U. S. Office of Education, Department of Health, Education and Welfare.

The following report includes only a partial representation of the content of a most rewarding undertaking, the total success of which can be measured only by the practical application to which each participant puts to work what he gained.
METHOD

The Guidance Counselor Institute for Health Careers came about as a result of staff discussions with guidance counselors, professional and voluntary health organizations, hospital administrators, educators, and interested lay members of the community both individually and in groups.

Prior to the Institute consideration was given to the type of counselors who should be invited to participate. Consideration was given not only to high school vocational guidance counselors but also to college counselors and counselors working with the various anti-poverty programs in New York City. It was decided to invite only high school and employment service counselors to participate in the Institute because college counselors are concerned primarily with the professional careers only and the counselors from the anti-poverty programs are concerned primarily with only those careers at the lower end of the scale of health professions.

Cooperation in selecting applicants was sought from the New York City Board of Education, the Archdiocese of New York, the Archdiocese of Brooklyn and the New York State Employment Service. The respective principals and/or supervisors were asked by letter to recommend possible applicants for the Institute. Application blanks were then sent to all those who were recommended. All applications were reviewed and screened by the Health Careers staff of the United Hospital Fund. The 48 participants representing the aforementioned groups were chosen on the basis of professional status and experience.

In an attempt to gain insight into the knowledge of health careers which vocational guidance counselors in New York City have, a questionnaire was sent to 800 licensed guidance counselors in the New York City secondary schools. There were several purposes for this questionnaire, but essentially we sought to find out in which health careers counselors have sufficient knowledge to feel competent in counseling students. We felt that by knowing the relative strengths and weaknesses we could structure the Institute program to provide maximum benefit to the participants.

Responses to the questionnaire showed the greatest deficiency of materials and knowledge to be in the area of ancillary or paramedic careers. Significant however, was that of the 15% who responded to the questionnaire none felt that he had sufficient information on any of the 38 careers listed including the physician, dentist and nurse (see appendices). Therefore in order to disseminate as much information as possible the Institute focused upon the full range of health careers including the professional as well as the ancillary job categories.

To help in the evaluation of the Institute, the Professional Examination Service was engaged to develop three parallel exams. One of the exams was given the first day of the Institute. A second exam was given the last day and the third was given six months later in an attempt to evaluate the retention of the participants. It was recognized by the staffs of the Professional Examination Service and the United Hospital Fund that these exams could not be used for a
total evaluation of the Institute, but only as an evaluation of the factual knowledge gained by those attending.

A psychologist was employed to work on the project throughout its entirety. Through personal interviews, small group discussions and questions which arose throughout the duration of the Institute, the psychologist attempted to evaluate the whole area of counselor attitudes toward health careers. It was evident to all staff members connected with the Institute that the participants were greatly influenced by what they saw and heard.

The methods of presentation for the Institute included:

1. Lectures by leaders in the field of health manpower.
2. Presentation of occupational information by people representing particular careers.
3. Tours of selected health facilities.
4. Feed-back seminars, general and small group discussions.
5. Distribution of literature and showing of films.

Copies of all major speeches, a bibliography of all literature which was distributed and a list of films which were shown are listed in other parts of this report.
RESULTS

It is extremely difficult to measure all of the results of this type of experience as most results will occur within the particular schools in which the participants work. There are, however, a few specific results which can be reported.

The results of the three examinations prepared and administered by the Professional Examination Service reveal that the effect of a short-term Institute can be measured by an objective multiple-choice test even when that test is based on the general stated purposes of the Institute rather than on specific lecture content. It was further shown that there is a loss of knowledge increment four months after the Institute, but that the level of test achievement of those who attended the Institute persists in being higher than that of a control group. (The complete results of the three examinations are shown in the appendixes).

In addition to the results shown by the examination it is necessary to report that the 48 people who participated in the Institute are now much more fully aware of the opportunities in the health field. And while not measurable, the 36 counselors who participated as a control group in the examinations and the principals, guidance supervisors and others who were in any way consulted before, during or after the Institute must now be more aware of health careers. Also, all the personnel in each of the health facilities which were visited are now more alert to their obligation to provide adequate information for guidance counselors.

A marked increase in the number of requests for health specialists to Junior and Senior High School programs on health careers can also be attributed to the Institute.

The questionnaire, shown in the appendixes, reveals that recruitment materials prepared by the various professional organizations are not being utilized as intended. It also reveals that basic source materials on health careers are not familiar tools to many of the counselors in New York City.
DISCUSSION

The Guidance Counselor Institute for Health Careers through its various phases of preliminary discussions and questionnaires, the actual Institute and post-institute evaluations clearly shows that there are severe shortcomings in the delivery of guidance services as they currently exist. There is a critical need for programs designed to give guidance counselors more information on health careers. It is also obvious that there is a need for better occupational material to be presented to counselors in a variety of ways.

The most effective means of presenting information was through the touring of health facilities where the participants had an opportunity to visit informally with practitioners of the various disciplines. Somewhat less effective was the use of such visual aids as movies. These were, however, more effective than the formal classroom presentations which made up approximately 40% of the Institute. The least effective method of presenting information was that of asking the participants to study reading material on their own time.

Prior to the beginning of the actual Institute the participants' attitudes and ideas concerning the health field were negative and definitely stereotyped. The vast majority thought that the entire health field offered poor salary scales, poor working conditions, low status with many transient employees (except physicians), and limited opportunities for advancement.

A definite change in attitude coincided with the visit to New York Hospital and continued to change with the visits to other facilities where participants got specific information concerning salaries and working conditions. Even to casual observers, such as members of the Institute Planning Committee, it became obvious that the participants began to realize the scope of the health services industry. Many of the participants indicated that they were impressed with the high caliber and dedication of the workers they saw during the various tours.

The question of giving academic credit for the Institute was weighed heavily by the planning committee. Many of the educational systems supervisory personnel who were consulted during the planning stages recommended that credit be given. This, however, presented such problems as: (1) What institution should give the credit? (2) Is the curricula review committee qualified to review the curriculum? (3) How many hours of credit should be given?

When participants which had been selected for the Institute were consulted they stated that they would prefer a stipend rather than academic credit. Several stated that they had a master's degree and would not be working for a doctorate so that credit would be meaningless.

The content of the material presented during the Institute was very broad and in some instances was not directly related to the objectives. This
was intentional, however, and was designed to show the social implications being
created by the rapid expansion of federal involvement in health.

Presentations, such as the one dealing with financial assistance,
should be designed to give not only the national picture, but also specific
information on aid available within the immediate area. Specific information
on training facilities for various health careers within the metropolitan New
York area should have been included.

Future institutes of this type may eliminate testing from the
content. While the testing of the participants in the Institute was done to
measure learning and retention and to illustrate the worthiness of this type
of experience, it is not necessary for future programs.

Discussion with participants in the Institute shows that the content
of the program could be structured to conform to existing in-service training
programs conducted for city guidance personnel on a regular basis. Another
possible method of disseminating information on health careers would be to have
the schools of education which are training guidance counselors institute a re-
quired occupational information course on health careers into their curricula.
Discussions have and are continuing to take place on the possibilities of using
both of the previously suggested methods of improving present and future counse-
lors knowledge of health careers.
RECOMMENDATIONS, CONCLUSIONS AND IMPLICATIONS

A great many specific recommendations were forthcoming from the participants in the Institute. These recommendations are grouped here to assist the reader in his perusal of this material.

RESEARCH NEEDS

The participants listed the following areas in which they see a need for research to be done. It is hoped that the various federal, educational and health agencies will keep these recommendations in mind as they plan their activities in the future.

1. What are the key factors contributing to career decisions?
2. Are there identifiable academic and personality traits indicative of success in the different health careers?
3. What are the health occupation opportunities of the future?
4. How can job advancement in the health fields be achieved? Are there career ladders so that a person can advance from one job to another without beginning training all over again?
5. How can we attract more male personnel to health careers?
6. What are the opportunities for older workers in the health services?
7. Is the present utilization of manpower in health careers most expedient? Are highly trained people often burdened with tasks that could easily be done by others?
8. Potential employees are often rejected from educational programs because of a deficiency in a single course. Are there ways these deficiencies can be overcome?
9. If a high school drop-out is capable of doing the job, should we restrict him on the basis of not having a diploma? Might not many later realize the importance of a diploma for advancement and return to school?
10. Can a filing system be devised in which job opportunities are listed by broad categories or families rather than alphabetically?
11. How can information on vocations be kept up-to-date?
12. How can we more effectively get career information to students, parents and counselors?
13. What is and what should be the role of guidance counselors in New York City? Is there a large gap between their "idealistic" role and their actual role?

14. Is the present two year teaching prerequisite required by the Board of Education necessary for effective counseling?

15. Would it be better to have only full-time counselors rather than some part-time counselors?

16. How and when can group vocational counseling be used more effectively? Can it be more effective than individual counseling?

17. What are the psychological factors involved in applying for an educational loan as compared to a scholarship? Does the word scholarship imply academic brilliance and thus prevent qualified individuals from applying?

18. Why do many average and bright students drop out of school? What can be done to keep them in school?

19. Are the present requirements to receive a high school diploma too stringent? What are the obstacles created by these requirements?

20. Is the constant upgrading of requirements for entry into advanced educational programs designed to keep the enrollment down?

21. Is present day society too college oriented? Can we find jobs for those who don't go to college?

22. Are all admissions requirements of community colleges necessary?

23. Are community and/or junior colleges preparing students for vocations or merely to transfer into a 4-year college?

CONCLUSIONS

The following conclusions were expressed by participants in the Institute:

1. There is a need for up-to-date information concerning:
   a. Job opportunities
   b. Educational and training requirements.
   c. Training facilities and admissions requirements
   d. Advancement possibilities
   e. Rewards - financial and personal
f. Financial aid available.

2. A central clearing house of information on health careers should be developed and its resources made available to guidance counselors. (The United Hospital Fund and many others are providing this type of service but it is obviously not known to many people. The United Hospital Fund must undertake a program to tell the community about the services which we are prepared to render).

3. High School counselors need profiles from colleges on why students are being refused admittance.

4. There is a need for improved in-service training programs for both public and parochial school counselors. These could take the form of seminars on health careers which could be set up by borough or by school district and should include tours of various types of health facilities.

5. There is a need to develop an occupational information course on health careers for students majoring in counseling in the various graduate schools.

6. There is a need to acquaint all students with the various possibilities in the health field, not just those who show an initial interest. Where possible a team of specialists from the health field including enthusiastic young people should present assembly programs as part of group vocational counseling.

7. There is a need for programs to be presented to parents so that they can know and understand the changes and needs in the health field.

8. There is a need for more full time counselors.

9. Counselors need a more realistic case load. The number of students presently assigned to one counselor is much too large for effective counseling. (In one school represented two counselors are handling 4,000 students).

10. Guidance departments need to be organized more effectively with counseling broken down into such categories as emotional and social, vocational and college advising.

11. A sufficient budget should be provided to allow for the employment of clerks, secretaries and aides to handle routine and clerical work and to purchase basic materials and equipment.

12. Counselors need a better knowledge of community resources and how to use them.

13. There is a need for more organized group counseling (often it is only the top 10% and the bottom 10% of the students that are seen).
14. Early vocational counseling should be for fields or concepts rather than for specific jobs.

15. A more effective system of communications between guidance counselors and their superiors is needed. Individual counselors must be given sufficient freedom to innovate and induce change.

16. Hospital personnel directors need to be concerned with the total person and not just place someone in a particular job because of an opening.

17. Hospitals need to provide more training opportunities for health personnel.

18. Cooperative work-study programs between hospitals and schools should be set up and periodically evaluated by professionals in the field.

19. More in-service training courses must be established in hospitals so that employees can advance.

20. Hospitals need to provide more opportunities for part time work experience, both volunteer and paid, so that students can discover whether or not they are interested in health careers.

21. Channels of communication between hospitals and educational institutions must be improved so that graduates of training programs can qualify for employment.

22. Formal affiliation agreements between educational and health facilities must be worked out.

23. Hospitals need to do direct recruitment of students as industry does.

24. More student visits to hospitals must be encouraged.

25. The Health Careers Guidebook should be rewritten to more clearly stress careers where less than a baccalaureate degree is required.

26. Visual aids must be kept up-to-date.

27. Career possibilities should be incorporated into text books.

28. Counselors should be asked by the professional organizations which are preparing recruitment materials to participate in the preparation of the materials.

29. Hospitals should employ a comprehensive in-service training director who will be responsible for up-grading of all personnel - not just professionals.

30. Formula grants which are now awarded to educational institutions should require that a certain percentage of the grant be directed toward improved guidance service.
SUMMARY

The Guidance Counselor Institute for Health Careers of the United Hospital Fund of New York has demonstrated the need for a cooperative means of presenting occupational information on health careers to guidance personnel who are assisting people in making career decisions. Broad representation of the agencies concerned with the problems should be included on the planning committee. In this instance the various educational systems, voluntary health agencies, professional health organizations and interested laymen were involved.

The Advisory Committee recommends that future Institutes involve as many counselors as possible, including supervisory personnel who are in a position to institute changes in the method of presenting occupational information to counselors.

The test results of this study indicate that a short term Institute of this type can significantly increase participants knowledge and awareness of the range of careers within the health services industry.

The study group found that health careers information was severely lacking in the schools. Presentations should be closely related to job realities and the committee strongly urges that presentations be centered in health facilities where participants can see actual facilities and work demonstrations. Professional people who are committed to their work and who are enthusiastic about it should be asked to make the presentations.

The Committee recommends that a method of presenting general information on the entire health field be required of all vocational guidance counselors as a prerequisite for employment as a licensed counselor.

The Committee found that there were a great number of specific recommendations forthcoming from the participants and that there is need for a great deal more research to be done in the area of determining how career decisions are made and in the methods of presenting career information to people.

Adequate communications between the various levels of educational institutions were found to be seriously lacking and a means of improving these must be found.

The study revealed that the health services industry must begin an intensive public education program to counteract its currently existing negatively stereotyped image if it is to attract the numbers and types of personnel which are so badly needed in over 250 job categories.
Appendix A

AGENDA

Guidance Counselor Institute for Health Careers
United Hospital Fund of New York
3 East 54th Street, New York

July 7-22, 1966

Thursday, July 7
9:00 A.M. United Hospital Fund
Orientation
Testing of Participants

P.M. Keynote Address: "The Health Service Industry - Today and Tomorrow"
Mr. Harry Becker, Executive Secretary,
Committee on Special Studies of New York Academy of Medicine

Friday, July 8
9:00 A.M. United Hospital Fund
"Research Needs In Health and Guidance"
Mr. Robert Herman, Assistant Director,
Employment Opportunities, U.S. Department
of Health, Education and Welfare

P.M. "Current Trends In Counseling"
Dr. Alva Cooper, College Career Counselor and
Placement Director, Hunter College

Monday, July 11 and Tuesday, July 12
9:00 A.M. New York Hospital
All Day Sessions
"Health Careers In Hospitals"
Dr. August Groeschel, Associate Director,
New York Hospital and Staff

Wednesday, July 13
9:00 A.M. Institute of Physical Medicine & Rehabilitation
All Day Session
"Health Careers In Rehabilitation"
Mrs. Rosalind R. Zuger
Institute of Physical Medicine and Staff
Thursday, July 14  8:30 A.M.  Bus leaving from United Hospital Fund Squibb Pharmaceutical Laboratory New Brunswick, New Jersey All Day Session "Health Careers In Industry" John Kenny, Manager of Pharmacy Services and Staff

Friday, July 15  9:00 A.M.  Post Graduate Center for Mental Health "Careers In Mental Health" Mr. Edward Linzer, Executive Director, Post Graduate Center for Mental Health P.M. Columbia University School of Dental & Oral Surgery "Dentistry As A Career" Dr. Joseph Cuttita, Chairman of Admissions and Professor of Dentistry, - Columbia University School of Dentistry & Oral Surgery "Careers and Opportunities In Dental Hygiene" Professor Patricia McLean, Director of Courses For Dental Hygienists Columbia University, School of Dentistry & Oral Surgery "Dental Assistants" Dr. George O'Grady, Assistant Professor of Dentistry, - Columbia University School of Dentistry & Oral Surgery

Monday, July 18  9:00 A.M.  Department of Health "Careers In Public Health" Dr. Robert Rothermel, Director of Training and Personnel - Department of Health, and Staff P.M. United Hospital Fund "Optometry and Related Careers" Dr. Alden Haffner, Executive Director, Optometric Center of New York "Social Work" Mr. Louis Levitt, Executive Director, Social Work Recruiting Center of Greater New York
Tuesday, July 19  9:00 A.M.  United Hospital Fund
"Utilizing Community Resources"
Miss Caroline Flanders, Director
Women's Activities Division
United Hospital Fund
Harold M. Kase, Ed. D., Vice-President
Altro Work Shops
Mr. Levitt Mendel, Associate Director
National Health Council
P.M.  "Regional Planning for Health Manpower"
Mr. Louis Levine, Director
Labor Rehabilitation Liaison Project
New York City Central Labor Council
"Careers in Voluntary Health Organizations"
Mr. Michael Plishner, Executive Director
Queensboro TB & Health Association

Wednesday, July 20  9:00 A.M.  United Hospital Fund
"Financial Assistance Available for Health Careers"
Mr. Rex Moon, Director of Studies - Academy For Educational Development
P.M.  "Government Programs Related to Health Manpower Training"
Mr. James E. Crank, President
Health Careers Council of Alabama
"OEO Programs"
Mr. Garrison Ellis, Northeast Deputy Regional Director
Office of Economic Opportunity

Thursday, July 21  9:00 A.M.  United Hospital Fund
"New Educational Training Programs To Meet Health Manpower Needs"
Mr. Ken Skaggs, Associate Director
American Association of Junior Colleges
P.M.  Testing of Participants
Friday, July 22

9:00 A.M. United Hospital Fund

Final Discussion

P.M. Concluding banquet
     Americana Hotel

"Future Activities of Guidance Counselors In
Our Educational System"
Mr. Fred Hechinger, Education Editor
New York Times

***

Group discussions will follow speakers' presentations each day.

Sessions: 9:00 A.M. - 4:30 P.M.
Appendix B

MAJOR SPEAKERS

Mr. Harry Becker, Executive Secretary
Committee on Special Studies
New York Academy of Medicine

Dr. Alva Cooper, College Career Counselor and
Placement Director, Hunter College

Mr. James E. Crank, President
Health Careers Council of Alabama

Dr. Joseph Cuttita, Chairman of Admissions and
Professor of Dentistry, Columbia University School
of Dental and Oral Surgery

Mr. Garrison Ellis, Office of Economic Opportunity

Dr. August Groeschel, Associate Director
New York Hospital

Dr. Alden Haffner, Executive Director
Optometric Center of New York

Mr. Fred Hechinger, Education Editor
New York Times

Mr. Robert Herman, Assistant Director
Employment Opportunities Branch
U.S. Department of Health, Education and Welfare

Mr. Louis Levine, Director
Labor Rehabilitation Liaison Project
New York City Central Labor Council

Mr. Louis Levitt, Executive Director
Social Work Recruiting Center of Greater New York

Mr. Edward Linzer, Executive Director
Post Graduate Center for Mental Health

Mrs. Patricia McLean, Director of Courses
for Dental Hygienists, Columbia University
School of Dental and Oral Surgery

Mr. Rex Moon, Director of Studies
Academy for Educational Development

Dr. George O'Grady, Assistant Professor of Dentistry
Columbia University School of Dental and Oral Surgery

B-1
Mr. John Kenny, Manager of Pharmacy Services
E.R. Squibb and Sons

Mr. Michael Plishner, Executive Director
Queensboro TB and Health Association

Dr. Robert Rothermel, Director of Training and Personnel
New York City Department of Health

Mr. Ken Skaggs, Associate Director
American Association of Junior Colleges
U.H.F. GUIDANCE COUNSELOR INSTITUTE FOR HEALTH CAREERS

WELCOME
by
Mrs. Herbert Greenberg, Chairman
Advisory Committee on Health Careers

On behalf of the United Hospital Fund it is my pleasure to welcome you to our Guidance Counselor Institute for Health Careers.

As you know, this institute is being conducted under the terms of the Vocational Educational Act of 1963 administered by the U. S. Office of Education. We know of no other program of this type which has been conducted in this country, so in a very real sense you are experimenting right along with us. Because this institute is a pilot program we would especially appreciate any comments or suggestions which you may have during the next two weeks.

Before we get down to the serious business at hand, I would like to give you a little background on the United Hospital Fund and its Health Careers Program.

The United Hospital Fund of New York is a non-profit organization representing 78 voluntary hospitals of New York City. It was organized and incorporated in 1879 as the Hospital Saturday and Sunday Association- "to further economy and management and extend the work of hospitals".

Areas currently of concern to the United Hospital Fund in addition to Health Careers include modernization and replacement of plants and equipment of member hospitals; city payments to voluntary hospitals for the care of indigent patients; a study of provision of appropriate social services in nursing homes; changes in hospital membership because of problems affecting small hospitals in neighborhoods with fast-changing populations; and continued sponsorship of workshops and in service training courses for paid and voluntary hospital personnel.

Approximately a year and a half ago, a large number of community representatives gathered at the United Hospital Fund offices to discuss the need for a Health Careers Program in New York City. As a result of this meeting, a steering committee was selected which outlined the objectives for what is now known as the Cooperative Program in Health Careers in New York City. These objectives include:

A. To act as a clearing house for information, films, and literature on health careers so that the abundance of such materials can be put to work in an orderly and effective fashion.

B. To develop channels between the "utilizers" of health personnel and those concerned with recruiting with the aim of more accurately pinpointing areas of specific and legitimate need.

C. To establish a formal cooperative liaison with the total
Educational system of New York City.

D. To study existing recruitment programs in order to determine the extent of coverage and effectiveness; to project the direction toward which new programs are needed; and to make available mutual experiences.

E. To compile, evaluate and disseminate information on existing scholarships, fellowships and other financial aid pertinent to health careers and to encourage the creation of additional sources of aid as needed.

F. To stimulate the collection of information and existing statistics that reflect the true nature of the overall needs for health and hospital personnel in New York City.

As you well know the past decade has presented you with some very serious problems of keeping up with the proliferation of new health jobs as they have compounded. New knowledge and treatment techniques have immeasurably improved prospects for restoring sick and physically and/or mentally handicapped to their maximum potential. The demands for medical, dental, and other health care programs are at peak levels and in many areas there are insufficient numbers of trained health workers to meet these demands.

The health service industry is one of the nation's largest employers and it is still growing. The need for expanding; recruiting, and training efforts for health personnel have been compounded by recent government health legislation. (Our communications media in recent weeks have certainly pointed up these needs in discussing the Medicare program.) The problems of attracting qualified personnel are many-faceted and vary in degree of importance. It is our hope that we can explore some of these problems in the next few days.

Very shortly after becoming involved in this Health Careers Program, we realized that no single group or organization could undertake the correction of all the factors which contribute to the manpower shortages in the broad health field. We feel that it is only through cooperation between those who are totally concerned with the health manpower needs that the present shortages can be alleviated. The United Hospital Fund through extensive interviews with educators, guidance counselors, organizations representing various health careers, and community lay leaders, is convinced of the importance of the guidance counselor in attracting people to health careers. Therefore, this institute will focus on developing new areas of concern for future research, as well as stimulating increased awareness on your part toward the problems confronting us.

Again, let me welcome you, and now I would like to introduce to you the staff who will be with you throughout the coming days.

First is Mr. Philip W. Morgan, our Staff Associate for Health Careers, here at the Fund, who has rapidly become one of the leading authorities in the field of Health Careers. Working with Mr. Morgan are Miss Arlene Kuperman, Staff Assistant for Health Careers, and Mrs. Anne Tamber, Secretary for the Health Careers Project.
As our Program Director and Consultant, we have imported Mr. Archie Lugenbeel from South Carolina, where he is working on a Health Education and Recruitment Project. Mr. Lugenbeel is a real asset to us in the institute because not only is he Director of a Health Careers Program with the South Carolina Hospital Association, but he also holds a Master's Degree in Guidance and Counseling from the University of South Carolina and I am sure that he will be able to speak to you in your language.

Now, I would like to turn the program over to Mr. Lugenbeel who will carry you forward from this point and on to our purpose for being here.
The Health Service Industry
Today and Tomorrow

Harry Becker
Executive Secretary
Committee on Special Studies of New York Academy of Medicine

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First of all, I'd like to say that I am quite excited about the opportunity to talk with you about the Health Services industry today and tomorrow. I don't think that there is anything more exciting right now in our domestic economy to talk about than the changes that are occurring in the Health Care economy of this country. Health Care as an industry is in the beginning phase of a truly explosive series of developments. These developments are occurring on every front. We are, in effect, in the beginning phase of a revolution in health care, which is probably going to continue throughout the rest of this century.

This revolution in health care has really come about in a matter of the last year or year and a half. All the things we've thought of in the past terms of the health care industry are sort of being modified and changed. Many of the things we've been committed to are falling by the wayside. We're picking up a whole new series of concepts, philosophies and patterns, and so-forth and so-on.

I honestly feel that there probably is no single sector of our national economy, so far as the domestic economy is concerned, that is going to be a greater issue than is health care over the next several decades. Part of this revolution comes about because of the advances in scientific medicine and part of it comes about for many other reasons. I'm going to try to touch on some of these various reasons, to give you a little feel of what I think is going on.

The point I want to make first of all is that not since the advent of scientific medicine, which you might peg at around 1900, has the health care industry been other than a laggard industry. I don't suppose any industry in the country has been more laggard than health care has been. By the term laggard I mean what we have been doing for people day by day in contrast with what we know how to do. We have not really brought the Health Care industry up to our present day knowledge. Today, in 1966, we are in the beginning phase of a revolution and those of us who are living are at the very forefront of action in this revolution as far as health care is concerned.

In part this is a social revolution. In part it is a political revolution, and in part it is also economic. The generation which is now facing the future, young adults, and are facing the future as parents for the first time, and who will begin to think about retirement about the year 2000 are going to shape this revolution in Health Care which now is just in the first beginning stages.
As I mentioned a minute ago, there is no single sector of our social and economic life in America which is today facing the tremendous growth and the tremendous expansion which we will witness in the Health Care Industry in the remaining years of this century. This revolution is going to affect consumers in a variety of ways, and of course it's also going to affect the providers of services in a variety of ways.

We have reached a level of technology in manufacturing which permits fewer and fewer people to produce each year all the material goods that an expanding population can consume. The production of the entire spectrum of material goods has reached a plateau - we can consume as individuals and families only so much, only so many autos, only so many TV sets and only so many washing machines and dryers and electrical appliances and the like. We have reached almost a saturation point in the consumption of shoes and clothing. Most of us have the shoes and clothing that we need and most of us have most of the material things in life that we need. It's interesting that it's taking fewer and fewer people every year to produce these material goods for an increasingly large population. So we have in effect reached a surprisingly high level plateau with respect to our material life, and the material goods that make up our material life. I don't really anticipate or see the possibility of any major break-through as far as material goods are concerned.

Now, of course we're going to get higher productivity, more automation, etc. The problem of material life is kind of behind us as far as tooling up for it is concerned. Those of us who are working are finding that it takes a smaller and smaller proportion of our earnings to buy the food, clothing and shelter needs that we have. So our disposable consumer income after we have met our food, clothing and shelter needs is becoming greater and greater and will continue to grow greater.

I don't want to indicate that we are all members of a highly affluent society, but when you contrast where we are today with even ten years ago or twenty years ago, our disposable consumer income to buy goods and services after we meet our essential living needs is growing greater. This is true in spite of the fact that taxes are going up and will continue to go up. However, our incomes are rising at a faster rate than prices, and incomes are rising at a faster rate than taxes.

When most of us in this room were born, the lion's share of our productivity was directed towards meeting the daily necessities of life - necessities in the narrow sense of food, clothing, and shelter. This of course is no longer true. Today we are concerned about expenditures for leisure time; we're concerned about ways to have and use more leisure time. We are concerned with a whole new set of considerations.

Today, we have a different attitude about leisure time than we had even 15 or 20 years ago. Leisure time is good. The justification that we have for working is in order to have and enjoy leisure time. There has been a complete reversal here in the course of our own lifetimes.
We no longer think of work as the end product of our goals...leisure time is the reason we're working. Work is in itself, I suppose, evil. Our hope is that we can find ways to have more leisure time, use our leisure time more productively and have fewer man hours employed in obtaining the material goods and the other goods that we need in order to enjoy our leisure time.

We are moving into an era in the rest of this century in which leisure time is going to be, in my judgment, the focus of our attention - and we've got a long way to go to reorient our thinking to the leisure time concept. I think it's wonderful that our older people can retire at a reasonable age, and still have 15-18-20 years left to enjoy leisure time.

Today we want to find ways to make the older years of life more pleasurable. We don't want to make the older years of life difficult and arduous. Our concern today as I see it, is not to work solely for the purpose of food, clothing and shelter, but to work so that we can have more leisure time and have a greater fulfillment as people...to have greater realization of our potentialities.

I'm just as much concerned about the old people, the unemployed, the disabled as I am the working people in terms of constructive use of leisure time, not thinking of leisure time as something we should feel guilty about. We should feel good about our leisure time. This is something for you to kind of ponder about, and kind of think through...because it probably underlies many of the changes in our economy which are going to take place and which are now taking place.

Now, to get down to the Health Care Industry specifically. We are in an exciting and expanding growth industry, as far as health care is concerned. For the first time in the history of our country, we are beginning to direct our attention specifically to the issue of improving the quality of life. This to me is a very important consideration, because up until fairly recently, as our productivity has increased and our disposable consumer incomes have been greater after meeting our essential needs, it's been difficult to concern ourselves with the quality of life.

We began to see some focus on the quality of life considerations in the late '20s. Then we had the depression which we did not cope with too successfully. We had World War II and then we had the re-conversion of our economy after World War II to meet the accumulate consumer needs in terms of autos and housing and so forth. But now we're kind of catching up with these kinds of things and if it were not for the Vietnam War, we would find considerably more emphasis on this quality of life issue.

I do want to stress to you that it is not enough today to just stay alive. The new element that we are committed to is the idea that all of us throughout our lifetime must live with dignity and must have human values more important than property values. Even in my own lifetime we have seen the shift from property values having paramount importance to the idea that human values have paramount importance.
In the early years of most of our lives the Supreme Court of our country was still thinking in terms of property values and not human values. Today there is a marked shift in Supreme Court decisions and in the thinking of our entire country in the direction of human values and fulfillment and opportunity for people for a good life. Those values have a higher importance than the wide range of things that constitute property values. As a matter of fact, I think we can say and I think we should say, that society exists today for the sake and for the reason of giving us a fuller measure of those things that improve the quality of life.

The sum total of all of our energies and all of our efforts today are really directed to improving the quality of life. This is the primary commitment that we have adopted and that we are moving into. This quality of life consideration is undoubtedly going to come into sharper focus as we move along and as we release the energy that is now going into the Vietnam War. For instance, the emphasis on quality of life will grow greater. One part of the quality of life consideration is going to be improved urban living. We're going to make urban living a more satisfactory experience for people; we're going to be concerned with education; we're going to be concerned with all the social services; we're going to be concerned with problems of transportation; better use of leisure time and all the rest. But the very heart of all these considerations is the health care industry.

The Health Care Industry is today and will continue to be the most expansive and the most creative industry in the entire country. If we examine the issues, and I will try to touch upon them, it's going to remain the most expansive sector of our economy for the remainder of this century. The underlying factors in the situation as far as health are concerned have an explosive character that is going to assure this growth trend as far as health is concerned. One idea I want to leave with you is the fact that health care is in an explosive growth trend and that we've only started to scratch the surface.

When I first started out my life as a social worker in Nebraska and Kansas, we accepted the idea that we would always have the poor with us. We also accepted the idea that health services were not a basic necessity of life. I can remember in the 1930's and 1950's that health care was not a basic necessity of life. Hospital care was not a basic necessity of life. In fact, it's only been in the last several years that we have begun to think in terms of health services - the full spectrum of health services - as being a basic necessity of life.

Today we are confronting ourselves with two kinds of social problems: one, we know how to abolish poverty, and we are committed to its abolition. Those of us in this room are going to live to see the time when poverty is abolished. There is no reason for poverty. We have the techniques for abolishing it and as far as this nation is concerned we are committed to the abolition of poverty.

There is no longer a place in our society for two classes of people, those who are above the poverty line and those who are below the
poverty line. This idea that we are going to abolish poverty for the first time in our country has far-reaching implications to every one of you people who are concerned with the training and development of people who are going to move into our society in the next twenty years as workers and as producers.

Please keep in mind that the idea of poverty is repulsive in present day America. It is just as repulsive as a smallpox epidemic in New York City or a typhoid epidemic in New York City or in any of our cities would be. We have techniques for abolishing smallpox and typhoid epidemics, and we also have techniques for abolishing poverty. The abolishment of poverty is going to create many changes in our social and economic life in our patterns of employment. It's going to create a whole shift. We've talked about the Industrial Revolution and we've talked about other phases of our economic development but today, you people who are working with youngsters who are coming into their working years have really got to orient yourselves to the fact that we are committed to the idea of improving the quality of life and abolishing poverty.

The second consideration I toss out to you to think about is that health care in this context - quality of life and abolishment of poverty - has become a necessity of life. We no longer debate the issue about health being a necessity for it is not an optional service. Health ranks now with food, clothing, shelter, and education, and I suppose if you want to be real analytical about it you'd put health ahead of education. As a matter of fact, in our country we are spending a greater proportion of our national output of goods and services for health than we are for education.

Let's take a closer look at the Health Care Industry which I see as a great growth industry over the next 40 - 50 years. We are for the first time committed and really committed. We are committed to the idea that all of the people in this country have the right to access to the best quality of health care that we have the ingenuity to provide. We are concerned with making health care available to the people in this country regardless of their economic status, which they live, or any factor that you might put in the picture.

If we know how to eradicate a given disease, if we know how to treat a given disease, then we have committed ourselves at this point in time to making these kinds of services available to all of our people all over the country. There can no longer be differences in the services that are available in Alabama and Mississippi as against the services that are available in New York City and other urban areas where the expenditures for health care are of course considerably higher. Medical need - need for health services, need for preventative services, need for diagnostic services - not economic status of individuals is going to be the sole or determining factor from here on in.

This idea of universal access, access to health care is a decision that's been made in this country at the national level. It is a national policy decision, it is a social policy decision, it is a public policy decision which the Congress has made. For a long time we've talked about equal access to health care. However it's only been with the passage of
the Medicare legislation by Congress that the access to health care has become more than an academic issue. It's no longer an ideological question. It is a question of delivery, it's a question of distribution, it's a question of technique and of how we're going to do this.

Equal access to health care on a universal basis for all people throughout our country means first of all that we've got to improve our mechanisms for the financing of care. Now that we've got the commitment to equal access, we are going to move ahead and find ways to finance this equal access idea, which I think involves a very important combination of considerations.

A little over a year ago Congress said that every person 65 years of age or over is going to have as a matter of right, regardless of economic status, employment, or where he lives in this country, the hospital care he needs and there would be no economic barrier to that hospital care. That is a policy break-through in this country that is unprecedented. We have never, since the founding of our country, had such a major policy decision which broke with previous historical tradition as the decision for the federal government to make hospital care available for persons 65 years of age and over.

The important point I want to make is this, when the Medicare legislation was passed, we had the Congressional commitment for delivery of a uniform level of access.

If in some areas of the country some hospitals do not gear themselves to provide the benefits that they have assured the old people they will have, the federal government is obligated to move in and make those services available even if it means opening up the VA hospitals.

In the case of medicare we started out with persons over 65. Now, we obviously can't sit for very long with the idea that we're only going to take care of persons over 65...and that we're not going to worry about persons who are disabled and chronically ill and are just as disadvantaged, if not more so, than the aged. We're not going to sit very long with a program of comprehensive benefits for the aged and then not face the problem of the unemployed, or the mother with dependent children whose husband for one reason, or another is not gainfully employed or who doesn't have a husband. We're not going to sit very long with persons of low income who are not participating in the financing systems.

The Medicare breakthrough is a breakthrough that is going to filter down through the entire population. Until we had this commitment on equal access we certainly could not have the motivation and the forces at work to provide the financing which we needed. I'm not talking with you about the idea of introducing in this country in the next several years a compulsory health insurance system. I don't see that happening, as a matter of fact. I do see happening, however, an integration, or coordination, or I might use the word meshing of private and public expenditures so that we do have a comprehensive system of financing, to back up our commitment to equal access.
I don't want to indicate to you by my strong emphasis that the Medicare breakthrough means a commitment on the part of the federal government to deliver equal access. I don't want to indicate to you that it means we are very suddenly going to drop our private expenditures and substitute tax expenditures. But I do want to say to you quite frankly that you cannot have equal and universal access to health services without having all the persons and their economy participating in some way in the system of financing. So our immediate problem is going to be to find some way to mesh our public and our private expenditures so we develop a single system of financing.

At the same time, equal access to the health service commitment also means that we're going to have to mobilize all of our health care resources and think in terms of a single coordinated system of health care. There is no longer any place in our economy for two systems of health care - one for the poor and one for those who are paying for care out of their own resources. We're going to mesh our systems of health care. We're going to abolish the idea of the charity entrance to the hospital. We're going to have one entrance and that one entrance is going to serve all the people on the same basis because we're going to find ways to mesh our financing.

We're not to differentiate our services in case of health care by economic status of individuals. We're going to differentiate our health care rather by the medical needs of people. In the matter of a very short time in places like Los Angeles, New Orleans, Chicago and New York City we're going to see emerging a single coordinated system of health care. It'll be uneven and jerky, but the basic concept will be there and we'll be spending the rest of the century perfecting the idea.

Another idea I would like to toss out for your consideration is that ever since the advent of scientific medicine, which I place at around 1900, the health care industry in our country has been insufficiently financed. It has been inadequately financed for many different reasons, but primarily because we have never made the commitment, as a matter of public policy that we were going to have equal access.

We realized we have had a problem in financing before World War II and we started to develop the voluntary pre-payment mechanisms. Then we went into collective bargaining and tried to develop programs in collective bargaining. We've been doing all kinds of things to try to straighten out this financing problem, and now we're beginning to see some light. It's going to take a while before the approaches that we're now starting are shaken out. But here we are, sitting on the Health Industry, a necessity of life, with an inadequate system of financing which has prevailed for a long time and we're now beginning to face the problem of resolving our system of financing.

Now, very briefly, I'd like to give you just one illustration on this. There isn't a single person in this room regardless of income who can finance medical care out of current earnings, if that medical care cost happens to be of certain magnitudes. Most of us, can pay for incidental health care costs out of our pocket, but we do not select our illness by a price tag, and we do not select our illness with respect to time. I don't
care what income group we are in, there are certain kinds of illness which could make all of us medically needy. In such cases we would have to fall back on some kind of system of financing which is more than we ourselves can arrange.

I can go around this room and count 1, 2, 3, 4, 5, 6 and if you are a good cross-section, and I think you are, about every 6th or 7th person in this room is going to have a major illness this year. I don't know and you don't know who is going to have that major illness. But whoever has that major illness is not going to select it by the price tag. It is a certainty that unless we have some system of pooled financing that illness cannot be financed. The basic problem we've had in getting sufficient funds to finance health care is that the sick, at the time of sickness, do not have the funds needed to pay for their care. This has created all the way down the line a problem of insufficient financing.

We can go to the grocery store and with $20 select frozen strawberries and other delicacies on our shopping list, or we can select other food items. We can handle our food need; in that respect. We can select our housing in relation to price, in relation to our incomes... or even select our clothing and other things that we are consuming. But in the case of individual health care it is futile to think in terms of trying to save for the time when we might need health care. None of us can save that much money and besides it's not in the interests of our economy that we as individuals try to save money for the financing of health care.

Ever since the advent of scientific medicine we've had the problem that sick people, by and large, could not pay for the care that they received. This meant we had what I call "tin cup financing" and philanthropy - and all kinds of different ways of trying to bolster up the health care economy. Never once in the history of our country have we developed a system of financing of health care such as that we have developed for the telephone service for example.

The telephone service, A.T. & T., is a great institution. It is adequately financed. They have the money for research, for innovation, and for moving ahead. And they have worked out a system of financing so all of us, every month, are paying for telephone services on a monthly basis. The cost to A.T. & T. of giving us our telephone service as individuals has no direct relationship particularly to the monthly telephone bill.

We have financed our electrical power services; we have financed our other public utilities by developing a system of financing. We have built in our country a very productive television industry, a very productive auto industry, because we met the problem of financing. We met the problem of financing in the latter two cases by payments over a period of time. But we still have not, even today, solved the problem of financing health care on the basis that all people are participating in the financing system on approximately the same basis and therefore have a claim to the access. We're committed to access, universal access, but we've still got to work out the kinks in financing. We know how to do this and we are on the way.
While I'm on this point of financing, I'd like to point out that about 76% of the population does have voluntary health insurance. Voluntary health insurance is only covering 76% of the population; it is not going to cover the other 24%. And the other 24% of course are the aged, which we have now faced having to have a program under federal government auspices in order to iron out the kinks. Voluntary health insurance is only covering about 30-31% of the costs that are being incurred so that even with the best voluntary health insurance which the most affluent industries are buying for their employees, we're not solving the problem of financing health care. We're not going to solve the problem of financing health care until anyone of us can feel, at any time in a 24 hour period, that we can walk into a medical care institution and receive all the services we need without any consideration of the cost to us at the time of illness.

I'm not disturbed about this factor and this problem because I see now the ways that we are going to solve this problem. But the fact that we have not solved this problem up to now is the reason that our wages in the health field have been low. It's the reason that we have not met the problems of productivity. It's the reason that we have not met all the other problems that we are confronted with today.

The deficits in the health industry with respect to manpower and facilities are so tremendous that I hesitate to express it to you in specific terms because any terms I would use would have a lack of validity depending on the assumptions that I used. Even in a City like New York, using standards of what we know how to do and how to provide, and by the standards of the productivity of our economy, there isn't a single hospital that has a physical plant that can be called modern. By my standards of where we could be as against where we are, we could say that we have to rebuild the entire physical plant for health care in this country. There are some pockets of exception, but by and large the physical plant is obsolete, needs rebuilding and will be rebuilt because we have the manpower, we have the tools to do that job.

As far as personnel are concerned, the deficit might be one of the magnitude of 50-60-70%. I don't care where you put the figure, the deficit is so great in manpower in the health field that no matter where you put it, we're not going to be able to fill that gap fast enough. It's interesting to note that in 1960 when the last U.S. Census was taken they broke the industries in this country down into 71 classifications. In these 71 classifications of industry the hospital and health care industry combined is the third largest industry in our country. This was in 1960, before we had committed ourselves to equal access throughout the country, before we had committed ourselves to doing something about the dis-advantaged groups, and before we committed ourselves to more adequate systems of financing.

Health Care was third in 1960. Two and one half million people in 1960 were employed in the Health Industry as far as U.S. Census was concerned. Now, if the U.S. Census would take into account job classifications that
are not usually thought of as being in the Health Industry, this 2½ million figure would be even larger. The 2½ million figure really includes those people who indicated to the U.S. Census people they were regular x-ray technicains, lab technicians, nurses, etc. There are a lot of supporting services in relation to the health care industry that are not counted as health industry jobs. For example, a hospital is buying food from a producer of food. The people who are producing that food are not, so far as the U.S. Census is concerned, in the health industry.

It is also interesting to note that my comments about the health industry being the greatest growth industry in our country in the remainder of this century is not without foundation in the past. From 1950 to 1960, the growth rate for the health industry was 54%. Among the largest industries in the U.S. Census classification there was only one industry that had a rate of growth that exceeded that of the health industry. This was during the period of 1950 to 1960 where health was admittedly a laggard industry. In that decade the only industry that exceeded health in the rate of growth was the government educational services. And that rate of growth was slightly more than it was in health. So, even before the decade that we are now living in, this trend toward explosive expansion in health services was already evident. It is obviously going to become sharply more evident.

Between 1950 and 1960 we added one million additional workers to the health industry. By 1970, the health industry in our country will without question be the largest industry and will be showing the fastest rate of growth. I base this on the experience of the 1950-1960 decade, and I also base it on the developments that we are having on the state and federal legislative fronts. You can't have this kind of a situation in our country without having a tremendous need of people to come into the industry.

There probably is no single industry that has greater need for employees over the next several decades, or an industry that can absorb more people. We don't need more auto workers; we don't need more people manufacturing television sets; we don't need more people in any of the hardware type of production activities. We do need relatively few people in, say, electronics that are involved in computer technology, and so forth - but that's an awfully small number in terms of the total labor force.

Just think for a minute that we will be rebuilding to a very large extent our entire physical plant for health services. We are going to do this not only because the physical plant that we have today is obsolete, in terms of our concept of what people have a right to, but the organizational patterns for health services are changing so rapidly that even in hospitals that were built last year or are under construction now, the architectural plans have changed. The rapidity with which we are developing ambulatory care, for example, which a few years ago was not considered part of the hospital, today is an essential part of the hospital. In the near future, we're going to have more and better hospitals and we're going to rebuild many of our present hospitals.
As we replan our cities we are going to relocate our hospitals, have neighborhood health centers, fewer doctors practicing alone, and more doctors grouped in the neighborhood centers. These centers are tying into the larger complex of the hospital and the teaching hospital, where there is free flow of patients back and forth. We are going to have an explosive development in nursing home care. Today we have virtually no nursing homes in institutions that meet present day standards. We are going to have a very great expansion in skilled nursing homes.

Skilled nursing homes are for people who are in need of nursing care and cannot be at home easily for any one of a number of reasons. I suppose we have at least 15 of the nursing home beds we need in terms of demand for nursing home services now going to be financed by Medicare, and in terms of our standards. Most of the nursing homes that we do have are lousy. They're not adequate, and they do not meet the needs of people as patients in terms of today's standards. This one area alone can absorb as many personnel as you possibly can route into the health services industry.

I'd like to stress a little bit in the next few minutes, the personnel problem. The personnel problem in the case of health care is much more acute than I think any of us appreciate. The problem really isn't that we need more doctors primarily, although we do need more doctors. We need the other kind of personnel that support doctor's services. You can use the term "medical personnel", you can use the term "auxiliary personnel", or you can use any term you like. But we can absorb into the health industry all of the personnel that can be routed into it over the next several decades.

In 1900 we had three doctors for every five people employed in health. In other words, for every two people who were not doctors, and were working in the health field, we had three doctors. Today the relationship is one doctor to five people employed. Over the next several decades the total labor force in health care is going to increase in proportion to doctors.

The reasons for this are many and I will try to mention them to you briefly. When you think about careers in health care, I would put less and less stress on all the other kinds of skills that we need. The number of people needed is, I think, greater than we can possibly hope to attract into the health field - so there is no problem of over-supply. There is no problem of more people than there are jobs and that is not going to happen in our lifetime or for most of those people who are in the generation immediately behind us.

By 1970, we are certainly going to have 4 to 5% of the total labor force in this country in the health care industry. That is a relatively conservative estimate and I think you're perfectly safe in saying 5%. The growth of the number of workers that we need in the various health occupations must be stepped up to twice as great as that for population growth. We're not just trying to keep pace with the population growth, we're working like the devil to catch up. To catch up not only with the laggard situation that we've had in the provision of health services, but also to catch up with the medical technology that the research laboratories are kicking out.
There's a big, big gap between what we know how to do in terms of health and what we are doing. This gap strangely enough, is growing greater and not less great. We have put enormous amounts of federal tax dollars into medical research, and the medical research is way, way ahead of where we are in terms of distribution. It's going to take us a lot of hard work to catch up. We're not just catching up with the fact that we're laggard, we're also catching up with the fact that the technology in health is increasing at such a fast pace that we run like the dickens in order to stand still. But even though we are running like the dickens, we are not standing still, we are lagging behind.

I don't think this situation can go on any longer. Medicine, dentistry and nursing constitute about only 40% of the health care personnel, so I want to again stress to you the need for interesting young people in the health industry, even though they're not going to be doctors, dentists or nurses. The nursing situation is extremely acute and critical, and will be acute and critical for years to come.

There isn't a single interest that a single high school student has that cannot be used in the health industry. We can use it in the health industry in terms of construction, and all the ramifications of the problems of construction - architecture, cement work, design, in drafting and all the rest of it. We need any one who is interested in financing or any aspect of financing, (public finance, private finance, source of funds). We need people who have administrative skills at all levels, from being supervisor of an out-patient department or ambulatory care unit or supervisor of a home care program to a city administrator of a complex system of hospital and health services. We have a tremendous scarcity of administrative personnel. We are screaming for people who have administrative know-how, in relation to health services, people who are interested in planning in relation to public services and community services, people who are interested in community organizations, social work, chemistry, psychology, speech pathology and education. We need people who are interested in writing and public relations, in physiology and biology.

We need librarians, physical therapists, occupational therapists, radiologists. People who are interested in any aspect of the field of electronics, whether it's computer technology or whether it's some other aspect of the field of electronics. I really can't think of a single skill that we do not need to assimilate and to relate to the health care industry problem.

One problem I think is that those of you who are counselling think in terms of channeling only the most brilliant of your students into the health career industry. The health career industry has room for people who are not the most brilliant students. In fact, many of the kinds of jobs that we have might be better handled by people who aren't geniuses. We've got hundreds of thousands of jobs that require just ordinary people with ordinary intelligence.

The important thing is that all the people in health care have a compassion for people, a concern about them and a desire to be of help.
This I place higher than I do any other single trait. Any student who has any of these various kinds of interest combined with a concern about people should be considered for the health industry.

Really, I can't see any student that you would be working with that should not be encouraged to think of the health field as the growth situation of the future.

The Health Care Field offers job security - there probably is no field that offers more job security. A nurse can get a job any place in this country, as can a lab technician, x-ray technician or almost any job that you can think of. These people have a mobility that does not exist in any other industry. We do not have unemployment in the health industry. We have job satisfaction to offer in the health industry. We now have a new status for health workers because we're facing the problem of higher pay scales and the pay scales in the health industry are going to move up very sharply.

The nurses in New York City won a very substantial wage increase just a few weeks ago which was a very modest increase in terms of where it should be. In terms of the wage increase trend of workers in other industries, the trend upward of the pay scales in health are sharper and they are going to continue to be sharper. This is because of our laggard situation; this because we have to attract employees; we have to attract people. It's because we are the most expanding industry in this country and we do need the people. We're going to remove pay levels as a barrier to moving into health care.

I expect that the nurses in New York City are now about on a par with the teachers - and that situation is going to continue to improve. It's not going to reach a plateau. We need in New York about five times more nurses than we now have, and there is no classification where there aren't tremendous deficits.

A couple of other ideas to throw out to you before I stop. One is that the population in our country is going to continue to increase, and with the increase in population an increase in health services is assured. Even without advances, breakthroughs in technology and the population increases, we are going to make more jobs for more people.

The increase in persons 65 years of age and over which is going to continue throughout this century is going to create more demand for health care. People over 65 consume about 1/3 of all the health services we now provide. They consume about 2½ times more hospital care than do people of younger ages. So with the proportion of people over 65, the demand and claim on our health career industry is going to grow greater for that reason alone. Strangely enough, the proportion of women in our population, particularly of the older ages, is increasing. Women consume more health services in older age than do men, and the curve on the female utilization is a little different than the curve on the male utilization.

Our educational levels are rising, and with the rises in educational level, demand for health services increases. We are going to have more urbanization and urbanization increases the demand for health services. Our incomes as a group of people are going to continue to rise. We're going to
have more disposable income in the future after meeting our essential needs, and the more income we have the greater is our demand for health services. Our total national income is increasing and our gross national product is increasing and we're going to allocate an increasingly large proportion of our annual increases in our gross national product for health. So, given all these factors together, there's nothing here to indicate that this is not the industry in which to stake one's future. And if there were stock to buy in this industry...I would strongly recommend that we all buy it... because it's sure to go only in one direction and that's up.

We also have, I think, another factor which I would like to toss out...not discuss too much but just toss out as something to think about. And that is that today we are committed to the idea that the federal government has a role in the financing of health care. Once that commitment was made by the Congress in the case of the aged, this underpinning of financing will lead to our finally breaking down and facing the fact of the role of government in financing. It is going to be a very important consideration. I would put that very high on the agenda because without an adequate system of financing we're not going to get any place. The pressures are so great on the part of the consumers and the place of health has risen so high on our agenda as consumers, that we're going to finance the health care we need even though we have to call for it from governmental sources.

I'm not saying that I think we have to do that. What I am saying quite frankly, is that we are going to have more and more of our personal health services paid for as a mechanism of government. We've got about 25% of the population right now which is unable to buy voluntary health insurance. We have another segment of the population that is buying voluntary health insurance that cannot meet the price of a comprehensive and adequate level of benefits. Thus we're going to find government subsidizing not only the 25% who do not have the ability to pay for voluntary health service, but the government is also going to subsidize voluntary health insurance. And we're eventually going to get, as I said, this meshing kind of thing.

Please don't think of any saturation of manpower in the health field industry at any time in this century. We can't possibly get a saturation. Our ability to consume services is almost without limit. And the gap is so great that there is no danger of saturation in any time in this century. Today, and in the next year or two, you are going to see considerably more emphasis on the crisis in health care, crisis in physical plant, and crisis in manpower and that is going to create additional stimulus, I think. Think of this as the beginning phase of a real revolution in health care, because that's what it really is. This revolution is going to continue until the supply and demand have come into balance. This revolution is not just the usual economic concept of supply and demand because we are concerned not only with supply but with the person who needs health services.
I have some feelings that have been relayed to me from people who are much more adept in this field than I am... and I've prepared some remarks which will indicate to you how those who administer the Vocational Education Act in the Office of Education feel about health, guidance and related research. The increasing numbers of students and the multiplicity of their needs have magnified the difficulties of guidance counselors. The search in Educational Research today is how to do things better, despite pressures from without and limitations from within. In short, how to better achieve our mutual aim of developing the potentialities of students.

Dr. Henry Heald, who was then President of Ford Foundation, shed light in 1963 on the national concern for vocational and technical education. His speech was given on the occasion of the Foundation's movement to aid in the unified effort to improve the means of American youth for productive work in a changing labor market. He announced the program in this way. He said, "Traditionally, schools have been in a better position to prepare students for college than for vocations. This was partly because business, industry and formal education have not been able to reach a clear understanding of their respective roles in fitting youth for the challenges of the world of work. Now, as the pace of technological change is quickening, as the diffusion of technological change is mounting, the demand for special skills is becoming apparent. Now, we need to eliminate the problem of equipping our children with the wrong skills for this new age. When skills are no longer pertinent to society, their bearers become the unskilled and then the unemployed. What is needed is a rational, effective system of vocational education."

Social pressures continue to place a high premium on the traditional liberal arts curriculum in our high schools and junior colleges, while economic requirements and the realities of the world of work stress the expanded need for technicians. The result has been increasing numbers of technical curricula, to which it becomes more difficult to interest and attract able students. The attitudes of the staff also relate to the sensitivity with which societal needs are perceived. In contrast to the myopic local viewpoints of the traditionalist, the experimentalist is more likely to perceive needs in view of the societal context. In other words... he would be willing to develop refreshing curricula with suitable recruiting devices and teaching aids that will attract able students.

Technological changes which are intrinsic to an industrial society have been unprecedented in scope and rapidity. Some occupations of long standing have been reduced, and others have been completely eliminated. New occupations, calling potentially for tens of thousands of trained
workers, have arisen in less than a decade. The nature of the labor force is also changing dramatically. Young people are increasing in numbers three times as fast as the population as a whole. The labor force which now stands at about 74 million people or so, will increase by about 13½ million by the year 1970. Half of these new workers will be between the ages of 16 and 24. As a result, employers are going to have an abnormally large pool of new workers from which to draw. And they will seek for the good jobs, only the well trained applicant. The pattern of a lifetime in a single career is less and less the future of an average worker. Economists estimate that most youngsters today will be looking for a new job four or five times during their lifetime. Workers are moving around the country more than ever, and in one recent year more than 8 million of them changed to a different industry, and nearly 3/4 of a million to a completely different occupational category.

Finally, great changes are under way in the employment fields where the greatest opportunities exist. Despite the fact of continuing hard core unemployment, jobs remain unfilled in semi-professional and technical areas. Most new jobs of this rapidly expanding population have opened up, not in private industrial plants, but in service industries and in government work. The projection for local and state government employment indicates an increase over 50 percent for 1975. This gives us some cause to think about where the changes are going to be taking place for our new employment opportunities. Some basic criticism of today's general vocational situations may excite your research desires. Too often education today limits the ranges of opportunity and career choices for young people. Not often enough are our students trained in co-e work skills that are transferable between occupational areas. Instructional programs for career fields need to be developed in such areas as medical technology, graphic arts, and sub-professional business occupations to replace curricula aimed at preparing youngsters for a very narrow range of occupations. In many vocational programs youngsters must decide whether to get on to a vocational track by the 9th grade. This is an age at which most students have not had sufficient opportunity to explore their own potentialities, their own needs and their own possibilities. Research in vocational and technical education, on transferable skills for example, is insufficient. Universities, schools and individuals have not applied the full range of their scholarly resources to these fields. Experimentation and demonstration efforts are needed to determine the best means for training thousands of vocational education teachers for secondary schools, technical institutions and community colleges. These shortcomings and needs are beginning to engage the active interest and concern of educators, behavioral scientists, public officials and industrialists. This all comes in the face of the unprecedented amount of funds being supplied through the Vocational Educational Act of 1963.

The present funding of the Vocational Educational Act is 122½ million dollars for the fiscal year 1967. Of this, it is anticipated that 10% will be utilized in research on some of these very topics that we've been talking about. Not only is money available to take a hard look at the problems, but the rigidities of previous vocational education acts have been torn wide open. This Act makes appropriations available for such things as meeting the needs of higher skill and technical ability, youth unemployment, the high school drop-out, the disadvantaged individual, and the displaced worker who needs training.
Within the past few years, greatly increasing support has become available for research in vocational education. With the passage of the Vocational Education Act of 1963, Congress established the revolutionary new principle that a specified portion of the funds for an educational program shall be used for research, training, pilot and demonstration programs. In practice, very little of operating budgets have been devoted specifically to research, a practice that has been prevalent in industry for two decades, where most firms use 5 to 15% of their operating budgets for research and development.

In addition, the Vocational Education Act specified that a 3% minimum of the allocation to each and every state must be spent for ancillary services. These services are designed to insure quality in vocational educational programs. The activities include preparation of instructional materials, teacher education, administration and supervision, evaluation, and special demonstration and experimental programs. It is significant that the Vocational Education Act specified that colleges, universities and other public or non-profit organizations may deal directly with the federal government in proposing expenditures for research, training, and pilot demonstration programs.

But we are not here today to talk generally about the Vocational Education Act. We're to tell you of the exciting changes that are taking place in the occupational area of health occupations. We're here to focus some attention on the Office of Education's stake in the health careers, and what you as Guidance Counselors can do toward meeting increasing demands for health personnel.

Today the American people expect high quality health care delivered whenever and wherever such care is needed. Much of the recent legislation has given form to this aspiration of the Federal role in health. In effect, the Federal government has formed what the Secretary of Health, Education, and Welfare, Gardner, calls, "a creative partnership with the health professions, the universities, the hospitals, the states, the community, and a wide range of other institutions in the health fields."

The American Association of Junior Colleges and the National Health Council's Joint Committee on Health Technology Education, sponsored by the U.S. Office of Education, has identified several problems that are impeding the progress of expanding technical education in the health occupations. One of these problems is the ineffective communications between the educational institutions (in particular vocational technical high schools, community junior colleges) and the professional associations representing health practitioners. There is a need to identify and establish channels of communication between educational institutions and professional associations for the development of realistic curricula; another is the identification of the requirements for facilities; and still another, the identification of the related components in the community; all of these must be utilized to assure that the graduates of health technician programs are adequately prepared for the roles that they will assume after they have been trained.

Need I belabor the point to say that we have dramatic, real and growing needs in the health services. The demands for medical and health services are rising considerably faster than the total population. This is
due in large measure to the very rapid growth in the number of children and older people in our population, the requirements of Medicare, new environmental health hazards, the greater urbanization of the population, and the vast expansion in medical research have contributed significantly to the demand for health services. The extension of hospital insurance plans and the increased use of technological devices for diagnosis and treatment have also added to the need for medical and health personnel at the professional, sub-professional and technical levels.

It is common knowledge that the economy is characterized by record high levels of employment, while many pockets of unemployment exist. And you, as Guidance Counselors, know from first-hand experience that the unemployment rates are highest for workers of low skill and low educational attainment, whose job opportunities have been curtailed by automation and other technological changes. The health field, with its growing manpower needs has a tremendous potential as a source of employment for a large number of young persons who find few opportunities open to them.

These demands are so pronounced that former HEW Assistant Secretary, Francis Keppel said earlier this year, "It is estimated that we will need an increase of a million individuals, in all health occupations. Divide that by 120 months of ten years and you derive the arresting demand on health officials to develop an average of nearly 10,000 new jobs in the health services alone per month." Presently we come to our gross estimates. "In this fashion we multiply the number of extra physicians needed, estimated by the American Medical Association at 60,000 by the eight allied medical occupations which the AMA says are already required to support each physician ... and this brings us to nearly a half million people needed." And Mr. Keppel continued, "The allied medical fields to which the AMA refers does not include dentists and their supporting personnel. Nor does it include registered, licensed or practical nurses. If we also include needed technicians in radio isotopes, medical electronics and similar fields recently identified, we get a million easily." He concluded, "We do not have names yet for some of the occupations which are emerging and there is every reason to believe that our estimations of needs are conservative."

I don't think he meant his brief statement as an in depth analysis of the health manpower problem, but he probably came a lot closer to the correct answer than most people think. Not all this demand can be met from public educational institutions. As guidance persons, you are wondering where you fit into this situation. How can you lead a youngster in good conscience into a low paying job, with irregular and little or no advancement possibilities? This probably violates all the rules you have laid out for yourselves, and all the bylaws with which you have equipped yourselves over the years. To this I say, it is also error to focus on increasing the supply without simultaneously considering the wage structure and utilization patterns. But we'll dismiss that for the moment because there are persons working on raising the income levels...and I think the United Hospital Fund as well as labor and management organizations are involved somewhat in bringing up the standards of working conditions and raising the income levels.

The utilization patterns are being affected by the joint committees formed by the American Association of Junior Colleges and the National Health Council. The demands for adequate supply are great. Only if better
working conditions are developed and wages made more competitive, can good training help attract and retain the expanding numbers of people that will be required.

The financing of such training must be reviewed and the public education system will probably be called on to carry more responsibility in this field. By more efficient utilization of available manpower, we can work to reduce the current shortage. Utilization must continually be evaluated and we must keep training and re-training workers within the health industry. Only by offering attractive entry employment opportunities can even the most sophisticated recruitment activity be successful. By these methods can we supply additional manpower.

So far in the sixties, the millions of dollars spent in Federal funds for the training of doctors and nurses has availed us very little real improvement in our manpower situation. We are certainly not getting ahead. We are working very hard just to keep up in the medical and nursing occupations. We must find places for an effective breakthrough. We need new sources of personnel and new manpower utilization techniques. We mentioned before that the labor force will have increased by 13 million by 1970. Women, young people, and older workers will form the mass of this increase. The socially and economically disadvantaged, minority groups or those for whom poverty has obliterated opportunity can make a greater contribution to the provision of health services if we just find the way. We need to explore a wide new range of programs genuinely suited to these groups. These are people whose futures are in jeopardy in an increasingly technical world. If the health occupations have a shortage of manpower, then perhaps this is one place in which we can begin to fit some of our so-called "dead-ended" youngsters. If we can think clearly about sharing the load with the colleges, the junior colleges and professional schools, then we will be moving closer to a solution of health manpower problems.

This burgeoning occupational area of technical health jobs, demands in many cases students of higher than average potential. Most of the special education they may get may possibly fit best in a junior college program, but that does not mean that secondary schools, both vocational and general, have no roles. At a minimum, they bear responsibility for an alert guidance system to enable them to open up opportunities to youngsters with aptitudes for these occupations and the preparation needed prior to specialization.

The various health occupations and professions differ markedly in their ability to recruit personnel. Their differences are apparent at each level of the educational system for which recruitment occurs. In order to ascertain what the circumstances might be that account for these differences, it would be necessary to undertake detailed studies of the various factors which influence the recruitment performance of the individual professions and occupations.

Opportunities in the health field have limited visibility and are generally not known to high school students and teachers, with the exception of medical, dental and professional occupations. One way of increasing knowledge of career opportunities in health services would be to include the health courses and guidance programs more substantive and imaginative programs. Special student projects, cooperatively planned by local health agencies and school districts, including summer and part time employment, could be conducted.
Every individual, I am sure, does not aspire to reach the pinnacle of his profession nor does everyone have the basic capacity for such a career, but we have the obligation of identifying intellectual capacity in all groups, and channeling the various kinds of personnel into appropriate positions. It was no accident that the responsibility for providing counseling and guidance services under the Vocational Education Act of 1963 was vested in the public education, and Dr. Kenneth Hoyt said when this Act became law "high school counselors were presented with one of the greatest challenges in the history of the guidance movement."

It has been clear that the rapid increase in the nature of our work force demands more education and training. Of the thousands of youngsters now in limbo due to the lack of salable skills, the challenge to vocational education and vocational educators, counselors and other public educators seems quite clear. The challenge cannot be met solely through the efforts of vocational educators or junior college leaders. If it is to be met, all professional educators including counselors and teachers must be committed to vocational and technical education as a significant part of public education. The pervasive task facing High School Counselors who attempt to provide effective guidance services for all students is the challenge of ignorance, the challenge to learn about and understand their opportunities.

The suggestions I'm going to make now are things I feel, counselors could do in the way of research to move many of these programs forward. The first is that counselors need to know more about occupational opportunities likely to become available to students in the future. This counseling need was recognized by the Vocational Education Act which provides for transmission of pertinent occupational information from the public employment service to the high schools. Such information, especially in the health service field is not generally available on a local basis. Manpower status and need surveys should be conducted. The second point is that counselors and we, in vocational research, need to know more about the kinds of students that are going to school, the kinds of students that you have, and for whom training in this type of human service occupation is appropriate. We need to know more about the educational motivations of such students. Too little is yet known about the nature, strength or possibility of capitalizing on these motivations.

Another researchable item in the vocational area is the value of tests for use in predicting success in technical and service education. We have a vast number of tests for college bound students today, but very little for vocational and technical bound youngsters. We need to know more about the expanding opportunities in vocational education and community college programs. The opportunities for non-college bound students are becoming varied and numerous. Counselors need to be able to relay the myriad of opportunities for post secondary training to the students.

Fifth, we need to know and learn more about counseling students in vocational education. When do we start with occupational or career information and what types of information should be used? The non-college youngster may respond very well to slightly different techniques, and workers should be interviewed to give an insight into worker characteristics, job satisfactions and performance requirements. We know very little about these things, especially in the newly emerging occupations. There is a great deal of misinformation and poor information in the health field and much of it does not relate to the youth of today and especially to the youngsters we need and want.
to attract. We don't speak the appropriate language. The film strips that we have, the pamphlets that we give away, are all pretty well related to the middle class youngster and do not speak in the language of today. This is of great concern.

The economic, racial, and religious barriers to educational achievement must be removed and remuneration, as I said before, should be made competitive.

The health field has an obligation to present itself well to the counselor. A person's self image, the way we picture ourselves, is enormously linked to our society; to what we do and despite Marshall McLuhan's recent testimony that the work ethic is quickly disappearing in society, I really don't believe it is. The standard social question today is "And what do you do?" The image created by the health community is the worker's passport to identity. I'm not a psychologist, but I find it exceedingly difficult to conceive of any meaningful identity apart from some functional purpose, some definite usefulness in life. The task is not only to train numbers of health personnel, but also to train and develop high quality personnel, oriented to community service, and hopefully, for adjustment to our environment.

A great deal of research is especially needed in this area. I certainly hope this Conference Workshop will present to you the opportunities that exist for the youth of this region in the allied health fields. The United Hospital Fund has a great stake in the progress of the community. Their support for Office of Education programs has been well-recognized and workshops like this are indicated to be, in the Office of Education, highly valuable experiences, both for the Office and for people that we try to serve. It is our hope that this series of meetings will prove to be successful, to produce an avalanche of research ideas at the local level, and to create great interest in the sub-professional role in health services, so that programs like this can be replicated throughout the country. Indeed, this is the purpose of this Conference. Thank you very much.
CURRENT TRENDS IN COUNSELING

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The title of my talk listed in the agenda was "Current Trends in Counseling." However, I received a letter which told me I was to give a talk on, "Counseling as it presently exists in New York City." Perhaps these two are the same thing...I think I'll use the latter title.

I think none of us would quarrel with the statement that there has been real improvement in the preparation of counselors and the counseling programs in the New York City schools during the past ten years. There has been great progress. Many teachers have taken the required graduate programs and moved into counseling positions and are doing an excellent job. However, I'm sure we'd all agree that although we're aware of progress, there are far too few counselors for the number of students with whom they are dealing, and that much more preparation in the specific areas of career information and career development might well be required in order to do an even better job.

When I look at the stated requirements for a counseling certificate in New York City, I realize that a counselor could have as few as two credits in career information and still satisfy the requirements for certification. And as you know far better than I do, this is all too little. We are also aware of budget problems with the schools. We know that it isn't easy to get all the things we should have. We hope that this will be remedied. We know too, that counselors in the High Schools and public schools have a particular and difficult problem because of the wide variety of socio-economic backgrounds from which the students come. We are familiar with the problems of the college bound student, the pressures for grades and achievement. We're also aware of the problems on the other side of the fence for the non-oriented college student, some of whom have college potential but are never going to get there unless some counselor gets into the breach and helps them. There are also students who must have satisfactory and useful jobs when they complete High School. And what about those who drop out, for whom there is sometimes no help within the schools? We rely very heavily on the U. S. Employment Service and certainly they are trying to up-grade the training of their counselors. I think they're to be congratulated on the Graduate Programs that are being established all over the country.

However, for many of the students, whether they be college graduates, high school graduates or drop-outs, the area of health careers presents appropriate, possible, and potentially satisfying positions. There's a wide spectrum of jobs available within the health career area...all levels of skills: the kitchen assistant, the porters, the cleaners, the technicians, the dietitians, the programmers, the nurses, the social workers, the physicians, the psychia-
trists and the applied research workers. And I think we have to arrive at a point in our culture where if we need people to do certain kinds of jobs we accord them the respect that they deserve. And if some people are willing to do the kinds of jobs that some of us think are not quite suitable as far as we are concerned, I think we have to be very sure that we're not making value judgments in terms of our own orientation, not in terms of the person with whom we are working.

In spite of advancing technology, I think we're fairly safe in saying that Health Services will continue to demand increasing numbers of persons; as we learn more and more concerning physical and mental rehabilitation, as emphasis increases on diagnostic techniques and prevention as well as cure, and as our social programs improve and increase. We haven't enough Health career people now, and it's hard to see how we're going to have enough in the future.

How much do we counsellors know of career possibilities? ...where the jobs are...what kinds of jobs...what preparations are required, what kinds of people are happy in these kinds of jobs...what kinds of interests are demanded for the specific type of job that will allow the worker to have a satisfactory life. Certainly no one of us can hope to know everything about all the careers possible in this world, but equally certainly we need to have at hand good, reliable career information...available not only to counsellors but to students. Sometimes we need two very different kinds of files...one for the student, and one for those of us who are trained persons.

A questionnaire was sent out to High School counsellors in this City to gather some information prior to the establishment of this Institute, and 82 questionnaires were returned. I'm going to give you a run-down on some of the returns on this questionnaire because I think they point up some very important factors. In answer to the question "Do you have sufficient information in your files on the following Health Careers to feel competent in counselling your students, the highest number of affirmative answers was received for the field of Registered Nurse. Now, you know what an effort the professional nursing groups have made to get this material across. Of the 82 respondents a significantly high number answered YES...60, but it's interesting that 22 felt they didn't have enough information. And that's in a field in which many people felt they had received material.

82 counsellors said they didn't have information concerning cytotechnologists and inhalation therapists...however, these are more or less new fields. 81 had not enough information on EKG technician and orthoptist. 78 had nothing on sanitarian that they considered adequate. 75 lacked material on audiologist and speech pathologists as well as medical illustrator; 71 on certified lab assistant and rehabilitation therapist. 68 on the job known as housekeeper. 64 dispensing optitians. 62 health educator and osteopathic physician. 61 medical record librarian. Remember, these numbers represent those who did not have it. First I put down those who did have it, and then I thought it wasn't quite as dramatic as those who don't. 57 social worker, that is the medical social worker. 57 nutritionist. 56 medical librarian. 56 hospital administrator. 54 had insufficient information on
medical technologist; 53 on podiatrist; 51 on optometrist; 50 on physical therapist; 48 on dental lab technician...that surprised me a little bit. 48 on nurse aide and orderly and 48 on x-ray technician. 45 had insufficient material on medical secretary, dental hygienist; 44 in the area of veterinarian; 40 on dental assistant; 40 for home economist; 41 for dietician...now we come to the low figures. 30 did not have sufficient material for the licensed practical nurse, and also didn't have enough for dentist. 27 on physician, and the lowest number 22 for registered professional nurse. Now, I think that's a very interesting statistical run-down.

Another question that was asked was where counsellors sought information...what were their sources of information? Interestingly enough, of course 54 mentioned our guide book par :xcellence, the Occupational Outlook Handbook, 30 mentioned professional organizations; 30 mentioned the Dictionary of Occupational Titles, only 24 mentioned the Health Careers Guidebook, and 24 mentioned organizations such as Metropolitan Life, Science Research Associates which as most of you know puts out a regular career series with complete filing system. I think when they refer to Career Occupational Briefs they're probably talking about the B'nai B'rth series which also has very good material.

In answer to the question as to which sources were readily available, 67 said they had the Occupational Outlook Handbook. It's interesting to me that the entire 82 didn't have it. I would have expected that it would have been readily available to all counsellors. Forty one have the D.O.T., 53 have Vocational and College School Guide, which I suspect is not quite as oriented to careers as we might think. Sixty-three did not have, Where To Get Health Careers Information, the green pamphlet which I expect you'll have by the end of this Institute, and 55 did not have the Health Careers Guidebook. Forty-five counsellors reported that they used visual aids: 27 obtained them from their visual education department; 19 from professional organizations. Thirty-one sponsored assembly meetings to promote health careers: Fifty-one did not.

Now, I'd like to share with you a little experience I had. The Health Careers Project, was approached for speakers and I had the opportunity of talking at one of the big High Schools. I approached this with some trepidation, because I faced 1300 young ladies, high school students, sitting out there in front of me, and I'm used to dealing with college students. As you know, there's a difference. I gave a presentation about Health Careers appropriate for both those who were going on to college and those who were not. I must say I was amazed at their attention. They were remarkably "good" and polite. And I don't think that the principal or the leader of the assembly program was just trying to be very nice to me when she said that they had so many inquiries about details from students who came in and wanted to know more. I was extremely encouraged and I think the proof of the pudding is that they asked if I would come back.

I think that you can do things. It's difficult to work with large groups of students, I know, but I think that all of us must become aware of the fact that we're almost hopelessly bogged down with numbers, and we're going to have to move toward larger group meetings, set stages, as it were,
and we're going to have to use more group meetings and become quite adept in group dynamics. I think that career information is one area where you really can use group counselling and I think that many things develop when you work with young people in a group situation. This is not a threatening situation, and out of this comes some very interesting peripheral results. You may find, of course, that for some you will have to follow up with individual conferences, but I think that you can get quite a bit across in the small group situation, like it or not, all of us are going to have to devise ways of meeting this terrific load that we carry, and we carry it now at the college level, too. At Hunter College we give a lecture (part of orientation) that is concerned with the bases of vocational planning. This was designed originally for nice, small groups of 20 where we could have give and take and not a lecture...it was really a small group meeting. We now are giving this lecture to 300 and 500 at a time because we just do not have staff enough to go around. And yet, because of that presentation, many students come in for individual counselling and begin to think in terms of their future careers. I think that we must become more ingenious and innovating, and try techniques that perhaps ten years ago we wouldn't have considered for five minutes. We cannot remain addicted to a one-to one situation for all problems. For some of them we still need this. Certainly for others we don't.

Fifty-eight of the counsellors said that their students attend Saturday Career Conferences, which I thought was very encouraging, and 54 have arranged and conducted tours to interest students. But again, this was an interesting sidelight, because the one career that was mentioned was Nursing, and here again I think we're getting the results of a well-organized professional group that's really gone out to try to make its needs known. It's quite obvious from the results of this questionnaire that more information is needed. We all knew this anyway, but this illustrates it rather dramatically.

The next question that arises in my mind is, "Who in the schools has the responsibility for putting this material together? Is it the counsellor, who's already over-burdened? Is there any one person? As I talk to various of my acquaintances in the schools, I get the feeling that in some places there isn't any one person who is really responsible for this, part of the program. Nobody says, "Mr. X or Mr. Y, it is your responsibility to see that this information is kept current." You need budget for this, too. However, there's lots of free material and good material. I'm sure you're all acquainted with Gertrude Forester's bibliography and certainly if you go through that...and there's a new edition out... you can pick up quantities of material that costs little or nothing. In my own Bureau I have a Research Assistant who spends a good part of her time just taking care of our career literature material. We keep files in the Library where students can browse as well as in our own office where counsellors can use the material directly with students. But let's remember that if we collect career materials we have a responsibility to get rid of them as soon as they become out-dated. I spent a couple of weeks this February in intercession, just going through career materials and when I got finished, there was practically nothing in our
files. I think there's nothing more damaging than out-dated material. It immediately causes the student to look at the career with utter and absolute disdain. It can be as simple as a picture of a girl whose dress is too short or too long or whatever the fad is at the moment. But we have to remember this. Certainly it's to be hoped that at some point in the development of counselling in the schools, administrative assistants or clerks or someone will be assigned to help the Guidance Counsellor to keep this kind of material in order, up-to-date, properly filed and available. Your time is far better spent with the student than looking after the material.

The fact that the counsellor needs information is obvious, but equally obvious is the fact that the counsellor is just not a giver of information...and this sometimes is what we tend to think the counsellor is. The counsellor plays an important role in recognizing student needs and helping in his vocational development. Naturally, it follows that if you have a special niche in any place, pretty soon everyone expects you to be all things to all men...and the counsellor can't carry the burden himself. We all know that you're part of a team...that you try to help spark creativity in your students...you try to help them realize their potential, but certainly you can be a great help to the classroom teacher in this area. You can't be expected to do it yourself. In the matter of vocational development, you know that Super's Research pointed out the importance of vocational exploration for the 9th grader. In fact, he said that the 9th grader is in the vocational exploration stage. He's exploring himself to see what features of a vocation will help him to gain personal satisfaction, and he's exploring a world of work to see how these features appear in reality. Well, while exploration enters the picture, Super believes that the years of 9th and 10th grade may be too early to start our preparation for a specific vocation. We know that there are all sorts of changes that go on, and in spite of all the research—and there's pounds of it—I still think we haven't any truly definitive material in this area. Perhaps, this is because we're dealing with human beings. However, I think that we have to realize that unless certain decisions are reached in High School, certain goals are never going to be achieved.

This is the kind of sticky wicket we deal with. Our educational structure imposes certain patterns on us and on the student. But we are all aware, too, that as far as career development is concerned, one has to learn many things about oneself. Self-knowledge, I believe, is as important as vocational information, and it's something that's hard to come by. You can't apply self-measurement to career choices until you know quite a bit about yourself and your relationship to the world. If a vocational choice is the implementation of a self concept, then you have to know what your own self concept is. And as we know, this is not easy for most of us, and it is certainly not easy for the adolescent.

In today's culture where so much of the emphasis is on intellectual achievement, I sometimes wonder what kind of a price we expect the less talented student to pay. How much attention is he really getting? And certainly he needs a great deal. Do we, as counsellors, help each student to achieve to his highest level? Are we interested in those who will fill some of the less prestigious jobs or are we interested only in those who
are going on to the kinds of things which we, as middle-class educated people set great store by? There are lots of useful and necessary jobs that need to be done, and that people are competent to do, and may be happy doing. Ericson says "In general, it is primarily the inability to settle on an occupational identity which disturbs young people."

I can give you my experience in this regard as far as the college population is concerned, and I think it has some relevance to your situation. Many of you are tremendously involved with helping the students who want to go on to college...seeing that they achieve the right grades, that they take the right courses and that they apply to the right schools...and this becomes a pretty big part of your work, I'm sure. It's quite fascinating how many students arrive at college with no idea of where they're going or what they're going to do. Now, perhaps this is all right. A Liberal Arts education is not meant to be vocational, per se. We know that what's going to be demanded, and is being demanded now actually, is flexibility, broad intelligence, a capability to move from one thing to another. And yet, I have plenty of evidence that shows me that one of the reasons why students do not achieve in college is because they are just aimlessly floating. They have no goals. They don't know where they're going or what they're doing, and this lack of motivation is what causes many of them to achieve at a very low level. It causes some of them to flunk out. The process of maturing for some of them is very slow.

I do know that when students come in for counselling, and I'm talking about career counselling, (you can't separate it completely from the personal), as the presenting problem, when they can finally arrive at a direction and a goal, it is amazing how their college grades improve and how they begin to be able to benefit from the education on which they've embarked. I'm not even so concerned as to whether by the time they get to be seniors the goal will have changed, for I think the establishment first of short range goals, and then long range goals is a very important thing in the development of any of our young people.

As I said before, much research has been carried on concerning vocational choice and the factors that enter into vocational choice. We know that the economic status of the family affects the vocational aspiration. We know about the correlation of Father's employment and Mother's employment. We have all kinds of factors. But one thing I'm sure of. Choice, in the true sense, is only possible when there are alternatives, knowledge and possible implementation. They must be present. Otherwise you cannot say that anyone makes a choice. Maybe he falls into something, or he takes something through sheer desperation.

How can we help students to get information that is realistic? We can open up areas to them through written material, certainly. Sometimes it doesn't mean too much to them in reality, because it doesn't exist except in words. I think some of the Summer Programs that are in existence now, some of the volunteer programs, certainly the kind of volunteer work that a high school student can do in a hospital or in a social agency can be very useful in pointing up a career. However, if the student goes into an area and finds out this is not for him. It's just as important as finding out that it is, because this knowledge saves time, and energy and heartbreak...so I think that
everything should be done to encourage career exploration, in the afternoons, part-time, if possible, or the Summer. Certainly one of the best ways we know are through some of the cooperative education programs about which there is some fascinating material coming out.

I think there's no doubt that a great deal could be done through television. I don't know if most of you have a closed circuit television in your schools. There are all kinds of ways this could be used. We also have to be aware of the fact that some pretty weird things can happen as a result of television... the boys who think they're going to be Perry Mason, for example. This can be rather unrealistic, but after all they're in the fantasy stage, so it's all right.

We have to remember, particularly with minority group children, that there has to be some contact with successful people. The problem of believability is a big one. Children who have no contact with certain kinds of careers are not going to be interested or think it is possible for them. I don't know how many of you are acquainted with the Inter-racial Council's program in this City. I think it's an excellent one. This is a group of business people who have banded together to work in this area, and they have succeeded in getting hold of some minority group members, men and women, who have successful careers for example, in advertising and in various aspects of business. These people go out and talk at programs in the High Schools and in the elementary schools and they are in a sense a model to whom these children can relate... which is very important. They've also done something to help minority group members to set up their own business. They don't know the ropes about credit, and banking; and they don't know the ropes about business.

There were two men... (this is one example)... who started a small business in Brooklyn. They were doing very well at first, but it was a small dress shop and they got into problems with inventory and such and they were going bankrupt. The former President of Franklin Simon went over and helped them, showing them how to handle inventory and how to handle stock and what to do about sales. He put them on their feet. And this is happening, of course, through the Small Business Administration and it's also happening through some of the bankers who are making special efforts to help people who want to go into their own business to be able to do so.

Another minority group that really isn't numerically minority but has minority group problems is women. There are an awful lot of us around, but as far as the work world is concerned we're still minority. In view of the fact that most of our young women will marry while they're very young, have their families while they're young and be back in the labor market by at least age 35 or 36 or 37 (and those who are high school graduates and not college graduates perhaps earlier), they really present a very important group for the counsellor. These young women need to give some thought to their futures and should, while they're home, be thinking about what they're going to do. The career they're going to choose is going to be important... because it ought to be one, for many of them, to which they will return. I think we have to be careful in our counselling... there's been too much emphasis on
the fact that a woman must have a job. I can't go along with this, ever, in any area. I think the important thing is for the individual to decide what he or she must do. It isn't the right thing for every woman...it's the right thing for some. And I think as counsellors we should not ride our hobby horses too hard. In a world of rapid change, which is not just technological change, but change of values and attitudes, we have a great responsibility to see to it that our students become self-responsible. That we try to help them in the learning process, so that they make their own decisions and are capable of making decisions in the future when change may be necessary...because it looks as if in the world that lies ahead...which is such a very wonderful and fascinating world...it may not be possible for all people to get into a job or a career and stay there. It's going to call for great flexibility, real use of intelligence and a knowledge of how to use sources...sources of information, sources of jobs. Choices, in other words, are not irrevocable and unchangeable and this is something that in a sense I guess is very frightening to young people. Once embarked on a program, can we ever make a change? Now, it's pretty difficult in some areas, for example, if you get into college and you want to be a research mathematician...you'd better take a math major. But there are so many things that can be done by practically any major, and there is no one job for each of us. We all know this. I do believe, however, that there are areas of work in which each one of us would be happier than in other areas. But within that area there are many different kinds of jobs. I know, for example, that I was going to be nothing but a teacher, because my 1st grade teacher was just so wonderful...but it happened that when I was graduated from college you couldn't be a teacher no matter how you tried; so I tried something else. And then I thought I was going to be a Dean of Students...and I never became a Dean of Students. But I have, nevertheless, kept in the area that I happen to think I was lucky in finding out was right for me. It's an area in the educational world...it's an area dealing with young people...who are among the most fascinating in the world. I don't think there's anything more wonderful. It's always a challenge, just as your job is always a challenge, and I think one is terribly lucky when one can keep contact with these young people.

We hear a lot being said about a future in which there won't be jobs for everyone. There's an exploding population. People are going to be out of work forever. But it's very fascinating how things change. Everybody's been screaming about the exploding population, and I've had some doubts about this for various reasons. I was very interested to pick up Business Week for July 2 and this is what it says: "U.S. population stops exploding...birth rate is declining despite the increase in marriages and this means a major change in how families want to live. Economists see higher living standards as a result. Richard Esterlin an economist at the University of Pennsylvania blames the current population bust on the difficulties young people are having in finding high paying jobs, in contrast to the salaries obtained in the fifties, the time of the baby boom. Among the 20 to 24 year old group of women who would normally be in the child-bearing phase of their lives, the number of births per thousand women dropped from 260 in the late fifties to below 220 in '64...to 190 in 1965...the lowest since 1946. The 1975 population in 1958 was estimated at 225.6 million; in '64 as 220 million and in '66 as 218.3."
I bring this to your attention because I think it's a great fallacy to take anything that happens in this matter of prediction as gospel. It changes too often, and just when we think we're all set, something happens and X number people are going to be out of jobs.

You have to be constantly alert to changing trends. There are some interesting problems that may arise that as counsellors I think we ought to be aware of. The work week is decreasing...we're all aware of this. But we need to remember that many executives still work 12-16 hours a day. Perhaps we'll have to change our basic assumption...the assumption of self-development and contribution to society through work, the idea that aptitudes, achievements and interests will be expressed through work. Even now we know that there are people who are finding their fulfillment in recreation...which to me is a sad situation. We have to remember that while work may change, basic psychological needs of people have not changed. Individuals have needs for feelings of accomplishment...of achievement. Some of them have definite needs for leadership, influence, and status. All of us have a need for personal satisfaction...and for some, these needs will continue to be developed and met through the careers they choose. But we need to ask ourselves if perhaps for some the distinction may not have to be made between a job, which means earning a living and a vocation which may give the person a sense of purpose, achievement and direction. And if this becomes true, then where do we change our focus as counsellors? And what kinds of other things do we need to know about people? In other words, counsellors have not only an important, but a difficult role. They must be as knowledgeable as possible concerning the dynamics of personality and individual development, and they must have access to vocational information concerning basic requirements, opportunities, and trends. They must themselves be able to function as members of a team...to work with the classroom teacher...the social worker...the administrator...the parent as well as the student. They must be ever alert to changing patterns and developments, but above all counsellors must have an abiding faith in the strength and integrity of each individual providing he's given a chance. And you are frequently the ones who give him a chance...and for this I think you are to be greatly congratulated. Thank you.
HEALTH CAREERS IN HOSPITALS
New York Hospital
July 11 and 12, 1966

Two full days were spent visiting New York Hospital where staff members from different departments spoke on various hospital careers with specific emphasis given to those careers which were not to be covered elsewhere on the Institute agenda.

The afternoon prior to the visit of New York Hospital the film "The Healers" was shown to the Institute participants to acquaint them with the types of careers which they could expect to see during the following two days.

Considerable discussion took place prior to the Institute on the advisability of having the participants visit only one large hospital rather than a small and a large one. It was ultimately decided that this matter was relatively unimportant as each hospital, regardless of size, employs the same categories of personnel. The only real difference would be in the number of employees in any given category.

Permission to visit the hospital was secured from Hospital Director, Dr. Henry N. Pratt. He assigned Mrs. Genevieve Cassanova, Director of Training, to coordinate the program, a copy of which follows:

PROGRAM FOR NEW YORK HOSPITAL

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>July 11, 1966</td>
<td>9:00 - 9:45</td>
<td>Opening remarks</td>
<td>Dr. August Groeschel, Assistant Director</td>
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<td></td>
<td>9:45 - 10:00</td>
<td>Coffee</td>
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<tr>
<td></td>
<td>10:00 - 11:00</td>
<td>Nursing (Professional)</td>
<td>Mrs. Ruth Kelly, Associate Dean, Cornell University, New York Hospital School of Nursing</td>
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<td></td>
<td></td>
<td>Nursing (Auxiliary)</td>
<td>Miss Dean Smith, Director of Nurses, Hospital for Special Surgery</td>
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<td>Miss Lydia Hansen, Supervisor Nursing Auxiliary, New York Hospital</td>
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11:00 - 11:45  Medical Records
Miss Helen Lincoln, 
Medical Records Librarian

11:45 - 1:00  Lunch

1:00 - 1:30  Film "Health Careers - I"
Dr. Roy Bonsnes, 
Director, Chemistry 
Laboratory

1:30 - 2:15  Chemistry Laboratories
Miss Louise Stephenson, 
Director of Nutrition

2:15 - 3:15  Cafeteria - Kitchen
Miss Charlotte Street, 
Supervisor Cytology 
Laboratory

3:15 - 3:30  Coffee
Mrs. Cassanova

3:30 - 4:30  "Cytology" film
Mr. Henry Bertram, 
Director of Personnel

July 12, 1966

9:00 - 9:30  Questions
Mr. Norman Baker, 
Chief Pharmacist

9:30 - 10:00  Pharmacy
Mr. Charles Farnham, 
Director of Building 
Service

10:00 - 10:30  Housekeeping
Miss Street

10:30 - 10:45  Coffee
Mrs. Mary Lawrence, 
Chief Physical Therapist

10:45 - 2:30  Tours of: 
Cytology
Miss Adele Groesbeck, 
Assistant to Chief 
Radiologist

Physical Medicine

Radiology

Medical Records

E. K. G.
Miss Lincoln

Miss Helen Burke, 
Supervisor E. K. G.
<table>
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<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter</th>
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</thead>
<tbody>
<tr>
<td>2:30 - 3:15</td>
<td>Miscellaneous Laboratories</td>
<td>Dr. Susan Hadley, Director, Microbiology Laboratory</td>
</tr>
<tr>
<td>3:15 - 3:30</td>
<td>Coffee</td>
<td></td>
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<tr>
<td>3:30 - 4:30</td>
<td>Questions</td>
<td>Dr. Groeschel</td>
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An entire day was spent at the Institute of Physical Medicine and Rehabilitation where staff members spoke on opportunities in rehabilitation and the participants had an opportunity to visit various work settings.

The following agenda shows the areas which were covered:

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Presenter/Leader</th>
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<tbody>
<tr>
<td>9:15 A.M.</td>
<td>Opening remarks</td>
<td>Dr. Howard Rusk. Director</td>
</tr>
<tr>
<td>10:00 - 11:30</td>
<td>Tour of IPM&amp;R, Film - &quot;New Beginning&quot;</td>
<td>Dr. John E. Sarno, Director Out Patient Department, Assistant Professor of Physical Medicine and Rehabilitation, New York University School of Medicine</td>
</tr>
<tr>
<td>11:30 - 12:00</td>
<td>Volunteer Service</td>
<td>Miss Ruth O'Brien, Director of Volunteers</td>
</tr>
<tr>
<td>12:00 - 1:30</td>
<td>Luncheon, Student Lounge, Medical Science Building</td>
<td>Mrs. Elaine Sands, Senior Speech Therapist</td>
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<tr>
<td>1:30 - 2:00</td>
<td>Speech Therapy</td>
<td>Mr. Raymond Rodriguez, Physical Therapist</td>
</tr>
<tr>
<td>2:00 - 2:30</td>
<td>Physical Therapy</td>
<td>Mr. Richard Lehneis, Director of Orthotics</td>
</tr>
<tr>
<td>2:30 - 3:00</td>
<td>Prosthetics and Orthotics</td>
<td>Mrs. Phyllis Palsgrove, Clinical Supervisor, Occupational Therapy</td>
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<tr>
<td>3:00 - 3:30</td>
<td>Occupational Therapy</td>
<td>Dr. Ralph Linder, Director, Psychology Training</td>
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<tr>
<td>3:30 - 4:00</td>
<td>Psychology</td>
<td>Miss Joyce Mesch, Rehabilitation Counselor</td>
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<tr>
<td>4:00 - 4:30</td>
<td>Rehabilitation Counseling</td>
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SQUIBB PHARMACEUTICAL LABORATORIES
New Brunswick, New Jersey

July 14, 1966

This tour was set up to show some of the opportunities for health careers in an industrial setting. The program was arranged as follows:

Opening remarks

Mr. John Kenny,
Manager Pharmacy Services

Tours:
Sterile Packaging
Radio Pharmaceuticals
Bone Implantation
Pharmacy Formulation

Lunch

Pharmacy Today

Mr. Steve Gross,
Columbia University School
of Pharmacy

General discussion

Mr. John Kenny
The program at the Postgraduate Center for Mental Health included the following talk given by Mr. Linzer, the showing of the movie entitled "People Who Care" and a tour of the facilities.
CAREERS IN MENTAL HEALTH

A new era

Edward Linzer
Executive Director
Postgraduate Center for Mental Health

July 15, 1966

In the treatment of mental illness a quiet revolution has been taking place all over the country. Twenty-five years ago most of those needing care for serious mental illness were sent away to huge mental institutions. For hundreds of years before that, they were quite literally "put away" in asylums isolated from the community, often far from their homes and families. There they were kept, with little or no medical treatment, for many years and often for an entire lifetime. Until recently there was little hope for mental patients' recovery. Mental illness was looked upon as a dreaded and incurable disease.

Things are different today. About ten years ago the picture began to improve and has continued to improve at a rapid pace. We are now in the first stage of a promising new era in the treatment of mental illness.

Those patients with a serious mental illness (psychosis) who go to the better mental hospitals today are receiving intensive treatment. Most are back with their families in a matter of a few months; many continue to receive treatment while living at home. More often, however, instead of going to a mental hospital, patients are now treated for mental illness right in their own community. New drugs and new methods of psychiatric treatment have made this possible. In addition, new mental health services have made treatment available in the community from the time an illness shows itself, through the acute phases of illness and the convalescent period, to the time when the patient is restored to health.

The new methods of treatment and new services will have far-reaching effects, not just on mental patients, but on all of us. More treatment and better treatment in both general and mental hospitals is increasing the number of patients who are restored sufficiently to return to their families and communities. This means that there will be a growing number of ex-mental hospital patients in the community who are either completely restored or who are still in need of continued treatment while living and working in the community. In addition, there is a new group of mental patients: those receiving psychiatric treatment from community facilities who in the past would have had to go to a mental hospital because there was no other type of psychiatric service available to them.
Most of the patients who receive good care and treatment can be restored to such a degree that they function better than they did before the signs of the illness appeared. To maintain this functioning they may require continued use of drugs, much as diabetics must depend on insulin for the control of diabetes. They may also need to avoid certain kinds of social and emotional pressures that can bring on a return of their illness, much as those who have had a heart attack may need to avoid certain kinds of physical exertion. But the important thing is that with new modern treatment and services the functioning of many mental patients can be restored. They can carry out their part in family life -- as parent, husband, wife -- as they once did; they can return to work and do their jobs as well as ever; and they can participate once again as members of the community.

Mental Hospital

The new mental hospital that is beginning to emerge in many parts of the country bears little resemblance to most of the old custodial institutions of the past. In less than ten years:

- there has been a ten percent reduction in the number of patients in mental hospitals;
- the number of patients being discharged from mental hospitals has almost doubled;
- the average amount of money spent per day to maintain a patient in mental hospitals has almost doubled.

Now the trend in modern mental hospitals is to give patients prompt, intensive treatment as soon as they enter, with the aim of returning them to the community as quickly as possible. Although in most cases the modern mental hospital is still housed in the same, often antiquated buildings, the treatment that it provides has been greatly improved.

Treatment begins as soon as the patient reaches the hospital and continues until he has improved enough to leave. The kinds of treatment available include: drugs -- the tranquilizers and anti-depressants which are so widely and successfully used today for the control of various forms of mental illness, shock therapy, psychotherapy, occupational therapy, recreational therapy and other therapies. The atmosphere -- the building and appearance of the hospital itself -- can also contribute to a patient's recovery.

Most mental hospitals today have "open wards" -- that is, most of the doors are no longer locked. The unlocked door means far more than the absence of a physical barrier. For both the patients and the hospital staff it shows a new attitude toward both the patient and his illness. It means the end of an era when patients were locked up and forgotten, when they received little or no treatment and a minimum of care, when treatment in the huge hospitals was so ineffective that patients often became worse instead of better.
In the modern mental hospital, patients get individual attention. They are treated and respected as human beings, and the hospital staff does its best to help them become independent, responsible men and women again. The emphasis is on getting the patient out of the hospital as soon as possible because it has been found that even the best hospital care has certain disadvantages. These disadvantages stem from the fact that when patients are kept shut off from normal life they become dependent on the special, protected circumstances of hospital life.

Mental hospital care in the future will be reserved for the small proportion of patients who need intensive around-the-clock treatment as resident patients, and who must be removed completely -- temporarily, at least -- from pressures at home or in the community. There will always be some, also, who will need confinement for their own safety and welfare as well as for the safety and welfare of the community.

Modern mental hospitals are providing various out-patient services so that today there are fewer mental patients being treated in the hospital, while more and more receive out-patient treatment. For example: twenty years ago a Boston mental hospital had several thousand in-patients, and only a few hundred out-patients. Today, this ratio is completely reversed with only a few hundred resident patients and thousands of out-patients.

The General Hospital

Today more mental patients are admitted to general hospitals than to mental hospitals. This is due primarily to the recent, marked increase in the number of general hospitals equipped to give psychiatric treatment. It is also due in part to the fact that there are far-sighted health insurance plans that now cover the cost of care for mental illness in a general hospital.

In general hospitals, mental patients may be treated in separate psychiatric units or services, or they may share the same floor with medical and surgical patients. For both the patient and his family, treatment at general hospitals has many advantages over treatment at a mental hospital. In the first place general hospitals are centrally located near the patient's home and the family can visit him easily. Another advantage is that mental patients are admitted and discharged from the general hospital just as other patients are. The family physician can visit the patient at the hospital and work closely with the hospital psychiatrist and others who treat him.

Drugs, psychotherapy and the other therapies available in mental hospitals are available in general hospitals. For many mental patients, the peace and security of the hospital, completely and temporarily removed from the conflicts and situations at home or work, are an important part of the treatment.
Part-time Hospitals

Part-time hospital care is beginning to be an answer to the needs of many patients. As many as two-thirds of the patients who in the past would have been sent to mental hospitals, it is estimated, could be treated successfully today with part-time hospitalization. This part-time service is for patients who do not require 24-hour treatment—and this includes many very sick patients—but who do need care for some hours of the day or night. The main advantage of the part-time hospital is that the patient's ties with his family or job are not disrupted. He can continue to live at home while attending a day hospital, or he can continue with his work while he lives at a night hospital. There are also weekend hospitals where patients stay on the job and live with their families Monday through Friday, and spend only the weekend at the hospital. All forms of psychiatric treatment are available at these part-time hospitals.

For the patient recently discharged from a full-time hospital the part-time hospital offers a unique combination of supervision, freedom, treatment and encouragement to help him take gradual steps back to community life.

Emergency Psychiatric Service

Because prompt treatment at the first signs of mental illness is so important, many communities now have 24-hour psychiatric emergency service. In one community that has this service, an emergency telephone call from the family will bring a physician and nurse to the patient's home.

Another kind of emergency service is the "drop-in" or "walk-in" clinics operating in several communities. There are no long waiting lists at these clinics. Anyone, without an appointment, may walk in and receive psychiatric treatment immediately.

Halfway Houses

The halfway house is just what its name implies—a residence for patients who are halfway between hospital care and community living. It provides semi-protected living quarters, with medical, social and vocational rehabilitation services, for groups of former hospital patients who no longer need hospital care but who are not yet ready for independent living.

Clinics

Until quite recently, mental health clinics were mainly for patients suffering from the milder emotional disorders. Today, however, these clinics are treating many patients with severe mental illness—those who do not require hospital care and those who need further treatment after leaving the hospital.
Outpatient psychiatric services are provided by mental hospitals, psychiatric departments of general hospitals, and community agencies.

Many mental hospitals have aftercare clinics located in the community to help patients after they have been discharged from the hospital. Most patients need some kind of after-care service. The after-care clinic has been set up to cut down on readmissions and help patients stay well. Patients attend the clinic on a regular basis to receive medication and whatever other treatment they need.

Mental Health - A Field For All

Opportunities in the field of mental health exist for persons with a variety of background and interests. Some positions require no more than a high school education plus a brief in-service training experience, while other jobs call for the most demanding professional education at the post-doctoral level.

In general, the field has been classified into four "core" professions -- psychiatry, psychology, social work, and mental health nursing and the related professions -- physical therapy, occupational therapy and recreational therapy. There is also a large group of mental health workers, the psychiatric aides, who serve as nursing assistants.

Many other professions in addition are engaged in the field of mental health and work with the mentally ill. These groups include teachers, clergy, law enforcement officials, public health nurses, social case workers, social group workers, youth leaders, and others. These groups include persons whose professional obligations bring them into contact with the field of mental health although their primary concern is not with the mentally ill. It is therefore possible to divide employment opportunities into two major groupings -- those who work with the mentally ill and those who engage in general mental health activities. The line of demarcation is not clear or precise since persons who ordinarily work with the mentally ill, psychiatrists for example, are frequently engaged in community activities in developing positive mental health programs; while a youth leader who usually functions in the community might be assigned to a group of emotionally disturbed adolescents who are in residence in a special treatment facility. Similarly, a clergyman can have a congregation of patients recovering from mental illness in a mental hospital or can serve a congregation in the community.

The seven major categories of persons who work in the field of mental health function as psychiatrists, psychiatric social workers, clinical psychologists, occupational therapists, recreational specialists, psychiatric nurses, and psychiatric aides.
The kind of work done by each of these specialists and the kind of education and training that are required are as follows:

THE PSYCHIATRIST: The psychiatrist is a physician (an M.D.) who deals specifically with prevention, diagnosis and treatment of mental illnesses and emotional disorders. After having completed a medical school course and internship, the psychiatrist serves a three year residency in-training in a psychiatric teaching hospital.

Psychiatrists work in a number of settings: mental hospitals, psychiatric services in general hospitals, mental health centers and clinics. In addition, psychiatrists serve as consultants to the courts, schools, social agencies, religious institutions, industries, unions and other organizations that serve people.

The field of psychiatry attracts both men and women and the future opportunities in this field are constantly mounting. It is a field of service which is rewarding financially as well as in the personal satisfaction that is derived from helping persons who are sick and troubled.

THE CLINICAL PSYCHOLOGIST: The clinical psychologist is now expected to earn a Ph.D from a university that has a specialized training program in clinical psychology. In addition to classroom work, the graduate student interested in a career as a psychologist is expected to have supervised experience in clinical services in a mental hospital, general hospital, mental health clinic or other mental health institutions. Many psychologists after earning the doctoral degree go on for additional training in psychotherapy and this may require an additional three years beyond the Ph.D.

Psychologists work in a wide variety of settings such as community mental health centers, mental hospitals, general hospitals, family service agencies, marriage clinics, rehabilitation centers, child guidance centers, courts, prisons, and psychological consulting organizations. Psychologists also serve as consultants to industry, school systems, churches, community agencies, and the courts.

Salaries and work opportunities for clinical psychologists continue to be on the rise and for those persons who are interested in a challenging field, clinical psychology provides many satisfying opportunities.

THE PSYCHIATRIC SOCIAL WORKER: Psychiatric social workers may be differentiated from other social workers by virtue of the fact that along with psychiatrists and clinical psychologists they deal primarily with emotionally disturbed persons and their families. They work in mental hospitals, psychiatric services of general hospitals, child guidance clinics, schools, courts, health departments, rehabilitation centers and similar organizations.

The professional training for psychiatric social workers includes two years of graduate work leading to a masters degree from an accredited school of social work. During the period of training the student in psychiatric social work has supervised work experience in a mental health setting where he develops familiarity with the nature of mental disorders and their treatment.
Salaries for psychiatric social workers are mounting. In some states fully trained but inexperienced workers are now being appointed at $9,000.00 per year. The number of persons entering psychiatric social work is far below the demand. At least twice the number are needed as are currently employed.

THE PSYCHIATRIC NURSE: This field is now beginning to draw men as well as women because of the growing opportunities for administrative positions. The psychiatric nurse is generally a graduate of a school of nursing who has had additional training in the care of the mentally ill. Frequently the psychiatric nurse is not only an R.N. but has attained a Bachelor of Science degree or even a Masters degree.

The psychiatric nurse as a nursing specialist supervises nursing assistants called psychiatric aides who play an important part in the treatment of mentally ill.

The psychiatric nurse usually works in a mental hospital or in the psychiatric unit of a general hospital, in a mental health clinic, in the residential school for disturbed children, or may care for mental patients in their own homes. Many psychiatric nurses teach this specialty in school of nursing.

Psychiatric nurses are in such great demand that trained persons can choose the kind of work, the type of mental health facility, and the location which best suits their interest.

THE OCCUPATIONAL THERAPIST: Occupational therapists are out-going people who like other people and who are able to help them to participate in activities which have therapeutic value for patients. These activities may include hobbies or vocational interests which provide the opportunity to help the patient to learn to accomplish something which provides meaning to his life and helps him develop a sense of confidence and self-expression.

Occupational therapy is a carefully thought out undertaking. The particular activity selected for a patient is suited to his needs and personal requirements.

Occupational therapists are expected to have completed a college course and certain prescribed courses. In addition, trainees in this field are expected to complete a supervised work experience which involves actual work with patients. After finishing their training, students are eligible to take a national registration examination given by the American Occupational Therapy Association and may use the initials O.T.R. after their name.

Occupational Therapists are employed mainly in mental hospitals, both private and public, in general hospitals, in aftercare centers, rehabilitation centers, and special schools. As in the other mental health professions the demand for qualified workers is so great that there is a wide choice of jobs and locations.
THE RECREATION SPECIALIST: The recreation specialist is usually a college graduate who has had special courses in health, physical education, recreation, and group work. A number of colleges now have specific programs in recreation for the ill and the handicapped and the academic programs are coordinated with in-service training programs in hospitals and other mental health institutions.

The recreation specialist knows that play is good medicine and applies this principle in helping to make sick people well. Through recreation activities directed by a specially trained mental health worker, patients are helped to lessen their fears and assisted to bolster their self-assurance. They are aided in overcoming their apprehension about meeting people and about participating in group activities.

Recreation specialists are employed in state and private mental hospitals, and by a growing number of general hospitals. They are also used in community centers and similar facilities.

The field of recreation specialist with the ill and handicapped provides vast opportunity for persons who enjoy movement and variety. The people in this field should enjoy work with others of all ages and various backgrounds. As the opportunities in this specialized field grow, salaries and working conditions will show rapid improvement.

THE PSYCHIATRIC AIDE: The psychiatric aide who works in direct patient services as a nursing assistant has been described as the "real backbone of mental patient care." The psychiatric aide has a very important role in the entire care of the mental patient. More than any other person, the aide shares the patient's life during the night as well as the day hours.

As differentiated from most of the other mental health professions, the job of psychiatric aide requires no professional degree or long years of training. Persons with no more than high school diplomas and sometimes without even having graduated from high school will find these jobs open to them.

Despite the fact that it does not require professional training the job of psychiatric aide cannot be overemphasized as far as its importance is concerned. Although there are many specific duties assigned to the psychiatric aide, his main work is to interact with patients and offer them the understanding, kindness, and encouragement that goes such a long way to helping patients recover. The psychiatric aide is also in a position to contribute valuable information and understanding that can help the other members of the mental health professional team plan the most beneficial programs of treatment and care for patients.

Some mental patients require actual physical care and this is provided by the psychiatric aide but probably the most important contribution that the psychiatric aide makes is in mingling with the patients, making them more comfortable, listening to them with interest or coaxing a patient to join in some activity.
Probably more than any other worker, the psychiatric aide is part of a patient's world, knowing their problems, sharing their achievements. For many people, working as a psychiatric aide can be a first step toward other careers in mental health. Aides have gone on for professional training in nursing, hospital administration, occupational therapy, recreation and many other related mental health fields.

Nearly all institutions which employ psychiatric aides provide them with in-service training. Through such programs, the aides gather experience and skill to improve their effectiveness.

Psychiatric aides are employed in mental hospitals, the psychiatric wards in general hospitals, in some mental health centers, and in clinics.

Working conditions, employment possibilities, and opportunities for advancement for psychiatric aides are on the increase. For the young person who is unable to obtain a professional education, a job as a psychiatric aide offers a challenging opportunity. For young men and women who are not quite decided which professional career they may wish to follow, may explore their interests by working as a psychiatric aide during a vacation period, or in a period following completion of one step in their education. For people who want to get the most from a job as psychiatric aide, they should be individuals who like others and find real satisfaction in helping them. They require a sense of responsibility, maturity, and an interest in living.

Encourage "Job-Tests"

The field of mental health is new to many and they may need to develop some real experience in it before committing themselves to this lifetime activity. Therefore "job-tests" are suggested. Students should be encouraged to spend their vacation or after-school hours experiencing the field by actual work. Opportunities exist in most general and mental hospitals for volunteer work where people can learn by doing. Students can also test their interest by vacation employment; still others may have ascertained their interest in working with people by experiences in camps, helping teachers, or even in serving as baby-sitters.

The law of supply and demand works very much in the favor of students in the mental health field. Always there has been scarcity of people -- trained, experienced workers who not only know their work but care about it. Wherever they go, persons trained in these fields will be needed; but the main advantages of any career in the mental health field are the joys of working with people, the opportunity to serve, the sheer adventure of entering a field where great discoveries are yet to be made, and where the workers can help make them.
REFERENCES


The visit to the Columbia University School of Dental and Oral Surgery included a tour of the facilities, and the showing of two films: "The Challenge of Dentistry" and "Opportunities in Dentistry".

The papers of Drs. Cuttita, McLean and O'Grady were prepared in advance and each participant was asked to read the papers prior to visiting the dental school. A portion of the program at the dental school was devoted to discussing the material presented in the various papers.
A CAREER IN DENTAL HYGIENE

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July 15, 1966

One of the major health problems, dating back to pre-historic times, is dental disease and deformity. Based on present day estimates, authorities agree not more than 5% of the present population will live out their lives free of this problem, yet there are only about 80,000 practicing dentists to care for 190 million persons. Limited dental manpower, increased federal aid making dental care available to a large part of the presently uncared for public and an increased population educated to the need for and value of dental care all point to the need for educating a greater number of auxiliaries.

In 1914 when the dental profession first began to stress mouth hygiene as an important phase of dental care, dentists realized the task of proper care at regular intervals for the general public, was an overwhelming task. It was at this time that Dr. Alfred C. Fones of Bridgeport, Connecticut began to advocate the assistance of women, designating them as dental hygienists.

The dental hygienist is a professional health worker who performs her services by direction of the dentist within the limits of the state dental practice acts. She functions in general and specialty dental office practice, public health departments, schools, hospitals, industrial organizations, departments of research and the Armed forces performing clinical, educational and community services which may include but need not necessarily be limited to:

Clinical Services

1. Removing stains and deposits from the teeth with hand or mechanized instruments
2. Applying preventive agents to the oral structures
3. Exposing and processing dental x-ray films
4. Administering prescribed medicaments
5. Obtaining and preparing non-surgical clinical laboratory oral diagnostic tests for interpretation by the dentist
6. Assisting the dentist at the chair
Educational Services

Providing dental health education according to individual patient needs; explaining the need for regular professional dental care and the value of dietary counseling to obtain optimum oral health; motivating patients to accept and follow professional dental advice.

Community Services

Augmenting the services of the dentist, the dental hygienist plans, conducts and evaluates dental health programs according to community needs; participates as an advisor to health classes and conferences sponsored by civic and voluntary groups; plans, conducts and evaluates pre-service and in-service programs for health personnel in related health fields.

What is required of the person interested in filling the role I have just outlined? Perhaps, first and foremost we should consider, personal traits and characteristics needed for success in the health profession. There is usually one major difference between being successful or being unsuccessful, i.e., knowing our potential ability and making the very best use of it. Many of the qualities that bring success are intangibles that defy description, yet, they shine forth from certain individuals like a halo. These qualities make conversation in such words as "attitude", "personality", "confidence", "initiative". They are the qualities found in successful people; often cultured into us by environment or cultivated by sheer force of endeavor, courage and perseverance but rarely inherited. Success comes from persistence and loyalty in the face of discouraging situations, the will to solve the problem and improve the situation through giving something more than one expects to get in return. These are personality traits needed for the dental hygienist. Further, this person need not be an "A" student. It is far better she be a "B" average hard worker with a big heart, for then she will have tolerance for public ignorance and sympathy for their ills and troubles. The hygienist must be able to develop a "selfless" attitude, giving other the feeling that they count, that their needs come first and that at the time of her service to them, they are the most important individuals in the world. Interest in people is a prime requisite.

Good health is a requirement. Too many of us think of health as secondary to economic and social success, only to find while we have achieved these ends, we have traded them for health. Therefore, it is important for the person interested in dental hygiene not only to be free of physical defects but to possess in addition to this a philosophy of good living. Health is largely a matter of cultivating proper habits of good living. Good natural or restored teeth, normal or correctable eyesight and manual dexterity are of utmost importance to anyone considering dental hygiene as a professional career. As the Chinese proverb expresses it, "A picture is worth a thousand words."
Along with personality traits and characteristics, health and a philosophy of good living, one must also consider the educational background needed for entrance to this field of study.

Entrance to the baccalaureate programs is varied and depends on the individual university or college. At present there are 20 baccalaureate programs, some requiring two years of dental hygiene plus two years of liberal arts and science, others require the two years liberal arts and science before the two years of dental hygiene and still others have a 1-2-1 curriculum.

Requirements for the A.S. degree or the two year program are stated by the Council on Dental Education of the American Dental Association.

As completion of a four-year high school college preparatory course which permits entrance to an accredited college of liberal arts or science or its equivalent. If a choice is given in the high school college preparatory course, students should elect to take chemistry, physics, math and biology to insure success in their forthcoming college study.

Students should be advised to take the dental hygiene aptitude test. Information about this test can be obtained from the American Dental Hygienists' Association, 211 East Chicago Avenue, Chicago, Illinois.

We have considered dental hygiene as a health profession, the general duties of the dental hygienist in all areas of service, the necessary character and personality traits, health and education required for entrance into this field, therefore, let us turn our attention to selection of the school.

Choosing a school or college is much like choosing a suit or dress. It is not enough to choose one because it is good and looks nice - it must also fit. So too with the college, it is not enough to choose one because it is a good one, rather it should be chosen because it is good and also fits the students needs. This is particularly true of school for dental hygiene education. Since there is considerable variation in these programs one should be aware of the several classifications.

1. Schools affiliated with university dental schools
2. Schools that are part of colleges or universities that do not have dental schools
3. Schools that are a part of institutes and clinics and have some collegiate affiliation
4. Schools that are a part of junior or community colleges.
Schools in the first category associated with university dental schools have the advantage of a well qualified dental faculty, the use of equipment found only in dental schools, the use of an extensive dental library, an adequate supply of patients for student practice and the educational atmosphere needed for training students to the need for and value of team practice.

Schools in all other categories cannot claim many of these advantages but, they usually have newer dental hygiene clinical facilities, are closer to home, less expensive and less difficult to enter.

Whether the student takes the 2 year certificate program or the baccalaureate program depends on the use to be made of the education. The certificate program is usually adequate for the student who wants to work in private practice but, the degree program should be advised for the student who wants to teach, work in research, public health or hospital administration.

**Loans and Scholarships**

Loans are available from state and federal sources as in all other educational programs. Scholarships are available from the American Dental Hygienists' Association, the Public Health Service and individual schools. Students should be advised to read each school bulletin carefully for the most accurate information in this area.

Once a school has been selected one will be required to study general anatomy, physiology, dental anatomy, histology and embryology, chemistry, microbiology, orientation to dental specialties, professional ethics, history and jurisprudence, practice administration, pharmacology, nutrition, clinical dental hygiene, medical and dental emergencies, dental health education, preventive dentistry, dental materials, dental assisting, roentgenology plus 15 or more liberal arts and science electives. Instruction within a dental hygiene curriculum will include lectures, laboratory experience and clinical practice under supervision. Thoroughness of accomplishment in the didactic and laboratory requirements and competency in clinical skill will be thoroughly evaluated before the student is allowed to apply for licensure.

After graduation students must pass licensing examinations prescribed by the State Board of Dental Examiners in the state or states in which the student wishes to practice. The dental hygienist is licensed to practice in all forty-eight states, the District of Columbia and Hawaii. National Board Examinations are now accepted in forty-one states.

I will be pleased to answer any questions you may have after you view the career film, "A Bright Future" just recently released by the American Dental Hygienists' Association, 211 East Chicago Avenue, Chicago, Illinois. This film may be obtained from the American Dental Hygienists' Association at a cost of $100.00 or may be rented from the American Dental Association, 211 East Chicago Avenue, Chicago, Illinois, at a cost of $7.00.
A SOLUTION FOR THE DENTAL MANPOWER SHORTAGE

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July 15, 1966

The scheduling of a meeting such as this is most appropriate since it comes at a time when we in dentistry are most concerned. We are faced with one of the gravest problems that has ever faced our profession, insufficient manpower with which to provide adequate dental care for our people.

This manpower shortage stems from three sources. Firstly, the American economy is at its highest level in history and as a result, the populace is making more and greater demands for more and better health services, particularly dental care, than ever before. Secondly, the expanding programs of the federal and state government for the care of the aged and the indigent are placing an added load on these already overburdened services. Thirdly, we are faced with an ever increasing population, one that is increasing so rapidly that it is termed a population explosion, and this increased population will also demand more and better dental care. Now we reach the nub of the problem. The rapid increase in population is not being met with a corresponding increase in the number of dentists to provide the required care. In short, we are faced with a manpower shortage that is fast becoming critical. Just how critical I would like you to judge for yourselves.

I quote from House Report #781 of the 89th Congress but I would also like to state the English is theirs and not mine, quote-"In 1963 there were 105,950 dentists in the United States including retired or otherwise not practicing dentists, giving a ratio of 64.6 dentists to each 100,000 individuals. To maintain this ratio, dental schools will have to graduate more than 70,000 dentists between now and 1980. At the present rate of graduation only slightly more than 55,000 graduates can be graduated by that time which would leave a deficit of 15,000 dentists or a ratio of about 50 dentists to each 100,000 individuals," end of quotation.

Actually this deficit will be much greater when you consider that only 96,000 of that 105,950 dentists are actually engaged in active practice. Our own manpower experts tell us that by 1980 this shortage will be closer to 37,500 dentists. And that this manpower shortage is not restricted to dentists but to their auxiliaries as well.

It is already becoming quite clear that the orderly, efficient production and distribution of the dental care authorized in the government health care programs will take place in a large measure in the voluntary and government hospitals of the community. That the development and operation of hospital dental clinic facilities within the neighborhood health centers will require
the availability of more and more dentists but even more importantly many more dental auxiliary personnel, hygienists, chair assistants and dental technicians. Last but not least, this development will require a large number of supervisory skills for the professional and operating administration of these facilities. And all of these are already in short supply.

To appreciate what this dental manpower shortage portends, we must first appreciate the status of the dental health of our population today. I can quote you some very interesting statistics on this subject. Our Public Health Service tells us that today there are in this country 700,000,000 cavities, that there are 300,000,000 teeth requiring extraction and that over 23,000,000 Americans are edentulous. Now these are nice, big, round figures but what do they mean? How does one relate to them? In order to put this picture in proper perspective let me give you some statistics with which I personally am more familiar, the present status of the dental health of the Army. Now you may think that this will not offer a true comparison because the greater majority of our troops represent the cream of our American youth. Please give me the benefit of the doubt for the sake of argument and let us consider them merely as a representative segment of our population.

In 1940, just prior to World War II, Selective Service first came into being. At that time eight of every ten men rejected by reason of physical deficiency were rejected for dental deficiencies. Perhaps our standards were too high. At that time all that was required was that the selectee have three serviceable upper anteriors opposing three serviceable lower anteriors and three serviceable upper posteriors opposing three serviceable posteriors. A serviceable tooth is defined as one having no caries or the caries has been replaced with a serviceable restoration.

Had these high standards been maintained we could not have raised an army. Consequently the standards were lowered. Stripped of all its official verbiage the new standards required only that the selectee have two gums so opposed that he could wear serviceable dentures. Yet, today, more than a quarter of a century later, the requirements are still the same.

A recent survey of recruits showed that six of every ten had not been to a dentist in the immediate preceding year, that 10 of every ten had 77.7 cavities, .7 oral surgical procedures and required 1.8 dentures. To put it even more graphically, General Bernier, the Chief of the Army Dental Corps stated: "In any given year there are eight million manhours of dental work to be accomplished. During that same four million manhours of new caries alone develop thus making a total of twelve million manhours of dental work to be accomplished. Unfortunately there are in the Army sufficient dentists to complete only four million manhours of this work during the year therefore we end up with a yearly deficit of eight million manhours of dental work". I think this gives a fairly complete picture of the status of the dental health of our present population which is really more dramatic when you realize that the ratio of dentists to troops is 1.5 per thousand while in civilian communities it is 1 to every 2,100.

This is our problem today. What will it be ten years from today? To help solve this problem it was suggested in the 1950's that one way to alleviate the impending manpower shortage would be to open two new dental schools each year from 1960 to 1975. Each school to admit 50 students per year and presumably graduate the same number four years later. Also to expand the capacities of the already existing schools at least 50%. To date two new schools have opened their doors and one is about to either this year or next.
Thirteen of the existing schools have made expansion plans but not all have received the necessary funds which must be voted by Congress. As yet none of these schools is ready to increase enrollments. Evidently this needed expansion program is far too slow.

Another remedy would be an active, all inclusive preventive dentistry program. Prevention is the keystone to control of disease and if we could control the incidence of dental disease we would automatically reduce the great demand for dental care. Let us look at the record. Caries controlled by fluoridation of water supplies, the only communal method of control of one dental disease that we have at our disposal has been denied more than half our population by a small, vociferous minority group. And it is more than thirty years since this health benefit was discovered, proved and publicized. We need more health education and the development of more health educators and other Public Health dental personnel. This apparently is another too slow remedy but one that must not be neglected.

Until now I have stressed the dark side of our problem but as some great philosopher once said, it is better to light one little candle than to forever curse the darkness. We do have an immediate method to alleviate the manpower shortage and that is efficient utilization of our dental auxiliaries. And since my part of this presentation is concerned with the dental assistant I shall confine the remainder of my talk to that auxiliary.

A trained dental assistant is a most important member of the dental team. Most often she is the first person on the team with whom the patient comes in contact, either on the telephone or in the office. Her duties are divided between assisting at the chair and office management. Her primary function is assisting at the chair where she plays an active and integral role in dental procedures. For example she prepares patients for treatment, sets out instruments in the order they are to be used, checks equipment, sterilizes instruments, keeps an inventory of all materials used and orders new supplies as needed. She does dental laboratory work such as making models of teeth and casting inlays. She exposes and processes x-rays and mounts the radiographs in the proper holder. In short, she relieves the dentist of much time-consuming work which permits him to devote his entire attention to this patient in the performance of those duties that only he can perform by virtue of his training, experience and by Law.

During treatment she keeps the operating field clean, mixes filling materials and dental cements and passes these materials and instruments to the dentist as he needs them.

As office manager she acts as receptionist, schedules appointments, keeps accounts and records, sends out bills and is responsible for the general appearance of the office.

The training of these assistants in colleges and technical schools is a recent development. In the past, a dental assistant received on-the-job training from her employer. This system was known as the blind leading the blind. He didn't know what to teach her and she didn't know what to do. Despite this, many excellent dentist-assistant teams did result but dependence on such training today does not meet modern needs. Not only is it too slow and uncertain but many dentists do not train their assistants beyond routine duties and except in rare instances dental assistants are not utilized to their full potential.
Recent studies show that by using an assistant effectively, a trained assistant can demonstrate her economic value from the very outset of her employment. Time and motion studies show that a dentist with one operatory and one full-time assistant can produce 33 percent more work per day and see up to 270 patients per year more than the dentist with one operatory and no assistant. That the dentist with two operatories and two full-time assistants can produce 60 to 70% more work per day and see over 400 patients per year more than the dentist with no assistant. That this extra workload is accomplished without sacrificing quality and with less fatigue. If we can persuade each dentist to have 2 operatories and to fully utilize two full-time assistants we can almost erase the gray area of dental manpower shortage.

This is my job at Columbia. I teach the dental students to work with trained dental assistants and to fully realize their potential. The program is called the Dental Auxiliary Utilization Program. We do not train assistants, I repeat that we teach the dental students to work with trained assistants. We educators and your government feel that the best place for this course is in the undergraduate curriculum during the students formative years. This program was started as an experiment in dental education to improve and expand dental service beyond that which could be accomplished by increasing the number of dental schools and the number of enrollments. The experiment was started with government support in 6 schools in 1956 on a budget of $65,000.00, today all but two schools in this country are engaged in this program and the budget has grown from $65,000 to $2,161,000 and is expected to reach $5,000,000 by 1969.

I have covered a tremendous area in an extremely short time and I realize that my information has been rather sketchy. For that reason I suggest that if you have not already done so read this pamphlet, "The Trained Dental Assistant, Facts for Counselors". In it is referenced supplemental information including a film, "The Dental Assistant - A Career of Service", that I highly recommend. I also suggest for your Reference Library - "The Dentist and His Assistant", Shailer Peterson, Editor, Printed by the C U Mosby Company, and

Now, if I may, I would like to show you a short slide presentation on Four-handed Dentistry - the Dental Assistant at Work.
DENTISTRY AS A CAREER
and
ADMISSIONS POLICIES

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July 15, 1966

At a recent Greater New York Dental Meeting, during the course of a panel discussion, a high school guidance counselor who was present told the members of the panel that the high school student's concept of dentistry was simply that it was a skilled mechanical profession. For many years there has been the mistaken impression among the lay public that a dentist does nothing more than fill teeth, extract teeth, and replace missing teeth. Although in truth much of his time is spent in performing these tasks, it is this idea in the public mind and in the minds of our high school and college students which has relegated Dentistry to the rank of a skilled mechanical occupation. Because of this misconception many promising candidates have shied away from Dentistry as a career.

Actually Dentistry is a health profession. It is both a science and an art. Dentistry can be considered a branch of medicine. It deals not only with the teeth but with all the structures in the mouth. The mouth is a distinctive, special part of the body. All of its structures, e.g., lips, cheeks, tongue, glands, bone, teeth, soft tissues are alive and dependent on the body. For example, "Infections" of all types can affect the mouth as much as they can affect any other part of the body. "Metabolic Diseases" - deficiencies or excesses of vitamins and hormones can affect the mouth as much as they can affect any other part of the body. Cancer can occur in the mouth as well as in any other part of the body. The same can be said of blood diseases, skeletal diseases, diseases of the nervous system, congenital diseases, and many others.

But besides systemic diseases which affect the mouth there are also the local diseases:

- Caries of teeth (tooth decay)
- Certain periodontal diseases - those affecting the gums and bone surrounding teeth
- Local infections
- Cysts
- Tumors and neoplasma - and
- Many others which are peculiar to the mouth

Thus Dentistry deals with the diagnosis, treatment and prevention of various systemic and local diseases in the mouth. The treatment of injuries, malformations and deficiencies besides the repair of teeth when damaged and their replacement when lost. All of these are the responsibility of the dentist—either for diagnosis and treatment or diagnosis alone. No one else can be as
prepared as the dentist to fulfill the responsibility. The Dentist is a specialist - well-trained in a certain area of the body.

Most dentists are independent professional men, working alone or in partnerships and engaged in general practice. Of the 97,000 licensed dentists in the U. S. today more than 88,000 are in private practice.

Some dentists prefer the teamwork of serving with other dentists, physicians and scientists on hospital staffs, in the public health agencies, and in the federal dental services. Still others are attracted to teaching and research.

There are about 7,600 dentists in the federal dental services. About 3,000 are teachers or administrators in a dental school or carry out dental research programs. About 500 are in public health dentistry at the state or local level, and several hundred more are administrative or public relations specialists in dental associations and societies.

There are more dental career opportunities for young people today than at any previous time in the history of the profession; careers in independent practice, in specialty practice, in research, in teaching, in business and in government service. Whether you like the incentive of working for yourself, of being independent, as in private practice, or whether you prefer an equally challenging career in the many salaried dental careers, you can be sure that there is a career for everyone in dentistry.

A specialty in itself, dentistry has its own specialties for those whose interests are particularized. These include orthodontia, the straightening of irregular teeth, - periodontia, the treatment of diseased gums and the tissue surrounding the teeth - prosthodontia, the reconstruction of replacement of teeth - and oral surgery, radiology, endodontics, and pathology. More than 5,000 dentists in private practice are specialists in one of the above recognized areas of dentistry. The dentist works to improve speech, appearance, comfort and general health. His highest reward is the satisfaction of helping other people, of relieving pain, of giving the patient a psychological lift by restoring esthetics and function and improving appearance. Satisfaction for himself when he sees the results of his delicate work - satisfaction for a job well done.

There are other rewards too. A dentist is a respected member of his community, enjoying an agreeable social status. He may be appointed a member of a school board or a member of any important local or civic committee.

Dentistry offers the private practitioner the opportunity to work for oneself (a dentist is his own boss) and to establish long-term relationships in a community. Today more than 75% of dentists work by appointment. They can take a day off or vacation at any time of the year. They are not called out after hours and work from 9 to 5 or later if so desired. Many dentists charge for a broken appointment. A dental career can last long and taper off gradually. As a dentist gets older he can work half days or less. Studies show that many dentists are still in active practice at ages 65 to 69.

Dentistry is a growing young profession. Only about 50% of Americans get regular dental care. As public education continues, and with the standard of living constantly rising toward new heights, dental services and dentists will undoubtedly be in greater demand than at any previous time in recent years.
Current statistics relating to both the need and demand for dental services indicate that more than 109,000 dentists will be needed by 1970 to maintain present day standards of dental health. Today many more of our college graduates are entering the fields of business, engineering, physics, and atomic energy and so leaving greater opportunities for those entering dentistry.

In regards to the cost of dental education, a total investment in a dental education may be as little as $5,800, or as much as $18,250, for the four-year school period. Living at home, living away from home, being married or not being married, are factors which will greatly influence plans for an educational fund. The average single dental student, living away from home while attending dental school, must plan to spend approximately $12,600 for the four-year school program. Institutional costs, such as tuition, books, fees, instruments, and so forth, account for slightly more than half of this amount, while the remainder is spent for normal expenses, such as room and board, travel, health, recreation and other personal needs. However, anyone fortunate enough to live in a community where a dental school is located, or who can live at home while attending school, will find that in so doing the cost of dental education is substantially reduced.

All students who plan to enter one of the professions are confronted with the higher cost of professional education. Students planning for careers in dentistry are finding many ways to finance a dental education and indicate that there are several sources from which they obtain an educational fund. Parents, helping a son or daughter acquire a professional degree, are one of the principal sources of support. Income of working wives of married dental students provides another substantial source of educational funds. In addition to parents, working wives, personal savings - the main source of funds used by dental students - a few students hold part-time jobs while attending dental school, and some obtain scholarship funds from school and private sources.

Dentists' earnings vary greatly, but in general dentistry offers adequate remuneration. The general net income range for all dentists, whether in private practice or in salaried positions, is from about $15,000 to $25,000. Many individual dentists earn considerably more than the top figure of $25,000 -- especially those engaged in some of the specialties such as orthodontia, periodontia, oral surgery and prosthodontia.

The finest dentists say with full sincerity that the financial rewards of their calling are secondary to its human satisfactions. Dentistry is more than a way of earning a living - it is a way of life.

So much for the rewards and attractions of dentistry - and now some remarks on Admissions Policies.

There is no doubt that the applicant's scholastic record has top priority in the consideration and evaluation of an application.

Much importance is given to scholastic average, and also, a great deal of thought is given to the relative value of grades from one college as compared to another. This is an important factor. The transcript must be thoroughly evaluated.

Was the applicant's overall average higher than his average in the sciences? Was it lower? Does the applicant have a well-rounded liberal arts education together with the required pre-professional science courses? Did the
applicant take part in many extra-curricular activities which may have interfered with his studies?

Did the applicant have to work his way through college?

Did the applicant take the difficult science requirements at summer school sessions to lighten the burden of the school year, and improve his grades by spreading out the curriculum?

All of these factors and many others must be considered in the evaluation of a transcript.

Recommendations from the applicant's college are given very important consideration. Most colleges have a Committee on Recommendations. Committee recommendation is preferred to letters sent by three science professors. A letter commenting on the applicant's motivation and industry, cooperation and dependability, personality, leadership qualities, integrity, extra-curricular activities, scholastic ability, class rank, and comparative overall rating, compiled by the different members of the Committee, would be most helpful. Colleges that send a very flowery recommendation for all of its applicants year after year are not of assistance. They actually are doing a dis-service to their applicants because there is no way of evaluating these applicants from the standpoint of comparative recommendations. A frank recommendation should include any knowledge relating to the applicant's health and mental condition, reaction under stress, and ability to carry a demanding curriculum. In reference to our curriculum may I take this opportunity to state that it is at least as demanding as that of the better Medical Schools. The same departments that teach the basic sciences to our Medical Students at P. and S. also teach our Dental Students, and both Medical and Dental Students attend lectures together. An applicant who does not meet the standards and requirements of a Medical School has no place in the School of Dental and Oral Surgery at Columbia.

In the past, some pre-professional advisors have unwisely urged the better students to go into Medicine, and the poorer students to try Dentistry. Columbia Dental School is not for such cases. A good student who is neat and exacting in carrying out his laboratory experiments and assignments, who is meticulous in his dissections, who likes to do detailed work with his hands, such as paint, sculpture, etc., who likes people, and is considerate of others, who is always a gentleman and who has the proper concept of professionalism; such a person should be encouraged to study Dentistry at Columbia.

We feel that if we can convey to you an insight into the high standard of Dental Education we have to offer, and what type of student we want to mold into the Columbia dentist, then your image of Dentistry will be elevated to a much higher plane.

The Dental Aptitude Test also plays a part in the selection of applicants. Our experience has shown that a very good or a very poor score has some significance, while an average score has little or no significance in predicting the applicant's performance in dental school. It goes without saying that a very good score is an asset in considering acceptance, and a very poor score is a liability. The Aptitude Test consists of 2 parts. Part I Manual; consists of dexterity in carving chalk and a test in space relations. Part II Academic; consists chiefly of chemistry and biology and some A.C.E. tests in quantitative and verbal reasoning as well as mental level.
It has been noted with interest that, at times, a B+ student at one college may get a lower score than a C+ student at another college. Also that students from certain colleges get consistently better scores than students from certain other colleges.

Relative to the Manual part of the test, a point to be considered is the fact that in recent years many applicants practice chalk carving for months before taking the test; others don't. Some misleading results may be obtained.

When an interview is requested each applicant is interviewed separately by each member of the committee. So he has 4 different interviews from 4 different angles. In general the applicant's neatness, cleanliness, and attention to details is noted. An applicant who is sloppy at an interview is a poor risk. The applicant's ability to express himself intelligently and to carry out a conversation is also noted, as is his knowledge of current events, the arts, sciences, and literature. Does he have a thorough concept of the responsibility of a professional man to the public, to the profession, to his family and to himself?

The advantages of 4 different interviews are several. Different subjects may be covered by the different interviewers and thus a more comprehensive appraisal can be made. One man may see something the others did not. Different viewpoints offer different discussions. The problems of determining whether the applicant has the proper motivation is present and sometimes difficult to ascertain. It should be borne in mind that the applicant is usually at his best during an interview, and that the interviewers do not always see eye to eye in evaluating certain factors. Some factors just can't be ascertained with any meaningful accuracy during the short time of an interview. The question - should a psychiatrist examine every acceptable applicant prior to admission? - can be similarly answered. It is difficult to see how even a psychiatrist could ascertain with any meaningful accuracy an applicant's adjustment and response to stress during one short interview. Here the pre-professional counselors can be of great assistance since they have had more contact with the applicant and his teachers.

An admissions committee's problems in selecting candidates for dental school would be simplified a great deal if we had:

1. An increased number of high caliber applicants.

2. A more effective and understanding relationship between an admission committee and the pre-professional advisors to science college students. To improve the image of dentistry, and to acquaint faculty committees with a clear picture of Dental Education today, personal contact between admissions officers of professional schools, and pre-professional advisors at colleges is essential. Many of the qualities and criteria which admissions committee looks for in an applicant, cannot be measured with any degree of accuracy in a short interview, but the pre-professional advisors at the colleges can accumulate a great deal more information on the applicant through more frequent contact and discussion at committee meetings, and so can assess many of these qualities and criteria with great validity than can be done in one interview by the admissions committee.

To come to facts, a committee has limited information to work with:

1 A transcript of a college record
II Recommendations from college attended

III A.D.A. Test Scores

IV Interview ratings

Briefly, the committee attempts to select a good student, well recommended, with a good score in the A.D.A. test, one who impresses the admissions officers with his personality, motivation and integrity, and who seems to most fully fit the picture of a man who will be a credit to the profession and to the school.
HEALTH CAREERS AND JOB OPPORTUNITIES
WITH THE NEW YORK CITY HEALTH DEPARTMENT

RIVERSIDE HEALTH CENTER
160 West 100th Street
New York, N. Y.

July 18, 1966

This program was set up to show the range of job opportunities in Public Health and more particularly within the New York City Health Department. The program was presented as follows:

9:00 A. M.  Employment Opportunities in the Health Department,
Robert E. Rothermel, M. D.,
Director of Professional Education

9:15 A. M.  Tour of the Health Center

10:00 A. M.  Physicians in the Health Department
Mary McLaughlin, M. D.,
Assistant Commissioner for District Health Services

10:45 A. M.  Public Health Nursing
Miss Leah Hoenig,
Associate Director of Public Health Nursing

Environmental Sanitation
Mr. John McHugh,
Assistant Director of Professional Education

Laboratory Careers in the Health Department
Miss Sylvia Blatt,
Chief,
Laboratory Field Services

Health Educators, Nutritionists, in the Health Department
Miss Mary Leder,
Health Educator,
Office of Professional Education

12:00 Noon  Film "The Winning Goal"
I didn't know, until I came in this afternoon, the degree of seriousness with which the audience would take to each of the speakers, and since the Chairman very kindly spoke in a jovial vein this afternoon, I think I'd like to pick that up with just one story which I hope you enjoy. We have one optometrist who is a nun. She happens to be in New York at the moment, but she is going back to her mission post. She was in last Friday and told me a little story that I thought was wonderful. She has a great sense of humor, is a marvelous human being, and I'm very fond of her. Her name is Sister Mary Annunciata and she took her vows after she was graduated from the Los Angeles College of Optometry, some ten or twelve years ago.

Her mission post is on the island of Okinawa in the Pacific and she operates an eye clinic in the mission hospital. There is also on Okinawa, as we all know, a very large Air Force and combined military installation which has a rather extensive hospital and out-patient dispensary or series of clinics...one of which is an eye clinic.

Apparently there was a very severe shortage of optometrists way back in 1960-61 in the military, and the Commanding Officer of the hospital had asked Sister Mary Annunciata if she would serve two days a week in the dispensary hospital, to begin to work down the backlog of patients who were in need of care and who were simply not able to receive care because there was not enough personnel to take care of them. In any event, the day she was appointed was the day after Election Day in what I guess was 1960, when President Kennedy was elected. Her first patient was an Air Force enlisted man who was listed for the 8:00 a.m. appointment. She was there in her habit, (I think she had a gown over the habit) and the Air Force enlisted man took one look at her and his eyes popped open. Without flinching, Sister Mary Annunciata said, "Well, this is what happens when you elect a Catholic as President!" However, he was none the worse for wear because I'm sure she cared for him rather well.

My subject this afternoon is optometry and some of the related disciplines. I have been asked to leave some time for a floor discussion which, if I may say, I'd like to provoke. I would like to hear from you about some of the problems that relate to the health professions, and some with which you have now become more familiar during these last few days. There are three areas that I would like to open for discussion later on. (I will announce them now so that you can at least think about them.) The first has to do with what is a rather rigid hierarchy in the system of the health professions and which certainly constitutes a barrier to bringing young people, young men and women, into the field of the health disciplines. They tend to think that the physician is at the top of the heap and everybody
else is somewhat lower down both monetarily and in status. They may not wish to be relegated to this kind of system for the remainder of their lives, being something like second-class citizens, or occupying second-class status in terms of their occupations. The second is whether there are easy steps between one discipline and the next, or whether the system is so rigid that when a person enters a particular slot and is accorded a particular status, he cannot rise in that hierarchy? And, the third has to do with money. We do live in a very realistic and materialistic world, and those professions, those health occupations which command the highest income will be the most attractive. Those which do not command a good income, or a decent income, or even a livable income, will not be attractive to young people. I don't think we can get away from this problem; I don't think we can sweep it under the rug. It's a very real problem. All you have to do is pick up the newspapers and read what's happening at some of the voluntary hospitals and there's no sense in hiding it...it's right in the middle of the paper. It deserves some discussions. Despite all of our attempts to acquaint the Guidance Counselors with information about the health professions and all the health occupations, unless young people are going to earn a decent income and be accorded some measure of respect, and unless they will not feel like second-hand citizens in a very rigid hierarchy, then all these conferences are going for naught. So let's discuss these three problems just a little bit later. I think too often we tend to mask these questions and they shouldn't be masked. They shouldn't be hidden. They should be brought right to the surface and discussed. And one final problem for discussion. People learn to work together best when they are trained and educated together. People who are not educated together will not learn to work well together. The concept of the team may be a myth and a fantasy, or it may be just a group of people who are working together in the same environment. That hardly constitutes a team. We certainly want to discuss this matter in addition to the other three. I'm pleased that Mr. Morgan has assigned them to me.

Optometry, ladies and gentlemen, is an evolving discipline...evolving and changing very rapidly. In the few short years that I have enjoyed being a part of the profession, I have found a great many changes taking place. And, certainly, the next ten or fifteen years promise even greater changes. Incidentally, I don't practice Optometry. I'm not a practitioner. I do my practicing behind a desk and with a telephone. In that way I don't inflict any damage on any patient except upon the telephone operator with whom I sometimes become rambunctious. I have my Ph.D. in the field of public administration of health and welfare services with minor in social organization. I am very much concerned with the broad nature of health care and the way in which we administer health care. I am also interested in the way we provoke, formulate and constitute our public policy with regard to health professions.

Optometry was founded perhaps 75 or a 100 years ago. Certainly, from a legal standpoint the earliest optometry laws were enacted in the year 1901 in the state of Minnesota and the last area in the United States to enact an Optometry Act was in 1924 by the Congress for the District of Columbia. Therefore, between 1901 and 1924, Optometry fought for legal recognition and did achieve it. The earliest program in Optometry in a college or university was at Columbia University in 1910. And shortly after that Ohio State instituted its program, and so on around the country.

Optometry has, in this country, 10 schools and colleges, 5 of which are affiliated with universities and 5 of which are private colleges...all are accredited by the regional accrediting bodies. The 10 schools are:
The Massachusetts College of Optometry in Boston; Pennsylvania College of Optometry, formerly known as Pennsylvania State College of Optometry, which is a land grant college in Philadelphia; The School of Optometry at Ohio State University in Columbus; Illinois College of Optometry in Chicago on the campus of the Illinois Institute of Technology; Indiana University's program at Bloomington; the Southern College of Optometry in Memphis, soon to be part of the University of Southern California; the University of Houston College of Optometry. Today each of the ten schools confer a Doctor of Optometry degree, O.D., not to be confused with a D.O. O.D., Doctor of Optometry, D.O., Doctor of Osteopathy. Up to a few years ago only five schools conferred the degree of Doctor of Optometry. But since 1964 all of the schools now confer the O.D. degree and are on a program of two years of pre-professional undergraduate education, and four years of optometry leading to the O.D. degree - a minimum of six years. Most of the students go into Optometry after three years of pre-professional work or they have a Bachelor's Degree. The average this past September, that is this September of 1965, was 3.3 years of pre-professional college education. Five of the institutions at the universities confer masters degrees in the field of physiological optics, (graduate work in visual science) and three of those confer the Ph.D. in the field of physiological optics, visual perception and visual science. Thereby, the graduate in optometry has the opportunity to go on and do research and to earn higher degrees in the field of the visual sciences.

I want to talk for a moment about the income of the optometrist. The optometrist is found where you find most professional people in the field of the health sciences. He is in a private office, in a clinic, in a hospital, in a penal institution (not as an inmate, of course), in a geriatric home, and nursing home, and in an industrial plant. The optometrist's income, by the last survey of the American Optometric Association, is approximately $15,500 (average). It is somewhat less, somewhat lower in the Northeast. Somewhat higher in the South. It is higher in the Midwest and North Central States. It ranges up to $21,000 in the Midwest and in the Pacific Northwest as an average for that particular region, which is rather high for any of the health professions.

I want to talk about one or two matters that relate to the level of the profession. As the level of education has risen, during the last 10, 15, 20 years, the status of the Optometrist has risen as well. This has gone consistently up. That status is important for two reasons. When one thinks of an Optometrist, one thinks of what we call in sociology a "generalized other." One thinks of the general Optometrist, the rank and file Optometrist. I asked three counselors who were here before the program began, "What do you think of when you think of an Optometrist?" The three of them gave me almost identical answers. (I thought they were coached.) They said, "Well, I think of a man in a store who sells glasses." And are you going to get (I said to myself immediately) young men and women to enter a profession where they will be consigned to a store to sell glasses? I thought that if this matter was in your minds, I had better bring it to the surface and immediately attempt to clarify it.
Optometry evolved from persons who were fitting glasses for visual correction. Because vision was considered (it really is) one of God's most precious gifts, glasses were sold in jewelry stores, where other precious things were sold. And the Optometrist evolved in the jewelry store much the same way that the surgeon evolved from the barber shop. And it wasn't until he gathered his education, his discipline, his background, his training, that he moved out of the jewelry store and established a store of his own. And in the early days, and certainly at the turn of the century it was not quite a business and not quite a profession. What you see today, by viewing an Optometrist in a store is something that's a throw-back. You're seeing a dying breed. This man is going out. He's going out because the professional man does not occupy a store for the sale of merchandise, but, rather, he occupies an office for the furnishing of professional services. And so optometry is in a state of constant change. That's why I said the profession is evolving...it's evolving professionally and in status. It's evolving educationally. And, it's certainly evolving in terms of the public view.

What does an Optometrist do? Well, an Optometrist examines eyes for visual disabilities and provides visual therapy. This may be in the form of glasses, visual training, contact lenses, or other devices or aids made specifically for the individual. The Optometrist may specialize in a number of areas...the field of contact lenses, a specialty all unto its own and certainly one that has grown up in the last 15 years, or in the field of Orthoptic or visual training, which is the alleviation of a binocular co-ordination imbalance. What do I mean by that? I mean that a person may have difficulty coordinating the vision of both eyes and this is amenable to a type of visual therapy known as visual training, a specialized field which is commonly called Orthoptics. The Optometrist may also engage in general practice. Most of the clinics and hospitals which have out-patient eye clinics do largely general work. And in many institutions you will find an Optometrist.

The question was also asked before, "What is the difference between an Optometrist and an Ophthalmologist?" It's a good question. A physician who is certified, and specialized in diseases of the eye and in the medical and surgical correction of such disabilities is an Ophthalmologist. If he is not certified he's called an Oculist. The Oculist is the old term and the name Oculist is going out. I think in another five years you won't find it used at all. Obviously, it's a word which people can easily pronounce, and maybe that's why we're getting rid of it. The word Ophthalmologist is a tongue twister and one has great difficulty spelling it, which perhaps is the reason we use it. Likewise, the word Optometrist is also difficult. I wish we could change that. It might make it easier for people, but I think that ease is probably the last thing that's thought of when terms are identified or developed. In any event, an Ophthalmologist is a specialist in medical and surgical treatment of diseases of the eye; an Optometrist is a professional person trained for the alleviation of visual problems. One is an eye specialist concerned with diseases, the other is an eye specialist concerned with visual problems. The Optometrist does, however, have an obligation to recognize the presence of pathology or disease, and when he does he refers it to other practitioners. It may be an Ophthalmologist or a Dermatologist, etc.

There are a small coterie of supporting personnel on a technical or technological level, which both Optometrists and Ophthalmologists utilize. They are first, the Optician or the Ophthalmic dispenser, sometimes known as Dispensing Optician. The Ophthalmic Dispenser is the person who is the
Pharmacist to the Optometrist or the Ophthalmologist. He takes the prescription written by the Optometrist or Ophthalmologist and fills it. He grinds the lenses, fits the lenses to the frame, and then fits the glasses to the patient. He fills the prescription. The Optician generally receives his training by apprenticeship, working in a laboratory, or for another Dispenser or a physician or for an Optometrist, doing the dispensing of eye glasses. There is a program in this State at the Erie Technical Institute in Buffalo which provides a two-year junior college level program for the Dispenser. There is also an evolving program at the New York City Community College for the Dispensing Optician. Incidentally, the laboratory mechanic or the bench worker is a person who is in very short supply. The Optician is in short supply and the Optometrist is in very short supply. There is no employment problem in any of the three groups. As a matter of fact, I was telling another Guidance Counselor today that there isn't a seat vacant in any of the schools or colleges of Optometry.

There are now plans for the development of three additional schools in the United States, one of which we hope will be in this State, at the City University, though that has not been made definite. We hope for an announcement soon. Columbia no longer has the program, and hasn't since 1956. The program was quite expensive, for the students were paying the highest tuition rate per student in the University. At the time of the closing of the program at Columbia the tuition for the optometry students was a little over $1,000 and the tuition at the Medical School was $850. It has a very high cost because of the extreme scientific technical nature of the work, which cuts across many of the basic science areas.

Is there a need for optometrists throughout the country? Yes, there is! There have been three or four major studies in the last five years which have predicted a shortage of about 17,000 optometrists by 1980. And this is a net shortage...assuming that every class and every school will be filled between now and 1980. With the rise in population, and with the greater entitlement to care, there will be a shortage of about 17,000 optometrists in the United States by 1980.

Now, may we talk for just a moment about the entitlement to care. As you know, ladies and gentlemen, the United States has now developed a new public policy with regard to health care. This policy didn't just come about today or last year or three years ago. It has been evolving since the 30's. Today major segments of the community are entitled to health care as a matter of right, not depending upon whether or not they can afford it. Certainly for the elderly, persons over 65, who are Social Security recipients, there is broad entitlement. Eye care is expected to be included in this next Medicare Legislation. Under the Title 19 Program which is just getting under way, care is included.

We know that a person receives an eye examination once every 3.4 years on an average. We know by experience that immediately after the National Health Service in Great Britain was instituted in 1948, the utilization rate went up...it went up very sharply. We anticipate the same kind of utilization rate in this country as entitlement becomes broader. This means that with more and more entitlement, and with broader scope in terms of social policy in health care, the shortages will become even more acute. Indeed, major segments of unmet needs will enter the public sector.
I would like to discuss another technical specialty, the Orthoptic Technician. The Orthoptic Technician is an assistant trained a year or two at a junior college or community college level to aid the optometrist or the ophthalmologist in the field of visual training. Some people become lay assistants in the field of Orthoptics and visual training. The most notable and celebrated person in the last few years has been Luci Baines Johnson who was treated by an Optometrist in the City of Washington. She became so intrigued by the fact that she needed visual training and benefited from the therapy that she was offered a summer job to help the Optometrist in his office. She became perhaps the most famous Orthoptic Assistant which we have. I presume she was paid rather well because she came back the following summer and pursued her new occupation that summer, as well. This summer I think she's preparing for something else. Incidentally, when she chose a career, interestingly enough she chose nursing but I think she's giving that up now and is just going to be a housewife. I met her a number of weeks ago at a convention in Boston. I met her fiance' as well, and they're both delightful young people. Now, may I answer any questions you may have.
CAREERS IN SOCIAL WORK

Louis Levitt
Executive Director
Social Work Recruiting Center
of Greater New York

July 18, 1966

One of the points made on the questionnaire sent to each of you is that because of your heavy counseling load, you do not have sufficient time to counsel students. I would suggest to you that organizations like the Social Work Recruiting Center can complement your services. Mrs. Steiner is our staff member responsible for the Social Work Career Planning and Information Service. She is equipped to run on a weekly basis what she calls "Open House Discussions," with High School students in their Junior and Senior year who are interested in exploring the profession of Social Work. We also do the same on a college level and, where necessary, we spend some time doing individual counseling in our office. We can also supply High School classes and Junior High School classes with the pamphlet you have before you, "Twenty Questions and Answers about Social Work." We have relatively unlimited numbers of that pamphlet available to you free of charge. The National Commission on Social Work Careers material is sold at its cost. The National Commission does have a kit of pamphlets which we can let you have free, provided you write for it on your school stationery. The kit contains a collection of one copy of each of the pamphlets they have in stock and an order blank for more. There is no charge for the original kit of material.

Our job in Social Work Recruiting Centers is to do two things:

1. Bring young people to social work;

2. To try to affect the mechanisms in Social Work that produce manpower.

For instance, one of the things we are trying very hard to do is to help the Graduate Schools of Social Work secure more Federal aid so that they can in turn expand their facilities and take on more students. A particular goal that we have...and which we could use your help with...is in recruiting Negro and Puerto Rican students for positions of professional leadership in Social Work. So if there are any particular individuals that you know of who would fit into this category we would be delighted to see if we can help them.

One of the concrete things that we do for College students in their Junior and Senior year is to provide them with work opportunities in Social Work during the summer months. This is their final summer. They will have
had it after that one, and so a testing opportunity in Social Work where they are paid, where they have an opportunity to work with professionally trained Social Workers is very important. We put over 350 of these students to work every summer in New York. This summer experience in a Social Work program is duplicated across the country in other cities.

Up-to-date information about Social Work: Medical and Psychiatric Social Workers, the people we are most concerned about today, help the patient and his family handle personal problems that result from severe or long illness or disability. There are much longer definitions, but that's the best one I've heard and it's official from the Federal Government. I think the key thought is to help the patient and his family handle personal problems with which they cannot cope.

How many Social Workers are there of all categories in the United States? The 1960 Census Report indicates 116,000 nationally. In all, today, there are perhaps 150,000. How many in Health and Mental Health? In 1964, the Study shows 9,000 Social Workers employed in hospitals with Social Service Departments. A study on Mental Health establishments in 1962-63 (and there's some overlap between these figures) gives us about 7,500 in Mental Health facilities, so between the two you can rest comfortably with a figure of 15,000 Social Workers employed in medical settings.

There's a serious manpower shortage in Social Work. The increasing demand for Social Workers in hospitals, clinics and rehabilitation centers, the steady growth of social work programs in Public Health, the rapid rise in medical care services under public welfare, and the growing demand for Social Workers in voluntary health and social work organizations have brought unprecedented demands on the small number of adequately trained Social Workers. It has been estimated that the known demands for Social Workers in the health field alone could assimilate all students graduating from all schools of social work in this country in a given year.

Some more facts and figures on the manpower shortage: We need today, July 1966, according to the United States Public Health Service, 10,500 more Social Workers for federally aided community health programs and mental hospitals and other facilities for the mentally ill. An additional 6,000 Medical Social Workers would be required to staff hospitals, clinics and other medical facilities.

The consequences of the manpower shortage are immense. From the service point of view it is tremendously harmful. It produces what might be called a facade of service and the people who get hurt most by this are the poor. Look at this interesting thought: Social Services, which were created to help the poor, if they are inadequately staffed can sometimes become a way of hurting the poor, because the rest of us go away saying, "Sure, there's Social Services. We don't have anything to worry about." Well, it isn't true. It's particularly unfortunate that some of the Public Health Services are so badly in need. In New York City we have a vacancy ratio of 35% for all Social Work positions requiring an MA in City government, and I assure you that New York City tends to be the leader in Social Services across the country, so you can imagine what the situation is like State by State.
From a negative point of view, for someone coming into the field, there may be serious consequences in understaffed units in places where staff turnover is high and continues to be high because there are nowhere near enough to do the job. But from a positive point of view, looking at it from the standpoint of a worker, someone today graduating from a School of Social Work with an MA degree will find employment in every one of the States in this country, in every large city. You just have to announce yourself and you will have a dozen job offers. You are a sought-after person in a profession which can never be automated out of existence. How are you going to automate the client-worker interview? How do you automate the conversation at a bedside of a chronically ill patient? You can't. This is really a people-to-people kind of profession that's growing very rapidly and going places.

This country is rapidly becoming a welfare state and we use that word in its positive sense. There are services today which are in demand and there are people all over the country busily engaged in creating new services as we sit here today. A week doesn't go by when some courageous new inventive Social Service Program doesn't begin somewhere.

From the point of view of the student interested in planning a career, the young people today, I don't have to tell you, (you can probably give me a chapter and verse on this) are becoming increasingly disenchanted with market place occupations. There's a recent article in the Harvard Business Review by Peter Drucker to that effect. Basically, what they are saying is, "I would like to do something useful with my life." When a young person says this, one of the occupations, one of the professions, that makes sense for him is the profession of Social Work. This is a profession where at least you can get to sleep at night feeling that you tried to be helpful to someone, that you have tried your darndest to deal with the consequences of social problems, and perhaps tried your darndest to remedy the problems themselves, not just to sit all day alleviating consequences. As these idealistic young people become older, there is, I think, a tremendous danger of disenchantment, a tremendous danger of cynicism..."Nobody counts nohow, and nobody is doing anything for anybody." And I think you can recite me chapter and verse on that, too. The earlier we can get them, the earlier we can make real this desire to help people, and the earlier we can reinforce the worthwhileness of convictions, the better off we are. They're making decisions now in the senior year in High School or freshman year in college...and many of them increasingly are sticking with these decisions. So, one of the pieces of advice I would give overburdened Guidance Staff is to add to your burdens by looking for volunteer experiences these 15-17 year old people can fulfill.

There are many responsibilities that they can fulfill. One of the ones that I'm most familiar with stems from a country camp that I worked with, where we sent 16-year old girls to work at the Sullivan County Old Age Home and Infirmary. Now, if you wanted a traditional, American Old Age Home, this was it. A lovely setting...lots of green grass... a lovely lake, the house set up on a hill. Now, for old people, you set a house on top of a hill, right? That made a lot of sense. But the patients were stuck. They had two floors, a dying floor and a waiting floor, because Sullivan County never had enough money really to appropriate for a recre-
ational staff. Now, that's a typical American picture, if I ever heard one. The budgets of these places are traditionally inadequate. Well, what these 16-year old girls did, (every summer a new crop came in) was to become the recreation staff for the Old Age Home, and they turned a place that was physically beautiful but emotionally decrepit into a place that was a great deal more full of life.

One of the stories I'd like to relate concerns the team of girls who worked with a blind and deaf old man. They worked with him in such a way that they wound up the summer being able to play checkers with him because they worked out a checkerboard with sandpaper, so that the black squares were sandpaper, and the red ones smooth. In this way, they were able to have a kind of communication with this old man. No one told them how to do it. This was a piece of social invention that they thought up by themselves.

Now, the problem in this country is that there is nowhere near enough time and nowhere near enough money to have trained staff look for experiences like this and provide them for young people who are ready for them and people in need who need this kind of help. And this is not a dilemma that we can solve overnight. But I would suggest that one of the places where responsibility for this belongs is in a Guidance Program of a school system.

How many kinds of Social Workers are there? A couple of hundred. Basically, two kinds: those with a Masters Degree in Social Work and those without. A Masters Degree in Social Work is obtained at now 65 graduate schools of Social Work and the number keeps growing every year. We have 9 in New York State and we lead the country in numbers of schools of Social Work.

A Masters Degree can be achieved in a variety of creative ways. The University of Michigan is on a tri-semester plan. It will produce Social Workers inside of 16 months. Syracuse University will produce the same... they have a tri-semester plan. Most schools are on a two-year plan, you know the traditional two semesters plus two semesters. The tri-semester plan is new and growing in popularity. There are other plans, such as Rutgers University, where you work for a year in an accredited agency, with a decent supervisor, and that year of work becomes your first year of internship.

Graduate education in Social Work is different from most professions in its continuing insistence on the internship as well as academic work. Students on the traditional plan work three days a week under close supervision and have classes two days a week. This continued insistence on internship at least makes the person with a Masters Degree in Social Work someone who can move into an important job with responsibilities fairly quickly. The second type of person who merits the title Social Worker is someone with a baccalaureate degree in educational preparation in the social and behavioral sciences, followed by in-service training, and so on. Now, it's important to appreciate this newness of definition, because it wasn't so long ago when this profession was insisting that only a person with a Masters Degree could be called a Social Worker. Some of you may have been party to some of the intra-mural disputes that went on. Now, that definition wasn't for real...didn't correspond to the real conditions existing
in Social Agencies across the country, and it had to go under, and it has gone under. The definitions which I'm reading you now are from the Department of Health, Education and Welfare, so you have people with the title Social Worker with a Bachelor's Degree and with a Masters Degree. Now, there are all sorts of other people in social services with titles such as "Aides", you know...Social Service Aides...Psychiatric Aides. Homemaker would be a big, important addition to the profession.

We're in a transitional stage. The vital question is, how are we going to staff all these social services? The answer is by providing social service job components, for people with different backgrounds. It means that there will have to be found, in social services, jobs for the high school graduates, jobs for the junior college graduates, as well as these other two people. And indeed this is happening in two community colleges in New York State. Duchess County has a Community College Program in Child Care, producing in two years a Child Care Worker, and Plattsburgh produces a Homemaker in two years. And that, I tell you, is the wave of the future. It's going to happen...it is happening all over the country.

There are under-graduate programs in Social Work coming about, leading to an under-graduate major in Social Welfare. In New York State the most important place where this is happening now is the University of Buffalo, which will have an under-graduate Social Service Program capable of producing 150 graduates a year. The State University at Albany is a close second with plans for under-graduate preparation. And here in this State, the State University will be the leverage point. Many more schools, in the State University will have these programs, and therefore the voluntary colleges will then pick up and produce. Now, this is an old development. Some of you know about these programs on a small scale, but this is now a large scale sweep. It's necessary and it has the full endorsement of the profession. This is not something that somebody is going to say..."Well, we had to hire these people because we had nobody else." This is a deliberate attempt to fill jobs in a planful way with the kind of people who may be available.

What do Social Workers do in hospitals? I could answer this question by posing to you another question. Who sees a patient as a whole person in a hospital? Remember from your own hospital experience, the hospital administrator sees you as another Blue Cross bill, right? They ask you these stupid questions in the emergency room. Why? Because you have to have that bill filled out, so it's important. You're turning inside out, but somebody's got to come up and ask you what your mother's maiden name was. But that's because there's somebody who has charge of you in that sphere. How, the doctor sees you as someone. It's his job to get you well, so he's looking for the bug that's bothering you, the bone that's broken or the what have you, and he addresses himself to that. The nurse's job is to help the doctor carry out the treatment that he prescribes so she sees you as a chart, as someone who is a bloody nuisance, ringing that bell so damn often...and she's trying to do her job...in a much more patient-oriented way. And then the optometrist comes and he sees if you got two eyes, right? And so on...you have to permit a certain amount of exaggeration. So who sees you as a whole person? Well, of all the staff who work in a hospital, we now meet the Social Worker, because someone in this complex world has got to begin to coordinate all these
interactions. Someone has got to coordinate what's happening in the outside world with what's happening to you in bed. And if you're a widow, with two children on the outside, and your family is in California, there's somebody who has to help you worry about those kids and it's the Social Worker's job to help you worry and to help you do something about this.

The traditional role of the Social Worker has been the intermediary between the hospital and the patient's family, and that still continues, but added to that role is a new concept of communication hospital-to-community. We're making progress in this country on Family Planning. We already have government sponsored and financed Family Planning Clinics. Now, this is a very ticklish issue in many communities. There are many religious convictions of many people, and there are many kinds of other emotional and psychological blocks to the utilization of services. Someone has to help a community understand what this is all about if a hospital goes into this. Someone has to help a community understand a hospital's new approach to a tubercular patient that he can be released to a community two months earlier because of new drug discoveries. Someone has to help kids in a poor community...girls who are pregnant before they are married...who can help them know that they can get to the hospital and that there are friendly people there who can be of some use to them. Someone has to refer people who need its services to the hospital, as well as interpret its services. So you have a whole new development of community organization workers in Social Work being attached to hospitals and working in a community.

You have another issue here, which is the coordination of planning for a patient. What about a person who is a chronically ill person, head of the family, the breadwinner, has a heart condition and a broken leg, and he's got a family outside? Because of his heart condition he can't go back to the job that he had. Now, who coordinates the planning for that patient? The Foot Doctor will see him about the foot, and the Heart Doctor about the heart and maybe the two of them will get together. It's a Social Worker's job increasingly to become the staffer for this hospital team. Finally, think of the hospital as a therapeutic environment. I know that the papers about school say it is a kind of "scholastic community", but think of a hospital as a therapeutic community...particularly hospitals for older people or chronically ill people. Social Workers are beginning to have an increasingly important role in these places.

How much do Social Workers get paid? Well, I brought with me today a copy of the Wall Street Journal. There's an article in here about the gross national product. The gross national product in this quarter has an annual rate of 732 billion dollars. Now, that's what our country is producing. Ask yourself how much money goes into social services... and you will begin to understand the inadequate salaries we pay in the field of Social Work. This country is not spending anywhere near enough for its enterprises in social services. There's another piece in the Wall Street Journal: "Navy gives order for 250 million dollars for landing ships." This country is in a guns and butter crisis. That's one of the things about which Washington lacks candor. We don't have enough money to do all of the things we need to do. You must know this and feel it in your work, and some of your comments about being understaffed must stem from this. Well, this is very true for Social Workers. Many of these new programs are programs in name only. They don't have enough staff or enough money to
finish. Would you believe the possibility of quick, dramatic results where you have a social problem that has taken 100 years to create? Slum housing in central Harlem didn't happen overnight. It took many, many years. Harlem was a place that gradually got turned into what it is. I was born in Harlem, on 117th Street, and my family's flight from Harlem was a part of the picture.

Now, to go in there and expect to change the attitudes of people in one year or two years is ridiculous. These programs which are being funded for one year should have been funded for ten years. You take Operation Head Start as a classic example of a program whose intent was to change the status-quo, but because of the manner of its funding and the amount of its funding really serves to perpetuate the status-quo. If anyone wants to argue that point, they can do this with the Center on Urban Studies. But, if you get funded two weeks before you're supposed to start, who can you possibly hire? What can you possibly do? And that's the problem that affects many of the new social services in this country.

Social Workers are in scarce quantity, and people with a Masters Degree get paid fairly well. According to the National Association, $7,000 is the recommended minimum salary today for Social Workers. Family Service Association of America recommends to its agencies somewhat over $7,400 as a starting salary. The Veterans Administration is starting its case workers at $7,400. The State of California, County of Los Angeles is paying its beginning Social Workers $8,800. And this crazy thing is going to keep going, because there are nowhere near enough of us. Our salaries go up every year. Now, this contrasts with the Community Service Society of New York which is still paying people $6,300 to start, because this is an agency of tremendously high professional standing and prestige. And some of the larger hospitals in New York also fall into that category of starting people below $7,000, but it's going to go up.

The categories in Social Work fall into the practitioner category which is roughly about $7,000 to $10,000, the line supervisor category which is roughly from about $8,500 to $11,000 and the executive and supervisory managerial category which moves from about $10,000 to $12,000. There are people in responsible executive positions in Social Work earning $15,000, $20,000 and $25,000. Don't force me to tell you how many we have. We don't have enough. For people without a Masters Degree who are starting on a college level, the New York City Department of Welfare will pay $6,250, and that's now regarded as a decent salary for college graduates.

People who don't want to work for Welfare, who would rather work for a voluntary agency, whatever their reasons would be, who have a Bachelor's Degree will be paid much less, sometimes today going down to $5,100 in New York. So it's a kind of a crazy mixed up situation, without planning and without real coordination. A lot has to be done in the way of planning and coordination and we at the Social Work Recruiting Center are in business to do it.

Social Work offers psychic income as well as monetary. You get paid that, too, don't you? So we're together. We belong to the same union. Financial assistance, there's quite a bit of it. In planning for a Masters Degree in Social Work, no one should feel that they should not go on because
of money. Eighty percent of all the students who go to Graduate School in Social Work get some form of financial assistance. The largest amount of money tends to be $1,800 a year for living expenses, plus full tuition... and these are grants supplied by the Federal government without commitment to any particular agency afterwards. This is done by the National Institute of Mental Health and the Vocational Rehabilitation Administration. If there is a commitment, it's to a field, to Mental Health. That's a very broad term. There are also large agencies which want to be planful in their personnel who also supply scholarships of $3,500 a year... which I think isn't great, but it's enough to get by on. About when to apply and how to apply... it's getting rough. People who apply for September admission ought to start applying in October or November. Training facilities, the schools of Social Work, are attached to universities. All of them are accredited.

I think I have answered some of the basic questions which you had when you came in. I have enjoyed talking with you and I would be most interested in answering any other questions you may have.
A panel consisting of Miss Caroline Flanders of the United Hospital Fund, Mr. Levit Mendel of the National Health Council, and Dr. Harold Kaase of Altro Work Shops was set up to review with the Institute participants the range of community resources available within the metropolitan New York area. None of the panel members were asked to prepare a formal presentation for this part of the program. Rather, it was designed to give the participants an opportunity to discuss the types of community resources which they make use of in their day to day counseling activities. The panel acted merely as resource people.
I am very pleased to have been asked to speak to you today. One reason for this is because it is always challenging to address professionals, who are generally closer to the heart of the problems that confront them. A second, and more important, reason is because I am very concerned about the subject of manpower planning for the health field... and this gives me an opportunity to let off steam.

I am greatly concerned over the matter of manpower planning for public and private health. It seems to me that existing needs and present facilities long ago passed the crisis stage, let alone planning for the future. To illustrate my point, I am going first to preface my remarks with some observations about the overall health pictures confronting our nation, our states and our cities. Then I am going to tell you a little about the Labor Rehabilitation Liaison Project, which I am fortunate to direct. And finally, I am going to project these observations and few conclusions which result from them for the future - as it affects all of us interested in the field of health.

First, let me say that I am not a little amazed at the fact that the death rate in this nation isn't much higher than it is at the present time. I say this, because, as you know, the number of qualified doctors, nurses and other health personnel has been getting lower in proportion to our growing population. For a number of reasons, chief among which is the question of earnings, other than doctors, fewer nurses and other professional health people have been entering public and private health as a profession.

One is compelled - after some research into the public and private health fields - to conclude that money is the main reason why more people have not chosen the health field as their profession.

Of course, nurses, nurses' aides and other hospital, health center, nursing home and clinic employees during the past few years have started to earn more money. And the chief reason for this is that they have resorted to job action - either on their own or through unions. Indeed, increased compensation for nurses and other health employees had resulted in pushing the cost of services higher. But unfortunately, the increases received by health personnel have not been commensurate either with their needs or what they are entitled to get on the basis of the need for their services, on the amount of training they must undergo and finally on the cost of living in this world of the 1960's.

Well, this somewhat bleak situation in which private and public health personnel find themselves these days is cause for alarm. During the past six or seven years - when strikes have taken place by hospital employees, when nurses and nurses' aides have either resorted to job action or outright threats of a
work stoppage, the public has become increasingly aware of what key roles these workers play in the lives of human beings. Yet, when it comes to supporting health personnel in their demands for higher pay and better conditions, most people talk about "the public interest", and the job of supporting these employees falls mainly on the shoulders of organized labor. This is what happened when the hospital workers struck a few years ago. This is what happened a few weeks ago when the nurses threatened to stop work. And this is what happened more recently when doctors employed in New York City's clinics failed to show up for work.

I cite these situations only to document my personal feeling of concern over the future, and I have no doubt but that you share this concern. But there are many other factors that give me reason for alarm. One is the fact that there is a grave need for more centralization of information and more available guidance about existing health facilities. In far too many cases of illness - even more when this illness is sudden - people don't know where to turn. And often, when they do know where to turn, they do not get the proper direction or assistance. The number of organizations in the public and private health field that maintain guidance programs - such as your own - are deplorably few. I think we could use literally thousands of guidance counselor programs across the nation, especially in small cities and communities where there aren't the many voluntary or proprietary agencies that exist in urban centers like New York, Chicago, Los Angeles and other cities. A third reason why I am greatly concerned over existing and future health facilities and services is because the very people who have the necessary experience, training and desire to further training for the future, are too wrapped up in their professional specializations - or perhaps making far too much money at their job - to take time out. Incidentally, while doctors and experts in nursing and technical health matters know their respective fields, many of them lack the experience of the social case worker, who probably is exposed in greater depth to every client with whom he or she comes in contact. Doctors, nurses and other health personnel are shielded by the legend that they are too busy to afford too much time for patients. Social workers cannot plead in similar vein. They are expected to investigate every client down to the last detail. As a result, they have a broader knowledge of what makes each client tick than does the doctor, the nurse and certainly the other health personnel who see the patient less frequently and on a less personal basis than the doctor or nurse. Finally, there is the matter of decision. Far too many people who today have the authority for proper planning for health manpower in the future, are afraid to make decisions. Also, they lack the influence to see to it that those who have authority to make decisions do so. Unfortunately, this is resulting in too much theory and not enough down-to-earth fact and action.

THE LABOR REHAB PROJECT

Nearly three years ago, the Labor Liaison Rehabilitation Project, which I direct, was established in New York City. This was the first time in the entire nation that any labor body was given a grant of money by an agency of the Federal government. The United States Department of Health, Education and Welfare gave $310,000 to the New York City Central Labor Council for the purpose of setting up a project that would help people - union members and their families - with physical and mental disabilities. I think, based on these 34 months of experience, that our project can be called eminently successful. During this time, we have handled more than two thousand cases, more than sixty-percent of them being resolved favorably for the client. And in the other forty percent factors beyond our control militated against the completely successful disposition of the case.
Time does not permit me to detail all the types of cases we have handled and the infinite number of lessons we have learned as a result of this case-load. We took care of every possible kind of case - heart disease, cancer, stroke, paralysis, disability resulting from a score of different physiological, clinical ailments, mental illness, and this isn't all. We also handled cases involving child care, care of aged parent or parents, location of nursing homes for ill and-or aged people, cases involving problems arising on the job, in school and in the home. And you may believe we learned a great deal. So did our guidance people. Through the facilities of the Community Services Committee of the New York City Central Labor Council, we have been training on the average of 250 counselors a year. These have been drawn from the ranks of local unions in New York City. Between the Labor Rehab Project, as it is called, and our Community Services Committee counselors, we have probably built up one of the most successful and result-getting referral-counselling systems in the country. I did not bring up the subject of the Labor Rehab Project in order to gloat about our success. My motive in bringing it to your attention is the manpower lessons all of us connected with the project have learned during these past three years. One of these lessons is that most people still don't know what to do, where to turn and to whom they can turn when a health emergency occurs. Another lesson is that not enough planning is taking place to handle present-day needs, let alone those of the future.

This brings me to the third point in my remarks to you today - and this concerns the question of where we are going, how fast we are moving, and why we are not making more progress - for, as I said at the outset of my remarks - I do not think we are moving ahead quickly enough towards necessary objectives.

As of 1960, close to four million persons were involved in the various aspects of health services. Health services themselves accounted for approximately 2,600,000 persons employed in hospitals, clinics, health organizations, private offices, laboratories, nursing homes and other places where medical and health services are provided. (This, by the way, does not include military personnel in hospitals and other places who contribute to the health of the nation.)

Besides these 2,600,000 persons, an additional half million persons in the health field but outside of the health services industry are included in the overall group. These persons include veterinarians, pharmacists, sanitary engineers and manufacturers and employers of medical, surgical and prosthetic equipment, and others. Then there are another half million persons employed in industries directly or indirectly related to health services. These include people who work for drug manufacturers, producers of medicine and the wholesale and retail trades involving both. Also, there are people who work for manufacturers of health foods as well as those who work in the construction and maintenance of health facilities.

Between 1950 and 1960, the number of persons employed in the civilian labor force in health services increased from around 1,670,000 to more than 2,575,000 or a gain of about fifty-four percent. The increase since 1960 has been even more dramatic, and it is destined to continue proportionately as more and more Americans are offered adequate medical care.

As of 1960, here is how the 2,575,000 persons employed directly in health services were distributed as to occupation and industry; Professional, technical and kindred workers accounted for 45 percent of the total. Managerial, clerical, and sales workers accounted for eighteen percent. Craftsmen, operatives, service and laborers accounted for the remaining 37 percent.
In hospitals, forty-one percent of the 1,683,536 employed as of 1960 were professional technical and kindred workers. Thirteen percent were accounted for in managerial, clerical and sales workers. And forty-six percent were craftsmen, operatives, service and laborers. In other health services - that is, those not directly involved with providing health services - 55 percent were professional, technical and kindred workers as of 1960. Twenty-five percent were managerial, clerical and sales help. And twenty percent were craftsmen, operatives, service and laborers.

Over the past fifteen years, the greatest relative gains in numbers of persons employed in health services have been among clerical employees. What many people forget is that some eighty occupations are involved in the health field, and many of these eighty have more than 500 persons employed.

Now, here are some additional figures which point up the dramatic changes that have been taking place. Between 1900 and 1960, the number of professional health personnel increased nearly sixfold. And during these same sixty years, the number of doctors has decreased. As of 1900, about three out of five were physicians. This shows not only a decrease in the number of physicians but also points up the dramatic growth in specialization occupations.

Recent Federal legislation for the first time in the history of our nation has given promise of attacking the problem of fewer doctors for our nation's population. All sorts of scholarship, fellowship, study grants and outright gifts will eventually enable more young men and women to become doctors. To some extent, the same thing applies to many technical jobs in health services - radiology, bacteriology, laboratory technicians, and so on. However, the situation involving nurses, nurses' aides, orderlies and other relatively unskilled health service workers is different. So far, enough attraction is not offered to induce more young people to follow such careers. In some jobs a distinct feeling that the work is beneath one's dignity is an important factor influencing people from pursuing employment. And when one considers the earnings, the prospect of a large enough work force to meet the demand is very poor.

I would say that general planning for health manpower of the future is very poor now. I would also say that regional planning for health manpower is equally, if not more, poor. The reason for this is that people are not moving fast enough to keep up with a demand that is going to start to increase immensely since July 1, 1966, when Medicare went into effect. We also must face the fact that our Nation's population is increasing at a rapid rate, and that this also is contributing to more demand for health services.

If we expect to see adequate manpower in the area of health services, we must subscribe to the opinion that salaries have to increase.

Either nurses, nurses' aides, orderlies and other health services personnel will have to be paid more in line with their needs and the responsibilities they have on the job - not to mention training, or these careers will not attract people. Another problem, closely related to this, is that no matter how much counselling may be given young people casting around for a profession, if there isn't enough money in a job to attract them, they won't bother training for it.

As you know, collective bargaining in the voluntary and proprietary hospital field is a very recent development. The fact is that we are moving closer to the day when employees of all non-profit institutions will enjoy
collective bargaining rights. When salaries for health services personnel increase enough to attract trainees, there is no doubt but that manpower will be more plentiful.

Of course, we must remember that manpower needs in health services are affected by many things. Among these is the element of locale. Naturally, the jobs of hospital workers in voluntary hospitals in large cities are apt to be much more hectic than jobs of employees in small cities or towns. There is a difference in volume of cases, in the number of emergencies that can be expected, and other elements in which weight of numbers is felt more. When it comes to planning for health manpower needs in urban centers, it is important to take population concentration into consideration.

There seems to be a dearth of experts in health services manpower planning. And the reason for this is that not enough people have been trained. Certainly, we have employment experts ... we have health services experts - doctors, nurses and technicians ... We have experts on health services economics .... and we have informed government figures who have the know-how to push through appropriations for funds. But we do not have enough people who combine all of these talents, leaving out, of course, the government official.

I don't think that enough people in the health services field have the necessary experience of meeting up with many people's problems. I don't think that enough people have the courage to make decisions - decisions about who should study what, when and how much it should cost. I don't think that anyone is planning fast and furiously enough to handle America's needs and demands.

Take the advent of Medicare coverage. This alone - considering the fact that there are more than eighteen million senior citizens in this nation - is enough of a challenge to defeat the imagination. As though there aren't enough health services and facilities to take care of our under-65-year population; with seventeen million or more older Americans coming under Medicare protection, lack of health services is going to be tragic. No better example of this can be had than the number of nursing homes that are needed today. If enough nursing homes could be built to take care of the senior citizens who need them and are going to use them more in coming years, just think of the many workers who could secure employment. This runs the whole gamut - from professional nurse, nurse's aide, orderly, medical librarian .... right down the line to truck driver, gardener, and yes ... even musician.

Of course, most people would argue that if one expects to have adequate manpower and proper facilities, this costs money, and there just isn't enough money. Well, this may be true if one is looking for five-and-dime health services. The fact is that most people realize they have to pay for good service. And it should be entirely possible to educate Americans to the fact that they can't expect to get proper care, good service and competent health services personnel unless they pay for it. Actually, even if salaries go up, and other costs rise, it should be possible to run hospitals, nursing and residential homes on a paying basis, while providing minimum proper care for patients and residents.

It is my personal opinion that we are going to see the Federal government play an increasingly more important role in this area. The reason for this is because the government will have to move when private industry and professional groups fail. Certainly organized labor cannot do it alone, although there are some mighty exciting examples of labor unions that have started and have run medical centers and other health services most successfully.
I doubt whether private industry will be able to plan - either regionally or nationally - for better health services as government will do. The profit motive will prevent them from doing so. In fact, about the only effort expended by private industry in the area of health services planning is usually made by each firm for its own employees and their families. It is not undertaken on a community or city or state level.

Where does all this leave you - and me? Probably exactly where we were before I suggested some of the thoughts that have motivated my remarks here today. As counselors, we can continue to make a valuable contribution in many directions. We can document our own experiences in our respective areas of work, and translate this documentation into practical terms for the people whom we counsel; also for the people whom we may be instrumental in training.

On the whole, I would say there is too much theory and not enough practical experience and actual know-how behind the present planning for health manpower. What people in positions of authority need to enlighten them on this subject is the practical experience many of you have had. What is needed alongside the grand projects of financing health programs and health education is some down-to-earth solid advice on how much money should be spent where, and what programs should be given money to translate them into meaningful terms for the huge demand that exists for health services.

There is no limit to the audiences who can profit from our experience and our advice as health counselors. These audiences start with youngsters not yet old enough to walk, and they include senior citizens of advanced age. The one important factor that affects this entire subject is human service - the need for it, the demand for it and its role in our social system as a much-demanded commodity.

It is my opinion that the demand for human service in the health field transcends all other considerations - including concern about money matters.
CAREERS IN VOLUNTARY HEALTH ORGANIZATIONS

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We're going to talk about the development of careers in the health field aimed at, and specifically limited to, the voluntary health agencies. And one of the first things I'm going to do to stimulate somebody in the back of the room to say, "Oh no, he's going to start quoting other people," is to pick up a couple of books and read from them. And for those who may have a feeling of, "Oh, brother, he can't think for himself," just bear with me a few seconds while I read a little bit of background.

The reasons for using other people's words are for background and history, and to enable us to better understand what we're talking about. So I'll start with that, if I may, to try and create an image of the group for which we are going to try to recruit and in whose problems we will try to interest young people. I hope that some day, standing up here, one of those young people who you are going to start on the road, will be able to talk about health careers in somewhat the same fashion, with a conviction that somebody knew, that his Guidance Counselor knew, where and in what direction and for what purposes this individual was being guided.

The National Tuberculosis Association will be quoted frequently, not because it has been my principal affiliation, but mainly because it has been a pioneer in the voluntary health movement. Let me read from an historical account of the background and development of the National Tuberculosis Association:

"A conspicuous feature of the American health activities is the operation of voluntary national societies, each of which directs its activities against one major disease or group of diseases. The first of these was organized in 1904, and thus provided a pattern for later societies directed against other forms of illness. As both a pioneer and outstanding example of organizations of this type, the National Tuberculosis Association illuminates in its history an entire social movement which has had a definite impact on the nation's health."

Those words alone would stand in good stead toward the development of an interest by capable young people, for careers in the field. But let me quote just a little further.

"Nothing was more typical of American custom than the formation of voluntary societies in the promotion of every good cause."
Tocqueville had commented on this situation as early as the 1830's. As the French observer noted:

"When, at the head of some new undertaking, you see the government in France, or a man of rank in England, in the United States you will find an association."

The national and even the state governments in the United States had been slow to undertake health or other welfare programs, and so a free people stepped into the breach. The citizens apparently preferred it so, and they displayed an unusual generosity in contributing time and talents and effort to their favorite organizations. Most national observers, including many health authorities, have extolled this "American Way", and Winslow, in an often quoted passage declared:

"The discovery of the possibilities of widespread social organization as a means of controlling disease was one which may almost be placed alongside the discovery of the germ theory of disease itself as a factor in the evolution of the modern public health campaign."

I hardly think it's necessary to quote extensively beyond that point, but there was no doubt about the development of a "certain something" which became a pattern in the United States; and from this has grown the group we want to talk about, the voluntary health agencies.

When you talk about the Voluntary Agency we must note someplace along the line that there has been a simple, direct person-to-person evolution of a pattern, which eventually becomes a social movement. Somebody has just lost a dear one through a particular disease or difficulty or disability. In the process of discussing this personal loss, other people are involved, and invariably the question arises, what can we do about it so it doesn't happen again? Two, three, four, five people of various disciplines, the doctor, the nurse, the clergyman, the teacher, getting together to discuss not just the terrible problem, but the potentials for the future; this is the very basis for the Voluntary Organization.

Volunteering is one way to stick your neck way out! Invariably you will have in any group of people those who have experience saying, "I think the problem is"... Someone points a finger and says, "We'll make you chairman of that committee." You know it happens all the time, and yet in the final analysis the people who are interested and capable of reacting to a situation, saying, "I think the problem is," are the people who will become involved and be productive about something.

Yet those who are directly concerned constitute only the beginning. Those who come along later will in essence again underline in some fashion the problem and what might be done about it. And in the most complex of forms in the growth of an organization, you come from the initial stages to the Voluntary Agency, which is a group of people representing their own thinking on a problem, whose voices will be heard. It is of great importance to bring in the voices and the thoughts of many people on a problem so that through the collective views of a group more facets of a problem can be covered.
I think one of the underlying points that I'd like to make, and that I'll repeat throughout this presentation is that we are not just talking about the individual person, ... but in community work, and in voluntary health organizations, the individual who is responsive to others and to problems ... who can not only give, but take ... who can not only take but give ... and who can eventually bring in the thoughts of others; all of which makes for group opinion and action activity.

What, then is the voluntary health organization? It is a severe critic and a best friend. It is a group that needs to have facts at hand, with which to face a problem. It gathers different groups of people with different points of view, who can lend their own thinking to the facts at hand, and then with the knowledge, the information gathered, and an intelligent discussion, go on to do something; and that something is often something that has never been done before. So we're frequently talking about a pioneering effort. We're talking about an opportunity to be wrong as well as to be right ... the courage to be wrong and the ability to be right! We're talking about the willingness of individuals to speak about what they think and how they believe something can be accomplished. It involves pioneering to inform and to educate others, and devising ways in which legislation, and ultimately appropriations can be related to the problems at hand. You're talking about improvement and up-dating both the problems and the facilities for handling them.

The voluntary organizations for health problems are going to be in need of certain characteristics with regard to people, and they have a relationship to each other which is unique in the health field. Mount Sinai Hospital in New York City and Mount Sinai Hospital in San Francisco generally share in common only their names. The City of New York with its vast health department and the City of San Francisco, with its important health department, meet once a year at the APHA and exchange thoughts and ideas, but the development of a laboratory director in New York is not a phase of the development of a laboratory director in San Francisco. These are some of the facts of life. And yet, on the other hand, in the voluntary health agencies of the country which are nationally based, we have an inter-related (although frequently independent) group of organizations, bearing a unique relationship to one another. They're unique to the extent that they are part of a family fairly well defined. They're unique with regard to the word volunteer, ... a person, interested, willing, capable, and ready to do a job without being paid for it.

Some place along the line, the man who spoke before me made a great big dollar sign and said, ... "Brother, keep your eye on that." I'm going to draw another circle around it and say, as you look at the doughnut, keep your eye on the doughnut rather than the hole. There is a great satisfaction value, and utilization of capacity which is not limited to the availability of a dollar for an hour of work. A man who comes in and says, "I'm now retired. I've spent a useful life, and want to do something to accomplish that which I had no time for while I was earning money," can be given great satisfaction by a job in which he is not being paid. You get a person who may be from a so-called deprived area of the population, who has infrequently (or perhaps never) been asked to do something to help in a situation which involves his interest as well as others. Granted, without pay, he frequently can do little, because his principal concern is the daily task of living and existence, but he too, may be offered an opportunity for added satisfactions. I'd like to leave that now and come back to it.
The professionals, and the semi-professionals related to the volunteer workers in the voluntary health organizations, are people whose needs can be met; are people for whom there can be much satisfaction of working with others. And working with others in a relationship of those who are paid and those who are not, is one of the unique characteristics of people in professional jobs in the voluntary health agencies. You cannot work with people without respecting their particular role in an organization. To do it effectively, one then needs to think in terms of what these jobs are ... what the tasks are vis-a-vis one another.

Closely related to the positions in official health agencies are all sorts of voluntary agency jobs, in the Health Department, in the Department of Welfare, in the Department of Hospitals, etc. For example ... a rehabilitation counselor working at Bellevue Hospital, being paid as part of a health team, has a counterpart in the Tuberculosis Association running a vocational rehabilitation program. The nurse in a clinic in our organization has a counterpart across the street in the Health Department. The people who are medical social service workers and the people who are information workers, have direct parallels in community organizations and an opportunity to do the kinds of things they want to do under different circumstances.

From the standpoint of the subject matter at hand, however, which is understanding the needs of voluntary agencies, and presenting to you some of the facts about the workers in the voluntary health agencies, I'd like to talk mainly about the people who are ... in groups large and small ... in communities near and far ... the local executive secretaries, who are the field workers and the campaign workers; positions uniquely limited to the voluntary agency.

First, let us look at the executives ... who talks about them? Well, frequently too many opportunities to talk about them are completely and absolutely missed. I'm very glad to see that a stack of books arrived (very good timing) a little while ago, including the Health Careers Guidbook of the United States Department of Labor. When looking through this book some time back, I was more than delighted to find that they had listed and given D.O.T. numbers to the "local executive", etc. It was quite a delight, also, to find that the new 1965 publication went back to the 1955 publication on Health Careers ... (which many of you, I am sure, still have on your desks) issued by the National Health Council. It also had a section on the "local executives."

Now, the practical situation you are faced with, daily and annually, is a wave of young people whose interests are vague at best, and if perhaps being crystallized, uncertain in direction. Youngsters for whom services, good or bad, in cramped quarters or lavish ones are being developed. I do not share the earlier speaker's feelings about doing inadequate jobs in inadequate quarters; some very fine jobs were done in barns! I believe that there is a need for imaginative, intuitive, dynamic people to work with the variety of young people who could benefit from guidance ... you are those servants of the "needy"!

One student's interests might be vague and diffuse. Perhaps his father thinks he ought to be a pharmacist because his uncle who owns a pharmacy drives a costly big Cadillac. For him, however, the thought is that perhaps this particular schooling will be a little too difficult. Have
you met this kind of situation? All too frequently you may see on the other hand, the youngster who is involved with others, member of this committee and that, able to sit down and talk with others, and can accept an opinion as well as express one. The individual who is ready on occasion to stand up and say, "I think that the newspaper in this school stinks ... and I'd like to help make it better." Now, all too frequently without an opportunity for adequate counseling, the development of a person's interests and potential is stifled.

It is the belief of many people in Guidance and other members of faculties that ... for certain kinds of endeavors there are certain characteristics which we might look for, and if these characteristics are present, then we in good conscience can turn to a young person and say, "I know of something that may fit into the development of an ultimately satisfying career".

We think, in a voluntary health organization, there are such jobs. They are satisfying in ways which may or may not emphasize money and which in the final analysis will give the satisfaction of having lived usefully in this community of ours.

Let me tell you how this new Department of Labor Handbook characterizes one of the jobs. After going on for a page and a half on the section concerning local executives of local voluntary agencies, they say, "This may sound like a three-ring circus, and as a matter of fact it often is. But as already pointed out, the executive does not ordinarily have to perform all these duties unaided." Back there in 1955 somebody wrote another book, and under the circumstances of talking about the local executive of the voluntary health agency said, "This may sound like a three-ring circus as well as a one-man show ... well, as a matter of fact it is." Well, I think we're proving mainly that it's easier to write a book ten years later with a pair of scissors and a paste pot. But more important, is that three-ring circuses do exist. They exist not only in schools, they exist also in the community agencies. And for many people, the opportunity to do a job and do it well, does not depend on the pre-existence of ideal situations. It depends upon the capacity and willingness of people to come to grips with pretty poor situations. And those who can, will have many rewards in this existence.

Now, what are the characteristics of the young person you'd like to see guided in the direction of Voluntary Health Organizations? Well, take a day's example of contacts. One of the main features of the development of an organization which will bring all facets of the life of a community into focus on a particular problem, is the ability and willingness to meet with and work with a variety of people at different levels. Not to be afraid of them, and yet not to overwhelm them. The youngster recently out of school who can be sent over to see many "name" people in one day, including Mrs. Roy Wilkins and Mrs. Count Basie, and not be uncomfortable, and able to convey a message; this is just an example of one of the young people on my staff. The kinds of people who can, in turn, sit down with the Vice-President of a bank who thinks mainly in terms of dollars and return on large industrial loans, and a Justice of the Supreme Court to whom the return on life is some value other than that on a monetary basis ... are the kinds of "business" contacts we make in our daily existence.
The ability is needed ... later and with maturity, to sit down with the medical director of a high level segment of an important institution, and to say to him, "Doctor, I defer to your thinking when surgery is indicated, but where community organization and information is involved, I think you will defer to me." This is rather difficult; if the many has stature and power in the community, you can't say it in just that fashion, without all the diplomatic amenities around it.

Seeing the editor of a local newspaper who's involved with a thousand and one things, gets to be one of the roles that can be ... and must be ... played by the people in a voluntary health organization as this is part of the daily life of the professional worker in the voluntary health agency.

Frequently we see published very formal outlines of "Characteristics and qualifications" of people who we would like to apply for jobs in our professions. Everybody puts out a little pamphlet and everybody lists all of these wonderful qualities; it almost sounds like a mother-in-law's list of just what she'd like to have for a son and daughter-in-law... All of these beautiful characteristics, which if you could find them all put together in one place would hardly make a worthwhile robot!

We're talking about people. We're talking about people with positive and negative qualities. You're talking about people who have skills and abilities and faults. Let me read to you briefly from the "Personal Qualities" listing in a reprint from the American Journal of Public Health. It is a result of the work of a subcommittee and a committee on health careers; I served on the subcommittee, and very important names are on the parent committee. It read as follows: "Executives of voluntary organizations, etc. ... must like and respect people and be able to work well with all kinds of persons, individually and collectively." (I don't like everybody ... you don't like everybody ... nobody likes everybody. And yet when we put it down on paper it's supposed to work beautifully with everybody.) "He must have the presence and persuasiveness to represent his agency effectively, and ought to be able to do a good job. He must have the wisdom and perspective to create and adapt policies that will meet local needs, and the insight to see all sides of a problem."

Where are we going to find this paragon of virtue and say, "I think that you ought to be a local voluntary health agency executive, and if you're lucky you'll get $5,600 a year. I think what's necessary is a reasonable approach to the problems of today. The youngster who has a capacity for working with other people, respecting their opinion as well as his own, occasionally changing his ideas from those with which he walked into an office, a capacity to accumulate information, and come to grips with problems as they're presented; these are the key personal qualities for such jobs.

When and if you see him and they're not already committed to being something else, grab them. Sit them down and start working on them ... but don't do it alone. I say don't do it alone for the very reason that all of us are beset with a wide variety of daily problems, and if we would only turn sufficiently frequently to the people around us, to the agencies around us, who can do this job all the better for all concerned.

The voluntary health agency is in your community. The Health Councils the Tuberculosis, the Cancer, the Heart Association ... all of the other
groups are in a position to give the kind of guidance and time and direction which may be necessary. If you're teaching in a moderately approachable community, where there are people who live and can give a little bit of their time as volunteers, I think you'll find what we have found in the development of Merit Badge Counselors in the Boy Scouts. It works too. Who among the parents of the people who are already interested and involved in school activities may be such a person? Can you get someone, not just a practitioner of his art but one who can convey an idea about it who will sit and talk with the youngster about the problems, the advantages and disadvantages of this kind of activity? A plea ... a very fervent plea ... to utilize the facilities around you in developing this kind of interest.

The key, of course, to all such recruitment is you people here. That's what makes it worthwhile to take time out of a busy day to stand here and talk with you. You are by far the most important factors ... and this isn't just because I'm talking to this group. One of the things I've been told to do is to be nice to people we're talking to ... but the teacher, the Guidance Counselor, the people with whom the young developing mind comes in contact, with regard to an ultimate career are of vast importance. These are the individuals who can make that dynamic approach which stimulates the youngster to want to go into an area of interest, I'm not just talking about a job, or just employment.

The people we need in voluntary health work are both pushers and pullers, who are ready to take an idea and thrust it upon others to convince them that it is right and worthwhile. We need the ones who, recognizing when they've got a wet spaghetti are going to have to get out and pull because pushing won't do any good; the people who will of necessity recognize that people are important and who won't get lost in the process; the individual who has a social conscience and in whom you feel there is both environmental background and an innate potential for being interested in people and for doing things that are worthwhile for himself as well as those around him. These are the people we'd really very much like to get you interested in through us and with us.

Now, what are we offering these great paragons of virtue? I mentioned $5,600 for beginners ... and yet what it amounts to basically is this: For the individual starting in a voluntary health movement, generally the base is set on the salaries of beginning teachers. And with a great deal of obvious reason. We are looking for people who can convey information to others, and most frequently the source of such people are those who have been trained in the basics of education. As a matter of fact, if we were to say we would prefer a particular background to any other, it would be those who are prepared in education and journalism. In order to have an opportunity to use these techniques of information and education, they must of necessity also have content. Now, some of this comes in basic sciences during the college career ... and other facets are developed thereafter. But in order to do the job which is necessary, the value which can't possibly be overshadowed by any other is that of "educator".

The educator is one of the job titles (health educator) in the voluntary health agency but not the only one. To have this kind of person pirated away from the already depleting ranks of people entering the formal education group, may be a value as well as a disadvantage. The youngster who has been through an early college career, and has decided that teaching's great, but not teaching children, frequently is our best source of referral. Our
continuing educational efforts and our continuing recruitment efforts are aimed at those in and through the formal process of teacher training.

One of the thoughts that necessarily keeps coming back to me is that, "You can't live without ... but you can live without much of it." The youngster who wants to be assured that by the time he's been in business as long as his father has, can afford the nicest boat on the canal, and the best looking house in town, and a new car, had best be persuaded away from the voluntary health agency. The point I want to make is that those for whom money is the great be-all and end-all ... please keep them out of our hair! We've got no room for them. But the person realistic enough to want the kind of satisfaction that can be achieved working with and for people, with the fringe benefits of working with rather nice people, and some prestige in the community, and enough to live on so that you don't have to supplement your income by taking on more than one moon-lighting job ... those we'd like to see!

In terms of recruitment, we're actually competing with both the schools and the government. Let me tell you exactly what's happened along these lines. There is a very great area of air pollution control in which our organization, since I have been a member of a major development committee, has said we need people to do an educational job. So two years ago I took a young man just out of college who was going to school at night and thought he wanted to be a salesman. I told him, "If you're a salesman we'll try to get you to sell intangibles." It worked out very well. Three months ago, however, we lost him to the United States of America at a salary $2,500 better than what we had to offer.

We are in competition. We are in great competition, for people, with the government ... state and federal and local ... as well as Health Educators in the Health Department who are at categories just about equal to ours.

Now, what do we do about the competition? Frankly, at the moment we're suffering from it. But I think the greatest reason for that suffering is that we are not doing enough recruiting at the levels where we can get people involved, and where these "fringe benefits" of satisfaction can be seen and understood.

One of the ways in which we can give them a "pre-emergence exposure" is through getting the young people to work as volunteers in these agencies, (or in paid summer jobs in these agencies), under direction and supervision which gives an opportunity to get the feel of the voluntary agency and how free its pioneering effort is and can be, so that our competition in some measure is overcome.

In a career of now 28 years in this field, I have experienced those rewards for the individual which the voluntary agency has to offer far beyond that which an official agency possibly can. They include independence of action and that pioneering spirit of working toward something not yet proven right. The flexibility, the elasticity, the opportunity to tackle a job with one's own ideas are inherent in this kind of operation.

I would like to offer some guidance on where to send young people for information and what to tell them about schools. It seems these days that youngsters don't quite know what they want to do. They go in for arts and science ... or get a "generalized education with a B.A. that will broaden them." I think you and I know that a lot of people aren't broadened by
being exposed to four years of liberal arts. For the youngster who may be so inclined, the schools of education would by far direct them more closely to this kind of community work than just a diffuse interest in the History of Civilization, etc. I'm saying this because of the need for specific exposure to the techniques of conveying information as opposed to those simply of acquiring or perhaps assimilating information. Our needs are great and our continuing problems are such, that in the health field (not only in the voluntary health agencies) the most pertinent need is for people who can convey information to other people. The doctor who knows what's wrong with the patient and doesn't get it across to the patient is not serving that patient well. The nurse who knows what she ought to convey as a bridge from the doctor to the patient, who doesn't have the time to do it, isn't serving that patient well. We need health educators, and we need them desperately!

I've just come from a conference this morning in which we were dwelling on the very need for keeping patients under treatment, patients who have recurring communicable disease. Our greatest lack is that of convincing the patient that he has a problem about which something is being done, and on which his cooperation to do more is essential. So conveying, teaching, advising and guiding, are the keys to the ultimate validity of all of our medical services. And the health education field is one of the most poorly staffed areas of the whole picture at the moment; you, your help, are needed if we are to seek and find the people needed to convince the community and the student that health is their prime assignment.
I'm sure you have been told repeatedly during the last few days that the medical system of the United States faces critical problems. Even though we have more people today who want and are capable of paying for medical services, the number of doctors today per 1000 persons is the same as it was 15 years ago. Present plans for training more doctors will do very little to correct this situation for a long time to come. Doctors take a long time to train and their training is a fantastically expensive proposition.

The news isn't all bad. There is increased evidence to suggest that given sufficient and appropriate support -- in equipment, facilities, and personnel -- today's and tomorrow's doctor can oversee (if not see personally) the care of a larger number of patients than his professional predecessor, with equally good or better chances of patient recovery and sustained good health. The most serious limitation of this trend is the breakdown in the doctor-patient relationship. A great deal of importance has been associated with this in the past by both doctors and patients.

Though the statistics tell us that there are as many doctors per thousand population as 15 years ago, we must be frank in admitting that there has been a drastic "relative decline" in doctors per thousand population, and dentists too. My point is simply this; the demand for health care, with which this constant ratio of physicians has had to deal, has gone up tremendously in these 15 years. The evidence is, however, that they have, aided by advances in health knowledge, in equipment, in diagnostic and care techniques, been able to do a very creditable job. The death rate -- the best over-all measure of success we have -- has continued to decline, suggesting that the medical services under these higher use conditions has been extremely successful. (Our death rate, however, is still higher than many western European countries.)

I don't know whether there have been many direct studies of the impact on health care of what I've called the "relative decline" in doctors. In the field of education, though, we have been doing studies for a number of years about a much more complex process -- the communication of knowledge, the development of concepts and understanding -- the whole process of education; and whether this process is adversely affected by approaches other than the traditional teacher talking to student (and as much as possible in small groups). The results of these studies are pretty conclusive:

1. Learning takes place as well in large classes as in small ones;
2. Individuals can learn as well on their own as they can in the class situation;

3. Other devices -- TV, films, tapes, etc., can be important supplements to either individual or group instruction.

These results haven't been popular because they have flaunted strong tradition; implementation has been slow. Out of necessity resistance is waning -- there are just so many teachers but so many more students. What is the parallel with health? The productivity of the "great" doctor can be increased just as that of the great teacher if appropriate support -- good scheduling, more support personnel, proper organization and programming of services and therapy -- can be arranged. To me this suggests another parallel with education -- there will be more specialized training for medical technology but there will also be in the health field generally more need for persons who haven't been trained for health specialization. These will be people who can get things organized and systematized and can keep track of what is being done.

One major barrier to achieving more adequate health care is that there are not enough physicians and other health care personnel. It is possible, however, to develop technologically sophisticated ways of efficiently screening large numbers of people to detect certain abnormalities. An example is the automated multiphasic screen through which hundreds of patients can pass each hour, at a minimal expenditure of professional time. Patients found to have an abnormality can be referred to a planned program of study and follow-up where nonprofessional personnel under appropriate supervision can further analyze causes of disability. A medical diagnostic screening system, when further developed through research, has the potential of improving diagnosis of many illnesses and insuring better use of medical manpower.

While there are some good ideas for the future and considerable evidence of progress being made, there is still a great need for more training arrangements and opportunities. On this score, the President's Commission on Technology and The American Economy, in its very persuasive report, had this to say about the health manpower problem:

"The gap between the technological potential and our ability to apply it effectively is partly due to the lack of a significant improvement in the proportion of physicians to population. We have also not developed the proper manpower training programs for the new technologies. We have continued to hold on to our traditional and basic training programs in the various health and medical fields without analyzing the new technologies available and the real possibility of training new categories of manpower who can perform many of the functions now carried out by highly skilled and scarce professional personnel."
One solution lies in restructuring our training programs in accordance with current scientific and technological developments. The only solution, in the long run, is an increase in the number of trained medical personnel, physicians, nurses, and medical technicians in all categories. For this we need an extensive planned program of government support for the creation of more schools, expansion of enrollments, new methods of instruction, redefinition of how modern knowledge and technology can be most effectively applied, and, as seems likely, training of new categories of health personnel to supplement and complement those already in existence.

Those of you who are familiar with this report realize that the proposal made was that higher education should be free through the 14th grade with community colleges and similar arrangements set up to handle the extension of education for this much larger group of college goers. This scheme promises to do a great deal for increasing trained manpower particularly in technical areas and thus reducing unemployment. A number of states -- New York, Michigan, California, Texas, Florida, North Carolina, Georgia -- are already well advanced in providing these or similar services for the youth of their state. On balance, however, all of these are yet to accomplish in the technical specialties what the nation and its states need in trained manpower. Leaders in the health field tell me that the community colleges just haven't come close to realizing yet their potential in the technical fields. So many youngsters have put emphasis on transfer to four-year colleges. Also, technical programs are more expensive and states have shied away from developing them because the community college was developed as an inexpensive approach to mass education.

On the basis of the foregoing, some generalizations as background seem appropriate at this point.

1. Health services have improved in the last 15 years seemingly more as a result of increased knowledge and improved technique applied by a wider range of personnel -- not because of more doctors per thousand population.

2. Further progress in providing health services will come through more education of a large number of specialists in health fields particularly individuals who can support the doctors in an organization and systems approach to individual and mass health problems.

3. The most likely scheme to receive the widest support will be the public community college offering a wide variety of two-year technical offerings.
If my reading of the situation is correct, at the moment the major problem in the health field is the absence of programs not the absence of people who want and will undertake this training if it's available. This is a new field with lots of specialities (maybe 50 now and probably more in the future) that young people -- healthy ones particularly -- have no appreciation of. This makes guidance especially difficult.

What I have said so far seems on the surface to avoid the issue of how one pays for education in health careers and the related problem -- if one can't pay, where can he (or she) find the money to do so. My general conclusion is that money for college is now and will be in the future much less of a problem than in the past, particularly in junior colleges. Recent estimates for 1966-67 that I have just finished preparing for the U. S. Office of Education show that there will be next year nearly 2 billion dollars available in scholarships, loans, and jobs for undergraduates. This is nearly four times as much money as was available in 1960 -- the last year for which I made an estimate for the nation as a whole.

It might interest you to see where this increase has taken place. Table 1 shows the various sources of aid and their amounts estimated to be available for 1966-67 with comparable figures for 1960. The largest increase has come in loans with support mainly from Federal sources. The significant development, however, has been the lifting of restrictions so that these new funds are available for all kinds of study and that in the loan area, anyway, the "need" stipulations are much less stringent than in the past. Scholarships -- especially the Federal ones -- and to a marked extent the college and special ones, too -- are restricted to the neediest students. These scholarship awards, the Federal and college ones both, are much more likely to be available for four year programs in the arts, sciences and engineering. I doubt they are having much impact with respect to the two-year general and technology programs in junior colleges and in the big university systems.
Table 1 - Student Aid in the United States, 1966-67
(in millions of dollars)

<table>
<thead>
<tr>
<th>Institutions of higher education</th>
<th>1966-67</th>
<th>1960</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholarships</td>
<td>$428.0</td>
<td>$232.0</td>
</tr>
<tr>
<td>Jobs (not Federal)</td>
<td>$169.0</td>
<td>$98.0</td>
</tr>
<tr>
<td>Loans</td>
<td>$187.0</td>
<td>$99.0</td>
</tr>
<tr>
<td>Service grants</td>
<td>$30.0</td>
<td>$15.0</td>
</tr>
<tr>
<td>Federal Government</td>
<td>$42.0</td>
<td>$20.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Federal Government</th>
<th>$1,086.7</th>
<th>$157.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDEA Loans (including funds from colleges)</td>
<td>$225.0</td>
<td>$73.0</td>
</tr>
<tr>
<td>Work Study (including funds from colleges)</td>
<td>$135.0</td>
<td>-</td>
</tr>
<tr>
<td>Opportunity Grants</td>
<td>$58.0</td>
<td>-</td>
</tr>
<tr>
<td>Social Security payments</td>
<td>$162.0</td>
<td>-</td>
</tr>
<tr>
<td>Veterans benefits</td>
<td>$203.5</td>
<td>$73.0</td>
</tr>
<tr>
<td>ROTC</td>
<td>$26.0</td>
<td>$11.0</td>
</tr>
<tr>
<td>Bureau of Indian Affairs</td>
<td>2.2</td>
<td>.2</td>
</tr>
<tr>
<td>Guarantee Loan Program</td>
<td>$75.0</td>
<td>-</td>
</tr>
<tr>
<td>Direct Federal Insurance for Loans</td>
<td>$200.0</td>
<td>-</td>
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</table>

<table>
<thead>
<tr>
<th>States</th>
<th>$220.0</th>
<th>$51.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total appropriations for scholarships, service awards, etc.</td>
<td>$125.0</td>
<td>33.0</td>
</tr>
<tr>
<td>Guarantee and other loan programs (exclusive of Federal) including USAF activities</td>
<td>$95.0</td>
<td>18.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-institutional, non-government</th>
<th>$129.0</th>
<th>$40.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resources (mainly scholarships and other direct grants)</td>
<td>$84.0</td>
<td>$40.0</td>
</tr>
<tr>
<td>United Student Aid Funds (loans)</td>
<td>$35.0</td>
<td>-</td>
</tr>
<tr>
<td>Corporation loans for employees</td>
<td>$10.0</td>
<td>-</td>
</tr>
</tbody>
</table>

| TOTAL                            | $1,863.7| $480.2 |


A year ago the College Scholarship Service completed the first study of how aid is awarded by the nation's colleges and universities which still control virtually all the scholarships, jobs, and loans. The study showed that:

1. Almost all higher institutions have some type of student aid program; 97% of institutions reporting offered some type of student aid; 97% offered scholarships, 89% offered loans, and 76% offered jobs.

2. Student financial aid is still concentrated in a few institutions -- largely private: 10% of institutions gave 48% of the aid awarded. Though 64% of the students are in public institutions, these institutions gave only 37% of the aid.

3. Scholarships are more frequently a source of aid for freshmen than upperclassmen: 58% of the aid for freshmen was scholarship, while only 44% was scholarship for upperclassmen.

4. Men receive higher amounts of aid than women, but percentage-wise more women (21%) are aided than men (18%).

5. Men's colleges aid the highest percent of students (26%); women's colleges next (23%); coed institutions (19%). Higher dollar awards also come from the single sex colleges.

6. Students in junior colleges receive considerably less aid. Only 11% were aided. (I'll have more to say about this in a moment).

7. For the aided freshman students, the same percentage (18%) of men and women borrow except women borrow more on the average than men.

8. For the aided students, a higher percentage of women work (15%) than men work (13%).

9. The larger the amount of the individual award, the greater the likelihood it will be packaged. Only 8% of the single awards were over $1000, while 39% of the packaged awards were over $1000.

10. The more expensive the institution, the greater percentage of packaged awards. In 1954 institutions over $2,000 cost, an average of 54% of the aid was packaged compared with 15% in all remaining institutions. In high-cost men's and women's colleges, almost 50% of the aid is packaged.
11. The most frequent packaged award is a scholarship and loan in combination.

12. The likelihood is always greater that a woman will have to accept a packaged offer than a man for any given size of award. For example, for awards between $600-$1000, 43% of the awards to women were packaged whereas only 33% of the men's were packaged.

13. Though on the average 20% of the freshman students received aid, only 8% of students enrolling as transfers were assisted.

14. Colleges are still quite inexperienced in using employment as part of a total aid program. Jobs only amount to 8% of dollars awarded and scholarship-jobs another 8%. In other words, whereas loans alone or in combination with scholarships account for 33% of dollars expended for aid, jobs alone or with scholarships only account for 16%.

This picture of aid packaging is already out-of-date because the new Federal Opportunity Grants insist that packaging of other Federal programs be undertaken, particularly with jobs. Therefore, the enforced packaging will be larger this next year and so will the discretionary packaging. By discretionary packaging I mean the efforts of the student and his parents to put together funds from a variety of sources to meet the bill -- loan from the bank, scholarship from the Lions Club and work by the student in the summer and during college.

We know surprisingly little about students aid in a form that can be helpful to a counselor and a specific student in a face to face discussion. You have indicated your frustrations on this score and I suspect you hoped that this seminar was going to correct this situation for all times. I'm sorry we can't do it. What we are doing nationally, however, is trying to increase aid resources to such a point that some kind of resources are available to everybody so that less and less the planning for college will be related to the family pocketbook. We are actually awfully close right now. If the Federal Loan Program works as planned, there will be about 700,000,000 for low or no interest loans next year for anybody (describe income restrictions); the year after, well over a billion.

Now, in locating these resources there has to be some division of labor -- the counselor can't do it all. I think a scheme might be developed by the school that could come as close to getting all the information you and your students could use. I'd form a student organization -- club whose main responsibility was issuing annually a Financial Aid Handbook for your school -- complete with paid advertising. The principal research workers would be the sophomores and freshmen -- the editor would be junior. I'd put them to work canvassing, with a very simple question: 're, all the possible non-college sources of financial aid in your state. Second, I'd have them yearly do a study of all your students who graduated the previous year asking each what they were doing to finance their education --
looking in this way for leads as to sources which couldn't be uncovered in any other way.

Another thing I would do is let a student apply to as many colleges (or programs) as he wanted to on the proviso that all the materials he collected -- catalogues, brochures, etc. -- would be turned over to the guidance office.

The third thing I would do is put the organization in charge of the handbook also in charge of maintaining a guidance library of all the materials collected. But I stress this job for seniors -- not freshmen and sophomores.

The next thing I would do is try to get a chapter of the Citizens Scholarship Foundation formed in my town -- this organization is also known as Dollars for Scholars. It has done a tremendous job in a number of states recruiting local funds and local knowledge about college financing; and its philosophy of helping the B and C student has spread a lot of funds among some very deserving youngsters who aren't touched by many of the famous programs -- they stress technical and vocational education, too.

Relating financial aid to specific career information is something the counselor might take on as his or her own assignment. I would restrict this effort to colleges in my own state or region, and I would deal only with those institutions which graduated a lot of students (15 or more a year) in the career programs being studied. The most valuable source for this information is an annual publication of the U. S. Office of Education called Earned Degrees in the United States.

In connection with this paper I have done such a study aiming mainly at two-year institutions which, I was told by either UHF or AAJC, offer good programs in one or more of the health career areas. I chose a bad time to do this -- in early July when everybody was apparently on vacation. A copy of the questionnaire that I used is attached. I don't say that this is the only kind of questionnaire you can use but it gives you an idea of something you can do to build up resource information about careers.

Organizations, colleges and the government are going to keep on saying for many years to come -- "write the college and consult the guidance counselor" -- if you need more information about financing your education. It's good advice -- it's still the best we can give.
1. In which of the various health career areas will your institution offer formal programs of study during 1966-67? (Please place a check after each of the careers listed below for which your institution offers a full-time training program.)

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>Check if offered</th>
<th>Name of Program</th>
<th>Check if offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiologist &amp; Speech Pathologist</td>
<td></td>
<td>Nurse Aide &amp; Orderly</td>
<td></td>
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<tr>
<td>Certified Laboratory Assistant</td>
<td></td>
<td>Nurse, Registered Profession</td>
<td></td>
</tr>
<tr>
<td>Cytotechnologist</td>
<td></td>
<td>Nurse, Licensed Practical</td>
<td></td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td></td>
<td>Nutritionist</td>
<td></td>
</tr>
<tr>
<td>Dental Laboratory Technician</td>
<td></td>
<td>Occupational Therapist</td>
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</tr>
<tr>
<td>Dental Assistant</td>
<td></td>
<td>Optician, Dispensing</td>
<td></td>
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<tr>
<td>Dietitian</td>
<td></td>
<td>Optometrist</td>
<td></td>
</tr>
<tr>
<td>EEG &amp; EKG Technician</td>
<td></td>
<td>Osteopathic Physician</td>
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<tr>
<td>Health Educator</td>
<td></td>
<td>Orthoptist</td>
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<tr>
<td>Home Economist</td>
<td></td>
<td>Physical Therapist</td>
<td></td>
</tr>
<tr>
<td>Housekeeper</td>
<td></td>
<td>Podiatrist</td>
<td></td>
</tr>
<tr>
<td>Inhalation Therapist</td>
<td></td>
<td>Prosthetist &amp; Orthotist</td>
<td></td>
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<tr>
<td>Medical Illustrator</td>
<td></td>
<td>Rehabilitation Therapist</td>
<td></td>
</tr>
<tr>
<td>Medical Librarian</td>
<td></td>
<td>Sanitarian</td>
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<tr>
<td>Medical Record Librarian</td>
<td></td>
<td>X-ray Technician</td>
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<tr>
<td>Medical Secretary</td>
<td></td>
<td>Specify Other</td>
<td></td>
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<tr>
<td>Medical Technologist</td>
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</tbody>
</table>
2. Listed below are a variety of sources of student financial aid. Please check those sources from which full-time students registered in the programs you checked above are eligible for assistance and probably will receive assistance during 1966-67.

<table>
<thead>
<tr>
<th>Name of Source</th>
<th>Eligible for assistance</th>
<th>Assistance received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institutional scholarships (general)</td>
<td></td>
<td></td>
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<tr>
<td>Institutional scholarships (restricted to study Program)</td>
<td></td>
<td></td>
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<tr>
<td>Scholarships from non-college, non-government sources (Kiwanis, Lions, PTA, etc.)</td>
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<tr>
<td>State scholarships (general)</td>
<td></td>
<td></td>
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<tr>
<td>State scholarships (for health careers)</td>
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<tr>
<td>Federal Work-Study Program</td>
<td></td>
<td></td>
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<tr>
<td>Colleges own work program</td>
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<tr>
<td>NDEA loans</td>
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<tr>
<td>Vocational loan program</td>
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<tr>
<td>State loans</td>
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<td></td>
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<tr>
<td>Institution loans</td>
<td></td>
<td></td>
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<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
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</tbody>
</table>

3. Please list below the programs you checked under item 1. After each program please give the best estimate you can of the percent of full-time students in each program who will probably receive one or more types of assistance during 1966-67. One additional estimate would be very helpful also; what percent of the total yearly cost do you estimate the typical aided student is receiving?

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>% aided</th>
<th>% aid is of total cost</th>
</tr>
</thead>
<tbody>
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<th>% aided</th>
<th>% aid is of total cost</th>
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3. (continued)

<table>
<thead>
<tr>
<th>Name of Program</th>
<th>% aided</th>
<th>% aid is of total</th>
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</tbody>
</table>

4. What is the yearly cost at your institution (including tuition, room, board, books, fees, etc.)?

   Typical cost for:

   Resident student $_______ %_______

   Commuting student $_______ %_______

5. What is the single most important thing that guidance counselors should tell students about financing their education in the health career areas.

Thanks for your help.
It is a pleasure and an honor to be invited to be a participant with you in the Guidance Counselor Institute for Health Careers of the United Hospital Fund of New York. Particular appreciation should be extended to my friend, Phil Morgan. I trust, on his behalf, that my presence here today is related to a good many years of effort in the health careers recruitment areas and to the development of educational and training programs for health personnel. With a professional background in education I have had a particular interest in creating an awareness on the part of educational professionals that health careers has its own "place in the sun." Part of this is selfishness on my part, of course, and I think it should be on yours. After all, sickness and death will come to each of us. It is just a matter of when and how and why. The positive aspects of health also need to be emphasized. It has been stated that "Of the hundred blessings conferred on man, health makes a good ninety-nine." Importantly, though, in this day of scientific knowledge is rising the spectre of having available to you and to me the "know how" to save your life or mine or those of the people who are loved by us but concurrently not having the human hands to do what we know how to do. A decade ago we talked a great deal about how the mechanics of our age were ahead of the ethical and philosophical understandings and applications of most of us. Today - again from the purely selfish point-of-view of what health means to each of us - we are faced with the anomaly of having created the techniques of saving lives and restoring health but having neglected the necessary development of the "tools" for this great service. I speak of human hands and minds and, indeed, souls.

Now, you have been listening for several days to talks about different careers in health. You have visited seats of health services and have formed certain impressions. Undoubtedly, you have learned a great deal. I hope to add somewhat to your knowledge and, more importantly, to your thought process and to stimulate some curiosity toward investigation of this whole spectrum of the area of "Government Programs Related to Health Manpower Training." It is a broad task, as is illustrated by the comment of the Director of Alabama's Health Careers Council who said (when she was told the title of this talk) "How can anyone examine government programs related to health manpower training in that period of time?" There is really no way to adequately review these programs in this period of time. The partial answer lies in your review of the proceedings of this Institute and your pursuit of information contained in references from which this paper has been drawn.

Now for about the next 16 minutes I propose to develop the history of the financing of health manpower. These comments are "lifted" almost in their entirety from those of Larry Detmer of the American Hospital Association staff made at a "Conference on Paramedical Education" in Alabama in April, 1965.
He had done a great deal of research on this question of the history of the financing of Paramedical Education and presented what seemed, and seems to me, the most thorough study done in this area at that time and up to the present. I should perhaps quote -- and I will -- much of what is to follow and I am sure that the American Hospital Association and Larry will be pleased that this background information is being brought to your attention. I should also indicate that source material for this paper includes a variety of government pamphlets and papers as well as a looseleaf booklet produced by the Health Funds Institute in Cambridge, Massachusetts (See attached Bibliography).

"Health Manpower" in our discussion is broad in its usage. My experience and reading has suggested certain categories:

1. Manpower - in its strictest and yet broadest sense is all-inclusive.

2. "Service" personnel identify with the "lower" levels of activity such as maids, porters, orderlies, etc.

3. Paramedical refers to post-high school programs such as X-ray Technology, Nursing, Medical Technology, etc.

4. "Basic Degree" professions are those requiring a bachelor's degree (e.g., Medical Technology, certain Nursing Programs, Physical and Occupational Therapies, etc.)

5. "Doctoral" refers to programs such as Dentistry, Medicine, etc.

To formally begin, there are some forty-two executive departments, agencies and bureaus of the federal government involved in education. In only two agencies is education the primary concern - (1) the Office of Education, a division of the Department of Health, Education and Welfare, and (2) the National Science Foundation. There are counterparts of and/or many of these federal agencies in state and local government. Congressional jurisdiction is exercised in the Senate by the Committee on Labor and Public Welfare. There are at least five committees in the House of Representatives involved in health and education in varying degrees.

The legislation itself begins with Vocational Education, much of which needs presentation at the post-high school and collegiate level. The first federal legislation relating to Vocational Education was the Smith-Hughes Act of 1917. It was created to fit persons for useful employment. "Useful" in this context includes instruction in home economics - employment not paid for as well as that paid for. It is designed for persons over 14 years of age who may be regular day students, or employed or unemployed cut-of-school youth and adults. All training programs were defined as at less than college level. The Act provided matching grants to states for programs in trades and industry, agriculture and home economics, and for training teachers of these subjects. The Act authorized a permanent annual appropriation of $7.2 million. This, remember, is the beginning - the base - of dollar support and is appropriated annually by Congress.
Subsequent legislation (the George-Barden and National Defense Education Act) authorizes appropriations of about $50 million annually.

The George-Barden Act of 1946 was built on the Smith-Hughes Act. This piece of legislation increased federal aid and provided federal support for programs in distributive education. The Health Amendments Act of 1956 added Title II to the George-Barden Act and in this title provided the first federal support specifically for practical nurse education. The National Defense Education Act of 1958 added Title III to the George-Barden Act which provided federal support for programs to train highly skilled technicians in occupations requiring scientific knowledge in fields necessary to the national defense.

The Vocational Education Act of 1963 brought the Smith-Hughes Act and the George-Barden Act, with its Health Amendments Act of 1956 and its National Defense Education Act of 1958, under one legislative umbrella, excluding the original provision for "useful" employment by taking care of home economics instruction elsewhere and concentrating on training for paid employment.

The Vocational Education Act provides for state and local Vocational Education programs below the baccalaureate level (excepting associate degree nursing). The Act authorizes Vocational Education for high school and post-high school students, adults unemployed or underemployed and persons with academic or socioeconomic handicaps. It provides for inservice teacher training, program evaluation and experimentation, the development of instructional materials and a four-year program for residential vocational schools and student work-study programs.

Allotments are made to states on the basis of population and a per capita income factor. Of the total allotment, 90 percent goes to the states and 10 percent is retained by the U. S. Commissioner of Education. States are required to match the federal funds. State Boards of Education are responsible for administering the money, but are permitted to delegate administration to local Education Agencies providing the State Board supervises this administration. Under some circumstances the U. S. Commissioner of Education may require the appointment of a State Advisory Council.

The 10 percent of appropriation funds set aside for use by the U. S. Commissioner permits grants to Colleges and Universities and other related institutions and agencies to pay for part of the cost of Research and Training Programs designed to meet Vocational Educational needs of youth with academic or socioeconomic handicaps.

It is through this provision that Congress provides for and emphasizes its desire for greater quality in Vocational Education. It is expected to produce new and more flexible programs to meet the needs of our citizens who depend on Vocational Education for their formal job training. Congress further emphasizes its concern for quality by identifying 3 percent of each state's allotment of federal funds to be used for such purposes as training and supervision of teachers, development of instructional materials and evaluation of programs.
The 1963 Act allows states to transfer allotted funds from the George-Barden and Smith-Hughes Acts from one category to another or to any occupational training covered by the new Authority. This flexibility should produce more effective programming to meet the needs of individual states, particularly in relation to long-range Program Development.

The Vocational Education Act of 1963 also makes permanent the Practical Nurse Training program of the George-Barden Act. Too, it makes permanent the Area Technical Education Program of the National Defense Education Act, as well as allowing the use of new funds for building Area School Facilities.

The definition of "Area Vocational Education Schools" includes Junior and Community Colleges and Universities which provides Vocational Education in at least five different Occupational Fields leading to immediate employment but not to a baccalaureate degree. The Act requires that Vocational Educational Programs adjust promptly to changes in manpower needs. Cooperative agreements have been signed in most states by the State Employment Services and State Boards of Education. The success of the expanded program in preparing students for work depends, in part, on how well the Manpower Specialists in the Employment Service Systems and local Vocational Education work together in carrying out these agreements.

The Vocational Education Act of 1963 was preceded by three months by an Act directed to graduate health professions; namely, the Health Professions Educational Assistance Act of 1963. The purpose of this act is to increase the supply of professional manpower in Medicine, Dentistry, Osteopathy, Pharmacy, Optometry, Podiatry, Nursing and Public Health. (Nursing school applicants must apply to four-year institutions granting baccalaureate degrees).

Major provisions of this Act are construction grants and student loans. A $175 million dollar appropriation for grants was made for a three-year period in 1964 for new construction or modernization of schools for training health professionals. The grants are made directly to institutions by the Surgeon General of the Public Health Service. The funds must be matched, with the federal government covering 50 to 75 percent of the cost. Student loans are covered by the 1963 appropriation of $30.7 million dollars for the period up to July of 1966, plus funds to allow students who have received loans prior to that time to continue or complete their education. The total amount for the six years 1964-69 is estimated at $61.4 million dollars. I mention these figures only to give you an idea of the limits of funds in spite of their magnitude. A more useful figure for you to remember is that loans are limited to $2000.00 per student per academic year. Schools are required to provide 10 percent of the total funds available to students.

The Higher Education Facilities Act (December, 1963) appears to have the possibility of providing for training facilities for health disciplines which require a baccalaureate degree or higher and which are not covered in the Health Professions Educational Assistance Act of 1963 (for example, facilities for training in dietetics; physical, occupational and speech therapies; and medical and psychiatric social work).
The purpose of this Act is to enable Colleges and Universities to accommodate larger enrollments and meet the growing demands for skilled technicians and advanced graduate education. Under its three Titles it provides $463 million dollars for grants and loans. Twenty-two percent of this grant money is available to Public Community Colleges and Technical Institutes. Title I offers undergraduate facilities matching grants for construction of classrooms, laboratories, libraries and related administrative buildings for instruction or research in the natural or physical sciences, mathematics, engineering and foreign languages. The federal share for Public Community Colleges and Technical Institutes is 40 percent. It is limited to 33 1/3 percent for other institutions.

Title II is also a five-year grant program specified for the development of graduate academic facilities. It is hoped this will stimulate the development of cooperative graduate centers in which two or more institutions will collaborate for reasons of quality or economy of operation.

Title III is a loan program for the construction of undergraduate and graduate facilities. Loans may cover up to 75 percent of the cost of eligible projects. If a loan is made in combination with a grant, at least 25 percent of the total project cost must be met from non-federal funds. Loans are for 30 years, but may extend to 50. All loans must be secured. It is obvious that much of the planned expansion of facilities is a product of this legislation.

The National Defense Education Act of 1958 that was referred to earlier merits more definition. Briefly, its purpose is to help expand and improve certain aspects of education to meet critical national needs as is implied in its title. Its provisions fall into three major categories: (1) Loans to students of Colleges and Universities offering bachelor's or more advanced degrees, or with two-year programs acceptable for full credit toward a bachelor's degree; (2) Grants to states for development of Area Vocational Education Programs referred to earlier; and (3) A guidance, counseling and testing program to identify and encourage able students in secondary schools.

The Nurse Training Act of 1964 added Title VIII to the Public Health Service Act with appropriations for four years beginning in July, 1965. All funds go to schools of nursing. Briefly, there are 5 purposes and provisions. (1) Construction grants for associate degree, diploma and collegiate schools of nursing with provision for new facilities and rehabilitation or replacement of existing facilities. The grants may range from one-half to two-thirds of the total cost of a project. Thirty-five million dollars is earmarked for collegiate schools, $55 million for diploma schools and associate degree programs. (2) Project grants are made to assist schools of nursing in improving, strengthening, or expanding their programs in nurses training. The grants help improve the quality of instruction and assist some of the non-accredited nursing schools in meeting accreditation standards. Projects may be undertaken in such areas as curriculum expansion and development, experimentation with new and more effective methods of instruction including new teaching aids and audio-visual equipment, faculty development and improvement of instruction and supervision of students in clinical practice areas. The grant can be used to defray the direct costs of personnel, specifically employed for the project; equipment, supplies, travel, consultant fees, and other expenses related to the project. The grant can also be used for operating expenses such as executive and administrative costs, accounting, building maintenance and janitorial
services, utilities, and others. These funds cannot exceed 8 percent of direct costs. (3) Payments to diploma schools (hospital schools) to meet a portion of added costs created by larger enrollment that can be attributed to this legislation. The amount granted to each school is equal to the product of $250 and the sum of (a) the number of full-time students receiving Nurse Training Act loans of $100 or more and (b) the number by which full-time enrollment in the school exceeds the average of the enrollment during the three fiscal years ending June 30,1962, 1963 and 1964. February 15 is the date for determining each year's school enrollment. The maximum amount a school can receive is the product of $100 and the number of full-time students enrolled in the year of application. If Congressional appropriations are insufficient in any year to pay the full amount so determined, each school's grant will be reduced proportionally. (4) Traineeships for Professional Nurses - This program was established to increase the number of graduate nurses qualified for positions as administrators, supervisors, nursing specialists and teachers in hospitals and related institutions, public health agencies and schools of nursing. Aid for institutions includes full-time grants to provide for full-time or long-term study in Universities and Colleges. Short-term grants to provide nurses in leadership positions who are unable to undertake full-time academic study with opportunities for intensive training to update management and teaching skills. Aid for individuals includes full-time traineeships which cover tuitions and fees, a monthly stipend, travel to the training institutions, and an allowance for legal dependents. These traineeships are awarded for a maximum of 24 months, of which not more than 12 months at the post-master's level. Short-term traineeships are not available for regular college courses or for inservice educational programs. The traineeships include tuition and fees. A daily stipend is provided for those who must change residence to attend the course; cost of travel is not included. (5) The Nursing Student Loan Program establishes funds in all types of accredited schools of nursing to extend long-term low interest loans to students in need of aid to finance their nursing education. Any public or nonprofit institution is eligible which offers a program of nursing education and which is accredited or has reasonable assurance of accreditation within a specified time. The Federal capital contribution amounts to 9/10 of the working capital. The institution is responsible for the remaining 1/10, but loans are available from Federal funds for schools unable to meet the requirements for institutional contribution. The school must determine the eligibility of applicants, determine the amount to be loaned, collect the payments, and administer the loan fund. Schools wishing to establish a loan fund should write to: Training Resources Branch, Division of Community Health Services, Public Health Service, Department of Health, Education and Welfare, Washington, D. C. 20201. The applicant (student) must be a United States Citizen or have been lawfully admitted to the United States for permanent residence and must be studying full-time for a baccalaureate or associate degree in nursing, a diploma in nursing, or a graduate degree in nursing. The student must also meet the school's requirements of academic standing and financial need. The maximum loan for the academic year (9 months) for any one student is $1000.00. In the case of a student who must pursue her studies on a 12 month basis, further loans may be granted. If the school in which the student is enrolled has established a Nursing Student Loan Fund, the student cannot borrow from any other Federal loan fund. The loan is transferrable with the student only if the student transfers from one school participating in the program to another. Commencing one year after completion of the student's full-time course of study, the loan must be repaid in equal or graduated periodic installments within 10 years. The student has the right to
accelerate payment. Interest will not accrue on the loan until the commencement of the repayment period. For each complete year of service by the student in full-time employment as a professional nurse in any public or nonprofit private institution or agency, the student can cancel 10 percent of the loan, plus interest, which is unpaid on the first day of employment. By this means, the student is entitled to cancel up to 50 percent of the loan. The government allows the cancellation of both the unpaid balance of the loan and its accrued interest in the event of death or permanent disability of the student. The student should apply directly to the school.

The Economic Opportunity Act of 1964 (In daily language, "The War on Poverty") was created to plan and coordinate all poverty-related programs of all government agencies. Its objectives are: Work training heavily oriented toward younger people; Aimed at improving their motivation, skills and health; and Aimed at increasing their employability and opportunities for jobs. The Act is composed of several parts including: (1) THE JOB CORPS - combines basic education and work training for youths of ages 16 through 21 at residential centers. An aim of the program is to remove youths from potentially undesirable home environment giving them work skills; (2) VISTA VOLUNTEERS - (Volunteers in Service to America) which provides for volunteers to work among migrant laborers, on Indian Reservations, in urban and rural community-sponsored projects, at job corps centers, and in slum areas, hospitals, schools and institutions for the mentally ill and retarded; (3) The Community Action Programs for both urban and rural communities authorize financial and technical assistance to anti-poverty campaigns in employment, job training, vocational rehabilitation, etc.; (4) Help for migrant workers designed to assist states to provide basic facilities for these people, such as housing, sanitation, education and health services; (5) The Work Training Program which provides work experience and vocational training for youth and covers up to 90 percent of the cost of these programs; (6) The Work-Study Program for students past high school age promotes part-time employment of students from low-income families who need earnings to finance their way through institutions of higher learning up to 90 percent of the cost for two years and 75 percent after that period; (7) The Neighborhood Youth Corps provides full-time work experience to youths 16 through 21, enabling them to stay in high school or improve their job skills, and to do this in their own community; (8) Youth Opportunity Centers are operated in cooperation with the public employment service system to provide young people with one clearly designated place to go for individualized service relating to preparation for employment, development of job opportunities, and placement in a suitable job; (9) The Work Experience Program concentrates on helping unemployed heads of families, who lack sufficient education or basic work skills that are needed, to become employable. In other words, the "War on Poverty" Act will make it possible for competent youngsters from poor families to get vocational or collegiate education that would otherwise have been impossible.

Vocational Education as it relates to health was affected by the Manpower Development and Training Act of 1962, amended in 1965, which now incorporates the Area Redevelopment Act. It provides for training in a broad range of vocations and is directed primarily to the socioeconomically disadvantaged youth. Its objectives are to fit the unskilled for better jobs, to increase the supply of scarce skills and to improve the efficiency of labor markets. Its programs include:
(1) Institutional training projects providing inschool occupational instruction. Further information may be secured by contacting State Offices of Vocational Education; (2) On-the-job training encompassing actual work experience and related instruction; (3) Experimental and demonstration projects utilizing new techniques to reach, counsel and train the disadvantaged; and (4) Research projects exploring new ideas to find solutions to crucial manpower problems.

The Manpower for Health Program which implements this legislation is being carried out as a cooperative project of the U. S. Department of Labor and the Hospital Research and Educational Trust of the American Hospital Association. It offers on-the-job training to assist hospitals and related institutions in obtaining and training nonprofessional personnel. Instructors' salaries and certain training supplies are paid for through subcontracts between the health care institution and the Hospital Trust. Trainee wages are established and paid by the institution, based on prevailing rates in the area.

But there are two problems facing states that want to use the Manpower Development and Training Act. The first is that the states are having problems in meeting the dollar-for-dollar matching requirement and are seeking to reduce it. The second is that the one year maximum on the payment of training allowances was prohibiting the Act from meeting training needs in subprofessional scientific and technical fields such as X-ray Technology. The implemented reactions vary from state to state and I do not know the record of New York State.

Other acts and agencies that offer federal help in construction, program and equipment are the Vocational Rehabilitation Administration's program of teaching grants and stipends to students in professions giving rehabilitation services such as the Area Redevelopment Act of 1961, the Housing and Home Finance Agency, and the Federal Property and Administration Services Act of 1949. The first of these is so limited that it has no significant effect on the production of needed physical therapists, occupational therapists, speech therapists and medical social workers. This lack of emphasis may be attributed to the fact that health programs are generally more oriented to meeting patients' acute care needs. Rehabilitation is generally a long-term process with demonstrable progress showing up only after a great expenditure of human energies and dollars. This may be responsible for the slow integration of rehabilitation into all of our health care programs and the absence of greater provision for supporting education of needed professionals in these fields.

The Area Redevelopment Act of 1961 provides for Vocational Training Programs not exceeding 16 weeks. The Housing and Home Finance Agency provides long-term low interest loans for dormitory construction. The Federal Property and Administrative Services Act of 1949 provides surplus government property such as desks, typewriters and other furnishings and hardware.

The specific objectives of the training grants program of the Vocational Rehabilitation Administration are: (1) To increase the supply of personnel in the professional fields involved in rehabilitation of disabled persons by helping training programs expand and by scholarship assistance to students; (2) To participate with professional associations and educational institutions in their efforts to improve the quality of professional preparation for services; (3) To
facilitate better communication and working relationships among the professional fields engaged in serving disabled people; and (4) To give personnel now serving disabled individuals a better understanding of rehabilitation philosophy and methods through short-term courses or teaching materials, and provide opportunities for raising their level of knowledge and skill in rehabilitation of the handicapped. Grants are made in the fields of rehabilitation counseling, medicine, nursing, occupational therapy, physical therapy, prosthetics and orthotics, psychology, speech pathology and audiology, dentistry, social work recreation, medical sociology, public health and in specialized areas of service to special disability groups such as the blind, deaf, cerebral palsied and mentally retarded.

The Social Security Amendments of 1961 provide for the improvement of benefits under the old-age, survivors, and disability insurance program by increasing the minimum benefits and aged widow's benefits and by making additional persons eligible for benefits under the program and for other purposes.

The Juvenile Delinquency and Youth Offences Control Act of 1961 provides Federal assistance for projects which will demonstrate or develop techniques and practices leading to a solution of the Nation's juvenile delinquency control problems.

In September, 1961, The Training of Teachers for the Deaf Act was passed to make available to children who are handicapped by deafness, the specially trained teachers of the deaf needed to develop their abilities and to make available to individuals suffering from speech and hearing impairments the specially trained speech pathologists and audiologists needed to help them overcome their handicaps.

Also in September of 1961 the Peace Corps Act was passed to provide for a Peace Corps to help the peoples of interested countries and areas in meeting their needs for skilled manpower.

On October 5, 1961, the Community Health Services and Facilities Act of 1961 was passed to assist in expanding and improving community facilities and services for the health care of aged and other persons, and for other purposes.

The Public Welfare Amendments of 1962 extend and improve the public assistance and child welfare services programs of the Social Security Act and for other purposes.

An Act (untitled) was passed in September, 1962 to amend Title III of the Public Health Service Act to authorize grants for family clinics for domestic agricultural migratory workers, and for other purposes.

Graduate Public Health Training Amendments of 1964 amended the Public Health Service Act to extend the authorization for assistance in the provision of graduate or specialized public health training and for other purposes.

The Traineeship Program aims to increase the number of trained professional public health personnel and to bring new personnel into the field of public health by helping to finance graduate or specialized public health training. The program is intended to supplement the training activities sponsored by state and
local governments. Applications are accepted from members of all health professions such as: physicians, nurses, engineers, nutritionists, social workers, dentists, dental hygienists, health educators, veterinarians, sanitarians, statisticians and other involved in modern public health work. Applicants must have completed their basic professional education. In most instances, this means that the applicant has received a bachelor's degree or higher degree from an accredited institution. Examples are: physicians, dentists and veterinarians must have their doctor's degree; social workers, a master's degree in social work; engineers, nutritionists, laboratory personnel, sanitary chemists, sanitary biologists, sanitarians, statisticians, etc., a bachelor's degree; and individuals are also eligible if they have taken their basic non-degree professional training in an approved school, are currently licensed in one state if professional licensing is required and can qualify for graduate or specialized public health training. (e.g., registered nurses and dental hygienists who do not hold a bachelor's degree). All applicants must be citizens of the United States or have been lawfully admitted to the United States for permanent residency. All applicants must have been accepted by the training institutions of their choice for the program of study proposed. Preference is given to qualified younger applicants with less than one year of graduate or specialized public health training, and to those already in the field of public health who need additional training to prepare for specialized positions of importance to public health.

The purpose of the Nurse-Scientist Graduate Training program is to support needed research training in nursing, to stimulate and promote interest in studies and to improve nursing practice, and to identify scientific talent and resources to achieve these purposes through grants-in-aid. These grants are designed to support graduate programs in the basic sciences important to research in nursing and to include expansion and improvement of faculties, and payment of stipends to nurse-trainees who are graduate students and participating in the programs.

Social Security Amendments of 1965 provided a hospital insurance program for the aged under the Social Security Act with a supplementary medical benefits program. Its implications on the health manpower picture are not yet known.

The Heart Disease, Cancer and Stroke program of 1965 has as its principal purpose "to provide for the establishment of programs of cooperation between medical schools, clinical research institutions, and hospitals by means of which the latest advances in the care of patients suffering from heart disease, stroke, cancer, and related diseases may be afforded through locally administered programs of research, training and continuing education and related demonstrations of patient care." Its immediate impact is related largely to major medical centers. It will surely have major implications in the health manpower area, especially at the levels of more advanced scientific degrees. Of course, new opportunities will also be part of the program.

Mental Retardation Facilities and Community Mental Health Centers Construction Act Amendments of 1965 authorized assistance in meeting the initial cost of professional and technical personnel for comprehensive community mental health centers.
Also, the 1963 Mental Health Act authorized a new program for the training of teachers of mentally disturbed and handicapped children. "Handicapped children" is a term used to include the mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled or other health impaired children who require special education. Persons are trained for the following positions: Teachers of handicapped children; college and university instructors of teachers of handicapped children; supervisors of teachers of handicapped children; speech correctionists; research workers in the education of handicapped children; and other specialists providing special services in the education of handicapped children. The Program includes: (1) Traineeship grants - for full-time senior-year undergraduate study. The award is for one academic year and consists of a $1600 stipend. The participating institution or State Educational Agency receives $2000. (2) Fellowship grants - for full-time graduate study emphasizing one of the handicaps specified. The award is for a one-year period. A total of four fellowships may be awarded to the same individual. For the first graduate year of study, the award is $2000; $2400 for the second year; $2800 for the third; and $2800 for the fourth. An allowance of $400 per dependent is also made. (3) Short-term traineeship grants - for either full-time summer session traineeships or special-study institute traineeships. Short-term traineeship recipients receive $15 a day, with a $75 maximum; the participating institution receives $75 a week. (4) Stimulation grants - available to institutions of higher learning to develop or expand programs for training professional personnel. These grants are for a one year period, and may not exceed $2000. Institutions may not receive more than two stimulation grants for the improvement of any one specialty within this area. (5) Scholarships for the training of teachers of the deaf. They are awarded for one academic year. For graduate students, the award is $2000 plus $2000 institution support; for undergraduate seniors, the award is $1600 plus $2000 institution support.

Grants are made to public or other nonprofit institutions of higher learning providing professional or advanced training for personnel engaged or preparing to engage in employment as teachers of handicapped children, or any of the positions listed above. Institutions engaged in research in fields related to education of such children are also eligible. The institution, in turn, makes awards of the grants, fellowships, etc.

Public Works and Economic Development Act of 1965 provided grants for public works and development facilities, other financial assistance and the planning and coordination needs to alleviate conditions of substantial and persistent unemployment and underemployment in economically distressed areas and regions.

National Vocational Student Loan Insurance Act of 1965 established a system of loan insurance and a supplementary system of direct loans, to assist students to attend post-secondary business, trade, technical and other vocational schools.

The Health Professions Educational Assistance Amendments of 1965 amended the Public Health Service Act to improve the educational quality of schools of medicine, dentistry, and osteopathy, to authorize grants under that Act to such schools for the awarding of scholarships to needy students, and to extend expiring
provisions of that Act for student loans and for aid in construction of teaching facilities for students in such schools and schools for other health professions. The four specific provisions of the Act are: (1) to extend for three years to June 30, 1969, the current program of matching grants to help in construction, replacement, or rehabilitation of teaching facilities for the training of physicians, dentists, professional public health personnel, optometrists, pharmacists and podiatrists. Increase the funds ceiling for this program to $160 million per year. (2) to extend for three years to June 30, 1969, the current program under which student loan funds are made available to schools of medicine, dentistry, and optometry. Permit expansion of this loan program to help students at schools of pharmacy and podiatry. Authorize appropriations of $25 million per year for these purposes. (3) to set up a new four-year program of basic and special improvement grants to schools of medicine, osteopathy, dentistry, and optometry to help them increase the scope and quality of their teaching programs. Authorize appropriations for this purpose of $20 million for the fiscal year ending June 30, 1966, $40 million the second year, $60 million the third year and $80 million the fourth year. (4) to establish a new four-year program of grants to schools of medicine, dentistry, osteopathy and optometry from which scholarships could be awarded to their students in amounts up to $2500 per student annually.

The Higher Education Act of 1965 strengthened the educational resources of our Colleges and Universities and to provide financial assistance for students in post-secondary and higher education.

Vocational and Technical Rehabilitation Act Amendments of 1965 amended the Vocational Rehabilitation Act to assist in providing more flexibility in the financing and administration of state rehabilitation programs and to assist in the expansion and improvement of services and facilities provided under such programs, particularly for the mentally retarded and other groups presenting Special Vocational Rehabilitation Problems.

The National Library of Medicine awards special fellowships to promote the development of research monographs, critical reviews, bibliographies, and historical studies related to the biomedical sciences. The fellowships are for full-time effort in preparing such works, and the fellow may do his work at the National Library. The program is a small one, $20,000 being authorized for Fiscal Year 1965. Fellowships include salary, travel expenses, and necessary supplies. Applicants must have a Doctor's Degree or its equivalent and a minimum of three years of relevant research or professional experience or special need not met by other fellowships. All applicants must be United States citizens.

The training and traineeship awards of the National Institutes of Health support advanced training leading toward careers in research in sciences which relate to medicine and health or toward increased competence in the treatment of disease of public health significance. Each of the nine National Institutes award training grants falling within their particular fields of interest. The programs included are as follows:

(1) Undergraduate Training Grants - provide funds to institutions such as
Medical, dental or osteopathic schools or collegiate schools of nursing and schools of public health in the United States and its territories to enable them to establish or improve instruction which relates to the prevention, diagnosis or treatment of cancer, mental disease, cardiovascular disease and related gerontological conditions.

(2) Graduate Training Grants - provide funds to public and other non-profit institutions to establish, expand or improve training opportunities in the health-related sciences for persons interested in careers in research, teaching, and in certain designated areas, clinical service. In addition to providing sums for the support of the institutions' programs, grants often provide funds for the support of stipends and allowances awarded by the institutions to the trainees selected by the institutions.

(3) Direct Traineeships - awarded directly to qualified physicians and other scientists for post doctoral training in health science fields of interest to the awarding institute. The direct traineeship program is used only by the Institute of Neurological Diseases and Blindness.

(4) One area of special emphasis in the training programs of the National Institutes of Health is Radiotherapy, a program sponsored by the National Cancer Institute. The broad training program in this area provides many opportunities in experimental and clinical radiology and radiotherapy research.

Public and other nonprofit institutions are eligible for undergraduate and graduate training grants. Applicants for the direct traineeships must have completed residency training requirements in a clinical specialty or its equivalent or have had at least three years pertinent post-doctoral training or research experience. The applicant is responsible for having made all necessary arrangements with the institution where training will be received and with the person who will be responsible for his training. All applicants must be citizens of the United States or have been lawfully admitted to the United States for permanent residence. He must be free from any physical or mental liability that would interfere with the proposed training.

The Appalachian Program has application to several areas of the country but not in New York - at the present. It may well be that a pilot activity is being conducted which will have broad implications for many "deprived" groups and geographic areas.

State and local support of financing Paramedical Education hold the real key to support of health manpower legislation. I have never believed that federal financing was or is intended to replace individual responsibility. Support comes from private sources - local industries, national and local foundations, and families of wealth. These sources offer funds for construction programs and scholarships in varying degrees. What you can expect from legislation is largely dependent upon how well you inform your legislators and educational administrators of the need for support of Paramedical Education.
Local and statewide service organizations such as Rotary, Kiwanis, hospital and medical society auxiliaries have much more potential for developing needed support for scholarships. It is a primary responsibility of the health (and educational) leaders in your communities to continue the development of this potential.

In the professional areas there is support for medicine, dentistry, optometry, podiatry, osteopathy, nursing and public health. The program of the Vocational Rehabilitation Administration does, to a limited extent, support training in the therapies - physical, occupational and speech - but not to the extent provided for the other disciplines.

People in health administration are also aware of the great need for dietitians, nutritionists, medical records librarians, medical and psychiatric social workers and medical technologists. There is no direct support to develop the manpower needed for these essential services that require at least 4 years of college education.

With our increasing population and the increase in the number of children and aged who need most of the care, the explosion in medical knowledge and skill that requires more trained manpower to support and work with the physician, and the growing development of the concept of health being a right rather than a privilege, we are now seeing programs for our needs for trained and educated manpower expanding greatly.

There is a plethora of federal legislation which relates to the whole field of economic opportunity for citizens of this great country. Encouragingly, much of the discussion relates to health. For example, there is a "Catalog of Federal Programs for Individual and Community Improvement" which is produced by the Office of Economic Opportunity and is dated December 15, 1965. A major portion of this Catalog relates to human needs and human skills. As an individual who has devoted his adult life to the health field, I was gratified to note that "health" occupied a position secondary only to food and clothing in the listing of programs. It has long been my personal conviction that health should be listed along with and not separate from the original basic needs of food, clothing and shelter.

It would be both inappropriate and inaccurate to suggest that the future holds more puzzles for health in its entirety than it does for education in this democratic society. Surely we have our problems of understanding and evolution -- and so does education. In fact, "evolution" seems a rather mild word in these days.

However, the trend is clear. People must and will receive the educational and health services which are appropriate to their needs and which relate to their wants. It is equally clear that these programs are increasingly to be related to governmental programs. As a citizen of this country, and not at all because I choose my relative contributions in the health field and in the South -- it is clear that much of what will evolve in the development of the health resources of this country will be through governmental programs based upon the resources of all the people.
I dwell, perhaps too much, upon the paradox of the availability of scientific knowledge as different from the deliverance of human skills. As a former teacher, I have always been less than pleased at the thought that the personnel of educational institutions should subsidize the educational system of this country through substandard salaries and other benefits. I feel the same way about personnel in the health fields. That picture is changing in both areas.

While I believe profoundly in the "strength of private industry" in its contribution to the welfare of our nation, I also believe in the rights of "the common man." Where to strike the balance and how to achieve it seems to be the question. We - Education and Health - have a wonderful opportunity to help. The way, though, seems to me to be to suggest extending vistas, opportunities and encouragement and not through following prescribed avenues which lead to ultimate loss of professionalism, initiative and sense of values.

"Government" is a much bandied word today. I like the concept that government in its bigness offers supportive help for all avenues of life if we are willing to utilize the abilities of local resources to do what we are able to do. It seems to me that Education and Health are partners in the truest sense and that we have the opportunity to make them meaningful. What we like to talk about as our heritage and as our opportunity needs to be put into effect. That is really what the whole subject of "Government Programs Related to Health Manpower Training" suggests.
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The War on Poverty is a very much criticized program, and, as is usually the case, the criticism receives preferential treatment in the newspaper over the praise. The criticism has come from all quarters as has the praise that we've gotten: Republican and Democrat, rich and quite articulately the poor. Our smallest demonstration, of the four we've had outside our offices, was approximately 100 people and our largest nearly 500 people. So if you think me a bit paranoid in my presentation, perhaps you are right.

Our position is something like the football coach at a major state university where the pressures were intense from the student body, the faculty, from various segments of alumni, from all over. Even when he won a game he was violently criticized because he didn't win it by enough, because he didn't use so and so at right tackle, and so forth ... you know the syndrome. Well, this man cracked up in mid-season and went to the hospital. He was shortly in receipt of a get-well note from the Athletic Board of Control. And the get-well note read, "We are profoundly sorry to hear of your illness and send herewith all best wishes for a speedy recovery. The vote was 5 to 4."

The reason for this criticism, (and the opposite side of the coin), is the recent awakening and awareness of Americans about the problem of poverty. In a sense I think it is quite simple. This is a new program. It is using in many respects old tools, but it is using them in a different manner. It is practically always hard to explain and quite hard to understand. It is hard for me sometimes, and I've now been on the battle line for a year and a half or more, and I'm supposed to be dealing with it 12-14 hours a day. And it's still quite hard for me to explain certain of the ramifications. I sometimes think it's quite hard for the people who write the programs to explain the programs. At least it seems that way to me when I have to read them and try to make sense out of them. But it is an exciting thing.

It is now, by the way, in Congress for approval for next year. It has among other things caused perhaps not a revolution but certainly a realignment in American politics. As I say some of our worst critics are Democrats... and some of our best friends turned out to be Republicans, despite the fact that this is a Democratic Administration program. Maybe that proves that it is a program for all people, at least I hope so. But at the very least we can say, when we retire bloody and considerably bowed from the battlefield, that if we have done nothing else, we have introduced
many of our Republican friends to the existence of poor people. And now they're all for them and claim that we're not involving the poor enough. They remind me sometimes of a Brazilian legislator who got up a couple of months ago in the Chamber of Deputies in Brasilia, talking about some bill or other, and took a firm stance and said, "My party is neither for nor against this legislation. In point of fact, quite to the contrary." All of which is simply to indicate that there is nothing very simple, nothing very categorizable, nothing very pigeon-hole-able, in old terms, about the War On Poverty.

You all know, of course, the tragi-comedy of the New York Mets. You may have read in the spring of '65 that the Mets hired Jesse Owens, the Olympic track star of the thirties. And Jesse Owens' mission was, in effect, to try to teach the Mets to run on the balls of their feet, presumably so they could steal more bases. Red Smith in his syndicated column seized upon this with glee and said, "Wasn't this perfectly fine, that in the ensuing season there would be quite a few Mets who would steal second, - and, infrequently, but from time to time, the speedier of them might even manage to get as far as third. And once or twice during the season a particularly fleet-footed intrepid Met would pilfer home."

"But who," asked Red Smith, "is going to teach them how to steal first?" What we are trying to do in oversimplified terms is to help those who do not have the hitting power to have some way of getting around the base paths, to be able to compete in this very competitive society that we live in.

Of our programs, the most obvious, illustrating this analogy, would be Head Start, which I am sure you have all heard of. It is part of the Community Action Program. Under Head Start deprived children from slum neighborhoods or from bleak rural areas of four and five years old are given comprehensive pre-school education along with comprehensive medical and dental care in the hope and on the assumption that this will help them approach the level on which their more fortunate contemporaries will enter school. Some of them who were in Head Start last summer had never been able to tell one color from another by name because they had never been named to them; some of them were confused about sitting down in a chair in the Head Start classroom because there had been no chairs at home. Lots of shock statistics can be adduced. It proved if nothing else that the rather happy American assumption that everyone starts more or less equally, that there is an inherent equality of opportunity, economic and otherwise in our society, would seem to be false. It certainly was for these children.

A study of the children in the Boston Head Start, for instance, showed that there were two who had active and advanced cases of tuberculosis which had never even been diagnosed, let alone dealt with. Two other children had congenital heart defects which demanded immediate open heart surgery. Then you get numerically, I suppose, the more shocking statistics. Some 10% of the children in the Boston program were shown to have some psychological disability severe enough to prevent normal functioning. Some 2/3 of the children needed dental treatment and needed it then because their teeth had never been looked at before. You go to another age group, the Job Corps age group, 16 through 21. As of last month, when the latest tabulations were made, some of those boys and girls had never in the r lives seen a dentist. And I can recall one story of a boy who enrolled in a Job
Corps in Maryland and did not eat. His counselor tried to get him to eat and he refused. He had many excuses. Finally the counselor found that he could not chew any meat because all his teeth had rotted and had never been to a dentist.

These are shock statistics. I could add to them, but I don't think that I will bother to. Perhaps the only point to be made, and to be reiterated as I am reiterating it now, is that these people in these poverty programs somehow, in some way, were not given a fair shake. They were starting from somewhere behind everyone else. Now Head Start is our most popular product. I am reverting to my Madison Avenue terminology. It's our most popular product, and one of the reasons that it's our most popular product is that both its need and its good effects are obvious. But another reason which occurs to me for its popularity is a negative one. It is simply this. Nobody, not even the loudest reactionary, not even the pillar of the John Birch Society can really level his finger downward at a four-year old or a five-year old and say to him, "You slob. You are not doing anything to live up to the American Dream. You don't have the stick-to-itiveness and the get up and go, and why haven't you got a job?" You just can't do that to a four- or five-year old child and maintain your self respect. What some people don't realize is that the parents of these Head Start children were afflicted with the same disease and lacks and roadblocks that society inadvertently set up for them, but in those days there was no Head Start. If there had been a Head Start in 1945 or 1950, it is very possible that Head Start in 1965 and 1970 would not be necessary.

Let us be a little bit more hopeful and a little more optimistic and project ahead to when the children of the first Head Start children will be born. It is sobering to me to realize that this new generation of poverty children - or children that we now hope will not be poverty children - will start being born before 1980, in less than 14 years. And unless we do something about their parents, and about the environment in which their parents live, there will be little hope that the bulk of them will escape what has happened to their parents. The same thing applies up and down the line. It applies to the Job Corps boys and girls. It applies to the older people. There is perhaps less hope for salvage of older people but the effort is being made.

Now, I'm a little confused as to what I can give you that will be of value to you in relation to the purposes for which you are here. I have been given a program and have looked through these impressive days of topics and talks and from what I can figure out, all of them were pretty specific. They told you things about where jobs and opportunities for young people in the health field existed. I can tell you relatively little about that, partly because of the nature of the War On Poverty and in particular of the Community Action Program.

It is a local option program. Both the genius and the difficulty of the Community Action Program is that it is inspired locally and administered locally. And so every Community Action Program differs from every other Community Action Program as every finger print differs from every other finger print. The program is not imposed by federal formula. There are, of course, federal policies, but the initiative, direction, and follow-through, have to come from communities themselves. Many communities have found out, not unsurprisingly, that the unmet needs in the field of health were great, and were in many respects a first principle. No mind can function well in a sick body. When we have a headache or a bad cold or
something of that sort, we are moody. We snap at those around us. Our efficiency to carry on the business of the day is considerably lowered. Think what it must be to have a congenital and continual lowering of efficiency, to be constantly in that state and still be expected to compete in an environment which to us would be a pretty cruel environment. So Community Action Programs in education and in other fields can't mean very much unless something is first done in the health field.

It has occurred to me, (this is no official policy statement by the way) that part of the great fault that is being uncovered, the great fault in our society that has been progressively uncovered as these economic opportunity programs expand, part of the great fault and perhaps a major part lies with professional people. Now, I assume that everybody in this room is a professional person. I consider myself to be a professional person, and yet when you look at the children's congenital heart diseases and the tuberculosis, not to mention the 2/3 who haven't ever seen a dentist in the Head Start Programs in Boston, when you look at the 80% of Job Corps enrollees who have never seen a dentist, and 75%, by the way, who have never seen a doctor - somehow, some way, it strikes me the medical profession and the dental profession have fallen down. In some way they should have been reaching these people. We propose to do it, to have the medical and dental profession reach these people with the assistance or government money, and government programs. This does not mean that there should ideally be government money or that there should be government programs. It's just that it hasn't happened in any other way.

Nor are these the only professions. The lawyers I think, stand to take a fair amount of criticism on this score because there are countless numbers of poor people who have been in legal difficulties who don't get to lawyers. You hear about Legal Aid Societies (and they do wonderful work), Public Defenders and so on who give of their time and give up fees to help the poor. But this obviously isn't enough. This usually happens only in criminal cases when a poor man has been indicted of a crime and he is given a court lawyer. Suppose the poor man wants to sue his landlord, and there are good and sufficient reasons for suits against landlords as you see in the papers in New York quite frequently. This is a horse of another color, and the legal services to the poor man are not usually there. We are trying to do something about that too. But I am not suggesting that it is a WE and a THEY thing, we the government and they the doctors and they the lawyers. I suggest that it is all a WE and I suggest that the government has been delinquent in this also.

I want to dwell for one moment on the rural medical situation. I can think of one applicant for a Head Start grant in a southwestern state - not to put too fine a point on it, it was Texas - who had to plan to transport children 200 miles in order to provide access to the medical and health examinations and follow-up services that these children required. Two hundred miles! Lots of rural communities have no doctors, no public health services of any kind. These are the communities where many of the 75% of the Job Corps enrollees who have never seen a doctor in their life come from. Closer to home, the failures take a different form. Now in New York, you can't go anywhere without tripping over a public or a private health facility. But the trouble is that they abound in a maze that Ph.D. in Public Health Administration, which I by the way am not, would have great trouble in deciphering. And if a Ph.D. in Public Administration cannot figure his way through this
maze, I don't think that we can expect the ill-educated poor to cope with the limitless variations in standards of eligibility from one agency to another, the separation by distance and by time of availability, and the separation in language for the Spanish-speaking and others. It's self-defeating. The poor get too sick to be able to come to the medical facility if they have not found their way at the outset. And once they're there, of course, they get the most perfunctory and the worst treatment of all patients. That is, I think, a truism. Even with the great work that is being done, it is simply not enough.

Let me go back some ten years to Hollings' study of the psychiatric population of New Haven. As I recall, the book was called "Social Classes and Mental Health," and Hollings' conclusion, which I'm sure would hold today, was that the poorer the population, the more psychiatric patients there were. The happy poor is pretty much of a debunked myth these days. And not only that, but the poorer patients, once hospitalized, got worse treatment. They got the drugs and the electric shock, whereas the well-to-do, you and I, would get individual psycho-therapy. So not only are there more poor patients proportionately, but they get precisely what their resources command, which is less medical attention and lowest possible quality of care.

Sometimes it has struck me that the approach we as a society have taken to poor people is that of the psychiatrist who said to his patient, "Good man, you don't have an inferiority complex. You are inferior." And if I can recast that rather more grimly, one hears a great deal of not only individual but of group paranoia in Harlem, Watts and the Hough area of Cleveland, and Bedford-Stuyvesant, just to rattle off some of the areas of summer rioting. But I wonder if it really is paranoia. I can hear the psychiatrist saying to his patient, "Good man, you don't have paranoia; you are persecuted."

Okay, so what is being done medically? The attempt, which varies from place to place, is to bring health services within reach, and by reach I mean not only geographical reach but linguistic reach. I mean sympathetic reach. I mean the whole syndrome of accessibility and sympathy for the poor.

Very recently we approved a national demonstration program, under which grants were approved for ten or twelve massive health centers in various depressed areas. One of these centers is going to be at the Montefiore Hospital and Medical Center in the Bronx, which received nearly two million dollars. Let me read you the description of what they're doing. This perhaps may be indicative. "Montefiore and Morrisania Hospitals are cooperating in providing back-up facilities and medical staff for the neighborhood health center. A large-scale community health aid training program is part of this project. The aides will work in the low-income community, man the store front health stations, and perform non-professional aide functions in the neighborhood health center in the two cooperative hospitals. Medical educational institutions in the New York area will help plan the training program for non-professional aides recruited from among the poor." It comments, that 50% are members of families with incomes below $4,000, and that the public assistance caseload is 500 per 1,000 individuals. Over 80% of the population, as you might have guessed, is Puerto Rican and Negro. A neighborhood health advisory committee organized through block clubs will provide recreation, improvement and planning of the center. The Bronx
neighborhood health center is part of an OEO program demonstrating around the country how coordinated (and that's a key word), personalized (that's a particularly key word in medicine) total health services can be brought to families in poor communities. (How much better you like going to a doctor who knows something about you and your family and views you as a person, rather than a statistic, rather than as a case).

These storefront medical stations operating around the clock will provide a unique opportunity for using unemployed poor people to give basic health information to persons in need of help and to get them to the neighborhood health center for medical treatment and health counsel. These are what we hope will become models not only in big cities but also, in modified form, in rural areas or suburban areas that may happen to need them. This I hope is the wave of the future.
NEW EDUCATIONAL TRAINING PROGRAMS

TO MEET HEALTH MANPOWER NEEDS

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I am grateful of the privilege and the opportunity given me to talk to the participants in this Institute about the challenging and exciting world of education -- particularly this world of education that is creating opportunities in the health, medical, and paramedical areas.

As you know, I represent the American Association of Junior Colleges as a Staff Specialist in Curriculum, with major emphasis and responsibility in the health and paramedical fields. Our Association is composed of over six hundred junior colleges, enrolling a million and a quarter students, and of individual associate memberships. Our work is informational, stimulative, interpretive, and analytical. We provide consultants to the junior colleges in a variety of fields, we maintain liaison and communication with all levels of education and other educational organizations for our junior colleges, and we publish not only the Junior College Journal but many other books, brochures, newsletters, pamphlets, and directories. We also, in a somewhat less emphasis, provide services and representation to the two hundred additional junior colleges not members of the Association.

Now that we have established an acquaintanceship, let us turn our attention to the main business of this session, a discussion of the new educational training programs to meet health manpower needs. I am presenting my material in three parts: first, a general overview of what is happening today; second, descriptions of the new programs developing; and third, some problems and issues created by the demands and requirements of the expansion of programs in the health, medical, and paramedical fields.

In his recent book, Change and Challenge in American Education, Dr. James E. Russell makes these challenging and arresting statements: "We live in a world swept by the winds of change, but we have not learned yet to understand what change is or what it does ... The world is now changing in such radical fashion as even to challenge our concept of what education is. We are moving into a new world whose outlines we perceive dimly or not at all. Yet this new world will reconstruct everything we do."

For your own thinking and consideration, and as a kind of backdrop to the main theme of our discussion today, let me quote from several of our nation's outstanding leaders in addresses made to the annual convention of the American Association of Junior Colleges in St. Louis last March:
Dr. Fred E. Crossland of the Ford Foundation speaks of today's college youth, that young person who is being ardently recruited to enter our health and medical education programs: "Consider the youth of eighteen today, the young person now knocking on your college door. He was born in 1948. At the start of the twenty-first century, he will be fifty-two years of age. According to life expectancy tables, he will probably be living in the year 2020... just a bit more than fifty years from now. If all of us would serve him today, we must have twenty-twenty vision."

If any high school senior is in doubt today whether or not he should continue his education, Mr. Paul F. Lorenz, Vice-president of the Ford Motor Company, would tell him quickly that he faces a very unflattering proposition: He says, "As Secretary of Labor Willard W. Wirtz recently put it: The machine (the sophisticated "hardware" of computerization) now has a high school education in the sense that it can do most jobs that a high school graduate can do, so machines will get the jobs because they can work for less than a living wage. A person today needs at least fourteen years of education just to compete with the machine."

The use of computers in the health and medical field is, of course, already known. How long it will be until we shall go to our doctor's office and communicate only with the computers and the paramedical technicians, I cannot say, but such medical relationships may be closer to us than we think. Dr. Robert Kinsinger describes a student who receives practice in diagnosis by means of a teaching computer:

"The student asks the computer:

COUGH?
Yes, developed yesterday.

BACKACHE?
NO.

HEART EXAM?
Not enlarged to percussion but
low-grade systolic murmur at apex. Otherwise normal.
ABDOMINAL EXAM?
Diffusely tender, splinting
noticed in right quadrant and occasionally radiating to
right flank area.

THE GRIPPE?
There's insufficient evidence
for a diagnosis at this time. You're not being careful."

... and the student continues his questioning of the machine until a satisfactory diagnosis is made. Now while this machine acts as the patient giving answers to questions leading to medical diagnosis, how long will it be before
it receives the answers to questions and suggests possible diagnosis itself?

Tremendous strides are being made in medical and health research. The work of the medical student in our colleges of medicine is far different from that in years gone by. In my grandfather's day, there were practicing physicians who actually had but little schooling, and in my father's early days medical students frequently went directly from high school graduation to medical school. Few nurses received anything like the normal amount of training expected now, and most of the people on duty in hospitals received their training through "experience". The mid-wife and the so-called "home nurse" were important and busy people in any community. Paramedical personnel were unknown as we would identify them today.

Even the diseases and accidents of our people have changed during the decades just past, thus focusing the medical and health concerns in new directions and bringing about vast changes in the education of physicians, surgeons, nurses, and paramedical personnel. Tuberculosis, pneumonia, and diabetes are no longer the killers they at one time were. Accidents were the "farm" variety for the most part. Today our illnesses are increasingly resulting from the pressures and tensions of the environments we have created, and accidents from the speeds generated by a new age of machine and transportation. Too, better diagnosis, better knowledge as the result of research has identified illnesses and organic conditions long hidden to the medical man. All of these changes and new directions have had an impact and an influence upon educational programs, and the kind of people now needed to care for the health needs of society. "Preventive" medicine is being talked about more and more, but to be successfully explored, the field of preventive medicine requires increasing paramedical support.

Here, then, is a scattered and rambling review of just a few of the influencing factors on education programs today, but all of these and the many more that could be cited ad infinitum have startlingly increased manpower needs in all areas of health and medical careers. Some of the causes demanding this increasing need for manpower have been presented, but certainly one of the major causes for the need of more people is the ever-continuing national population growth, slowed to some extent during the last several years, but due to accelerate again on an almost frightening scale; to the increasing reliance of people upon health services of all types; and to the unprecedented advances of scientific discovery in health fields. We must also remember that not only has the number of people in the population had its impact upon needs and pressures in this area, but equally as important is the distribution of the population into age groups. By 1970 there will be almost 80 million people under twenty years of age and 23 million over 65, the two age groups demanding the most attention from medical and health personnel... and the services for this population group must be offered by personnel coming from a very small population group, the result of the low birth rate prior to the beginning of the population explosion in 1947. Remember, too, that all professional, semi-professional, and technical fields are making increasing inroads into this small group, thus creating a significant career competition factor. Finally, add to these other characteristics of this moment in time the social and economic advances of our society that have made health services of all kind more available and more desired than ever before, and add to this vastly
improved transportation and communication, and you will begin to see emerging a pattern of personnel needs, a stimulus for educational and training change, and a desperate pressure for sound and effective recruitment of personnel into educational programs serving the professional and semi-professional health and medical fields.

What are some of the new programs developing in the medical and health fields? For a definitive answer to this question, we should, with footnotes, cross-references, and much detailed description, divide our areas into, perhaps, the professional, the semi-professional, or technical, and the assistant, aide, or vocational level of the programs. Unfortunately, so much is happening, so fast, and so much is new enough to lack clear definition and identification that neatly wrapped packages of explicity cannot be offered. Let me give you an example of what I mean: A few weeks ago I was invited by the Southern Region Education Board to attend a conference in Atlanta on education and training personnel for the mental health fields. Stimulated by demands from the professional personnel in the mental health areas, SREB had received a grant from Federal funds to develop the conference and invite as participants some of the outstanding professional leadership and educational leadership in the South to attend. It was a challenging, productive meeting for the emphasis given to the very problems plaguing us today in most of the health and medical areas. Who, for instance, is the professional, what does he do? To what degree is he educated? How does he function? What is his role? A few years ago these were not complex problems .... he was the medical doctor with specialization in mental health and diagnosis, the psychiatrist, the graduate psychologist, the graduate social worker, and so on. His role was rather clearly defined. But as the conference began to raise questions, in the light of present day and developing needs and demands, the role, the function, the responsibility, and the education of the professional was not nearly so clear. The need for support from the paramedicalist emerged stronger and stronger, but who was this person, what would he do, how would he relate to the professional, how much responsibility could he exercise, what functions could he perform, what was his level and requirement of education? These same questions are now being asked of whole categories of personnel, and the answers are not easy because none of us can fully grasp a conception of the world in which we are going to perform these services or the exact needs of the people living in that world.

My family doctor is a good doctor, a graduate of Hopkins, a conscientious man in the reading of current literature and reports, and a constant attender of short courses and seminars and meetings concerned with new medical practices. He maintains an office and a small clinic, spends as much time as needed with every patient, and looks out for us not only physically, but mentally and emotionally as well. He is the old fashioned practitioner brought as much up to date as possible, with all the temperament of the family doctor of another age. But over these few years I've seen the waiting room of his office expanded twice, I've seen him a little more harassed and grey, a little more pushed and stooped, the lights of his office and clinic burning a little longer into the night. How long can he maintain the function and role of the personalized physician? Will the modern setting and demands allow such as he ever to come out of the medical schools again?
Most health professions, and I am speaking now mostly of the educational programs necessary to educate and train the personnel at the professional level, are no longer based upon the single level of competence, and the new educational programs emerging at the medical schools and graduate centers indicate this. The physician, the doctor, for this new age through the medium of hospital and laboratory, mobilized a wide group of competencies which supplement and extend his own, and he must be able to organize, administer, and supervise these competencies and the personnel representing them as well as perform highly specialized medical functions. The educational institution must take note of the education for these other competencies and articulate it with that of the physician. The need for the professional level program is obvious and desperate, but more and more the role of this person must be defined more strongly than it is now in administration of services and the personnel to perform them, in decision and over-all policy making that will provide sound and effective structures for the performance of health and medical services by others, in teaching and instruction, in research and study. The professionally educated person with the baccalaureate, or master's or doctor's degree must be the one to break the barriers of medical sciences, tear down the enveloping curtains of ignorance, open the doors to new techniques, new procedures, new devices and concepts, so that supportive personnel may follow and exercise the functions he has defined.

However, let no misunderstanding come into our discussion here. There are still those functions of skill, of talent, of educated genius that must be performed. It is still the surgeon who must wield the scalpel, the diagnostician who detects the slow movement of disease, even though he may translate his skill and talent and knowledge to the impersonal impulse of an electronic computer, the internist who prescribes with exactitude, the dentist who gives the right and deft touch to the impacted tooth, and so on ... but this personnel, with their talent and skill and genius, must receive a new kind of education and a new concept of their role and function. Not so much are new programs then emerging from the universities, the medical schools, the health education centers, but revised and modified educational programs are found. This is, of course, not to say that there are not some entirely new programs, educating and training new personnel for new jobs, on the university level, but the great majority of the new careers, the new programs, in the health fields are found in the less than baccalaureate degree level institutions ... most of the professional personnel so badly needed in this new age have been identified for a long time. Their functions have changed, their roles are different, their education far more complex and weighty, but their position and place has long been known. The new careers, the new personnel and the new programs for them is in the supportive field to them.

What do we mean by "support" personnel?

There is a little story, obviously apocryphal, that tells the beginning of paramedical personnel needs in the dental profession. One day, so the story goes, a weary dentist with his one chair office, looked into his crowded waiting room and sighed. Many of his patients were waiting for the less demanding kind of services that he provided: oral examination, sepsis of healing wounds from previous treatment, X-rays for diagnosis of troubles, cleaning of teeth and oral hygiene-- and the dentist said to himself, "I need help. I could teach someone to do these other things and prepare my patients for treatment. Now if I only had another chair or two, I could devote myself to the serious professional problems, I could clear my
waiting room faster, and I could handle more patients." Today, of course, this is exactly what is happening. My own dentist has his own office, but it is quite a sizable establishment. There are four chairs: while he is treating one patient, another is being prepared by a dental assistant, another is getting oral X-ray from another assistant, and the fourth is experiencing oral hygiene and teeth cleaning from the dental hygienist. The dentist is doing more, and probably doing it more effectively than ever before. Where did all these helpers, the new paramedical or, if we want to be specific in this case, the new paradental personnel get their training? At the community junior college, most likely, in a well-planned two year program leading to an Associate degree. They are the new breed: the health technician, the paramedic.

Here, then, on this level of education is the great new challenge, the new opportunities, the provisions for meeting new needs. Dr. Robert Kinsinger has identified about forty health related and paramedical programs which have been defined as appropriate to the educational program of a junior college. The U. S. Labor Department has named approximately one hundred programs in the health related fields, but many of these are on the vocational level of the aide or assistant level of work.

What are some of these developing programs on the community junior college level? There are several programs that we like to call our older, more "mature" curriculums, such as the associate degree nursing program, centering its training and education on the personnel for registered nurse group. These people are the bed-side nurses, and it probably will not be long until most of the bed-side, practicing nurses in our clinics, hospitals, and nursing homes will come from this associate degree program. There are about 190 associate degree nursing programs in our nation now, and last year over 13,000 students were enrolled in these programs. More are being added in the junior college field each year, and even now larger numbers are registering in our colleges. Another "mature" program is the dental hygiene curriculum, carefully developed by the American Dental Association, and still another the dental assisting program.

At this time we are hard pressed to report to you with accuracy the number or the current developmental status of new programs. The New York Times for June 8 headlines: "School for Aides to Doctors Urged." The news article goes on to state: "... the school would train rehabilitation personnel, nurses, medical laboratory technicians, and optometrists... it could help pioneer new health center educational programs. Medical practice in the future is likely to be increasingly dependent on a team composed of doctors and supporting staff. Some of the supporting medical staff are being graduated in the community junior colleges... but programs must be expanded."

The Community College Health Careers Project of the University of the State of New York discusses in a news release community junior college programs in Ophthalmic Dispensing, X-ray Technology, Operating Room Technology, Medical Emergency Technology, Inhalation Therapy Technology. Reports from the junior college field coming into our Washington office tell us of junior college programs in Environmental Health Technology, Occupational Therapy Assisting, Biomedical Engineering Technology, Medical Record Technology, Medical Secretaryship, Medical Librarian's Aide. Several of the rapidly growing new junior college programs include Unit Ward Manager for
Hospitals and Medical Laboratory Technician, which may also include optional specialities such as the Cytotechnologist or the blood bank technician.

Most of you received the Health Careers Questionnaire before coming to this Institute, listing a number of medical and health careers, both on the professional and the semi-professional or technician level. A review of that list in your leisure time will indicate again the number, variety, and uniqueness of these programs.

Before we leave this part of our discussion, one stark and somewhat frightening fact should be emphasized. All the new programs in medical and health fields are being developed, planned for, and implemented in the light and from the experience of present practices and needs. Certainly these have offered stimulus and guidance as we have rapidly forged ahead from the era past to the era present. But we know as surely as time is the consuming factor of our lives that the current practice and the present experience will change and move on, and the education now received by our students will itself become outmoded. Thus educational development today is focusing not only on the body of knowledge and skill needed to do the job **now**, but is also offering broad backgrounds of basic principles and procedures designed to allow for future educational building and adding to by the student, thus producing, we hope, the flexible, moving forward person we need. Let me cite one example that has emerged far enough for an outline to become visible of this forward movement. In several of our community junior colleges there are programs for Prosthetic technicians, personnel needed to plan, make, and fit artificial limbs, fingers, toes. But we are on the verge of a new expansion of the art and skill of the prosthetic technician. Already experiments are reaching the "break-through" point for the artificial heart... and soon it will be quite possible for us, as our old heart begins to wear out and give trouble to us, simply to replace it with a new one... or a new lung, or stomach, or kidney. For the prosthetic technician, a vast new, much more complicated world has opened up, and a new future confronts him. How different the design, manufacture, and functioning of a new heart, or kidney, or lung from the artificial leg or hand. But the technician must be prepared to move forward into his new world, and the educational process must also be "on the move" to give him skill and competence in his new world. This sort of advance will be expected in almost all of the medical and health fields, and the trumpet call for "dare and do" has already been sounded for education.

What are the problems facing us in medical and health education? What frustrations are bearing down on us? Where do we go from here?

Of all the occupational areas, the medical and health fields, right now, is the most dynamic and the most challenging, and perhaps, is feeling the pressures for need and demand more acutely than others. The Surgeon-General of the United States has expressed the need for mid-manpower health workers at 10,000 new personnel each month for the next ten years, or some 1,200,000 in the next decade.

In this education area the work of the university and college, but especially the community junior college, is to teach the right people in the right way at the right time and place. But to do the job, the colleges face
serious problems, several of which are presented for your consideration.

First, the general public, and students and their parents in particular, have expressed very little enthusiasm or exhibited very little interest in these kinds of occupational programs or in these careers as an educational objective. A continuing forceful program to acquaint the public with the worth and importance of occupational education is necessary. All resources of the college must be used in this never-ending campaign. Basic procedures in such an informational program would lead to:

(a) emphasizing the attractiveness of such education
(b) emphasizing the career opportunities of such programs
(c) emphasizing the career prestige of the whole health and medical field
(d) emphasizing the objectives of the program that places it in the realm of goals to be sought after, to be coveted, to be worked for
(e) emphasizing that there is no magic in the baccalaureate degree as such. Worth, importance, and career dignity will come as quickly to the competent, the able, the skilled as to the "degreed" person.

Assuming that strong, forceful programs can be developed to interest students and to make the medical and health careers attractive, what are our sources of students?

There are several sources of students for paramedical programs -- but all require various degrees of active recruitment. The college that develops a program and then sits back with doors open waiting for students to come in is doomed to disappointment and frustration.

(a) Our largest source of students is the high school graduate -- but once again, the junior college that depends wholly upon high school graduates for its students in health related programs will experience enrollment disappointment. All sources should be explored and, yes, exploited.

(b) Current college students who have been misdirected into other programs, or who have entered programs through false or misunderstood objectives, or who, for many reasons, may be frustrated in their college work, may be re-counseled into the paramedical programs.

(c) Adults who now wish to or find the need to engage in a career may be motivated into programs.

(d) Adults who practiced a health profession years ago, and who now wish to re-enter the profession, may need much refresher work.

(e) Adults currently in a health related career who wish to move into another field or upgrade themselves in their present employment may be interested.
However, we emphasize that in order to attract students from any of these categories into the paramedical programs a dynamic, aggressive, well-planned program of information, encouragement, and counseling must be undertaken.

Second, at this time our career counseling and guidance programs, both on the high school as well as the college level, are not giving effective positive support to the health and medical educational programs or the possibilities for careers. Frequently we find some frustrations in recruiting students for paramedical programs stemming from attitudes and counseling of high school guidance personnel, and in many cases we have caused these frustrations ourselves. We in the junior colleges have not developed thorough, acceptable techniques of cooperation and coordination with our high school colleagues, and consequently what is finally done on a frantic expedient kind of basis is ineffective and sometimes even distasteful to the high school counselor. We need to set up continuing working relationships with the high school counseling staffs and faculties, we need to start students to thinking about career choices much earlier than the senior year, we need to devise well-planned and prepared programs of information for students as well as for counselors, not on a "one-shot" career or college day procedure, but a continuing program, beginning early in the high school years. There would seem to be no doubt that counseling must become more aggressive and emphasized for career choices to the large and growing group of young people undecided on career choices. We must make a more concerted and more aggressive attempt to dig deeply into the "hard-to-reach" group of young people, who, because of socio-economic reasons, believe that continuing or post high school education is far beyond them, or whom society believes do not conform to typical middle class conceptions of the "college student". We need to find answers to questions such as: What procedures, programs or experiences developed to meet the decline of vocational experiences for young people (most young people have no work experiences and therefore have little knowledge of the world of work)? What kind of exposures to vocations should they have? What program in force can we adopt to meet current "rental" pressures for professional education without regard to the ability, or interests of their children? How can we combat the widely held belief that machines and technology are replacing all workers and occupational personnel below the supervisory or "professional" level, and therefore, professional education and the baccalaureate degree is a must for everybody?

A third problem in this particular field of education, although it is also found in others, is the built-in restrictiveness of the programs. Our various levels of education and the institutions representing them do not do much articulation of endeavor and efforts...not too much real talking goes on among them. Let me give you an example: A young person enters the practical nurse education program on the vocational level, and while receiving education there discovers a growing and developing talent and motivation. Means can be found to proceed beyond the practical nurse level. Can this be done now without sacrificing the time and money and learning already a factor? In very few institutions or from very few levels of education, if any. But let us think for just a moment: Why isn't it reasonable that this student be able to go directly into the associate degree nursing program on the junior college level without penalty?
Or from the associate degree program to the university baccalaureate degree program? We realize that several curriculum adjustments must be made, but shouldn't it be possible for this continuation of education to be realized for able and developing students? The ladder of progression in education should be possible. We like to call this the open-ended curriculum, and we believe it will aid immeasurably in removing the restrictiveness of educational programs that today frustrates and discourages students from entering occupational programs. Mobility of movement in educational programs should be horizontal as well as vertical, with flexibility and adaptability an underlying principle.

We have talked a long time about many things affecting the education and training of people for the medical and health fields, but we feel the subject is important and the issues involved challenging and grave. A desperate necessity frames the responsibility that rests upon the shoulders of everyone engaged in counseling, directing, and guiding young people as they go through the door leading to the tomorrows of their lives. May our knowledge increase, our perceptibility sharpen, our sensitiveness to need surround us, our wisdom direct us, so that our efforts with those who depend upon us will be meaningful and worthy.
FUTURE ACTIVITIES OF GUIDANCE COUNSELORS
IN OUR EDUCATIONAL SYSTEM

Fred Hechinger
Educational Editor
New York Times

July 22, 1966

It's almost impossible to talk to you about guidance and future guidance without at least etching out some of the really dominating trends in education itself and the scene in which you work. To me this is documented most eloquently by a story that a scientist told. His grandfather used to drive around in a horse drawn carriage. In the day of the automobile his father drove around in cars, but was afraid of flying. He himself, he said, goes cross country in jet planes almost every week without giving it a second thought. But he was somewhat concerned about the future travel in space. Then he stopped for a minute and finally stated that his six-year-old son seemed to be totally unconcerned about any danger of space travel but was scared to death of the horse-drawn carriage. In a sense, this summarizes the problem of the world we live in and the problems of education. It illustrates the fact that of all the scientists that ever lived, 90% are alive today.

Another aspect of the world of change which seems significant to me is illustrated by the United States census. In 1950, the census was tabulated and processed by an army of 4,200 statisticians. In 1960, 10 years later, it was taken care of by 60 statisticians and their computers.

Aside from that, what strikes me most about the changes in the educational scene is something that I don't think has been given a name as yet. For lack of an official name, I refer to it as the new timing of education. It's something that creeps into our lives and our children's lives virtually unnoticed and much of it without our doing anything about it. Again let me give you an example.

We have a little boy who is now five years old. One morning when he was just two I took him to Central Park. At one of the entrances where there are steps leading down to the Park (he was holding onto my hand) he completely surprised and startled me by counting the steps as we walked down. By suddenly starting to count the steps out loud he counted from 1 to 10. Now we knew that nobody had taught him to count and we became interested in how he had learned. In that no man's land between his breakfast and ours he had been watching television. This is not an unusual thing for a child that age to do and he had become very much intrigued by the man who tries to seduce housewives into doing calisthenics. If you do calisthenics you have to count, so he learned how to count.

This is only a small, but very typical example of what happens in this new timing of education. Children learn...they learn very early and learn from all sorts of things. They learn concepts and ideas and have specific information that children before them didn't have.
At the same time that this new timing takes over, unhappily, something else takes place. The privileged and the middle class child learn earlier and more rapidly and almost without effort. However, the less fortunate child, the children of the disadvantaged (one fifth of the country) become a more serious problem. This is the reason why we are now trying to build up confidence with specific programs such as Head Start, etc. And all this is part of the new timing of education.

New timing, as you know, was responded to not long ago by suggesting that all children start some form of schooling, maybe a different kind of schooling than they'd known in the past, at age 4 rather than 5½ or 6. And new timing, of course, takes over the other area - the area which you are much more concerned with - in extending schooling beyond the high school for the great majority of young people. Extending it into either college or junior college or the equivalent. Incidentally, just before I left my office I got a release from Harvard University which said the School of Education (I'm reading this to you as a warning of things to come) has received a grant from the Office of Education to develop some form of an information system to help students from kindergarten through college to improve their decisions about careers and vocations.

Timing makes the new meaning of education become important. The new meaning of education itself can be expressed very simply. At the turn of the century approximately 6% of the age group completed high school. Now approximately 35% of the age group go to college, or a college type of institution. This just completely changes the entire education scene. These are not changes that you can call changes in degree. These are changes so revolutionary that they have made an impact on everything that is done and thought about in education.

At the same time as these changes are taking place you have, of course, the enormous influence of the change in the labor market. The new meaning of education is influenced by the new labor market. In the labor market, you know, there is very little room and increasingly less room for the uneducated or the poorly educated.

I'd like to talk to you in the setting of this education scene. I'd like to talk to you very briefly of what I think are some of the major challenges to guidance experts in the present and future systems of education. I'd like to start with a very simple, now almost old hat, challenge which most of you have come to grips with. Then I'll proceed to the more difficult ones that may still lie in the future.

The first, I think, is to transmit to parents the real facts about what happens after high school. And this of course means in many instances to transmit to parents the facts about colleges and college type institutions. Great progress has been made in the last few years toward reducing the amount of misinformation, wrong ideas and wrong aspirations that parents have. I think that with the help of such people as you the misconceptions have been reduced enormously and a much greater amount of realism put into parents' aspirations for their children and the type of institutions they want them to attend. But there is still a great deal of work to be done, and there
is still a great deal to be learned by all of us who work in this field. To be learned about the changing nature of institutions, the rapidity with which institutions change, the constantly reduced time span between the college changing from a fourth rate to perhaps a second or even first rate institution.

It's very instructive to remember that in the forties, not too long ago, one of the outstanding college admissions experts in talking about the Ivy League colleges wrote, "If the check is good and the body is warm, you're in." This was the admissions' officer of what is today one of the most selective institutions.

This is the first challenge, to transmit to the students the changing facts of education.

The second challenge, I think, is to transmit to students the changing facts of employment. I think one of the most important areas of changing facts of employment in which the guidance counselor can become involved, not only as a source of information but as an active agent in bringing about necessary changes, is the emergence of what I would call the sub-divisions of professional jobs. This is replacing traditional stereotyped fields of work such as in the area which you have been working with in the last week, the area of health careers. To many people in the past health careers included only doctors and nurses. Very little was known about the other occupations related to these. The health professions have probably been the pioneers in this whole team approach to various areas of work and employment in professional activities. In other areas this is still in the developing stages. I would be willing to predict that in the next 10 or 15 years there will be a growth of allied or sub-professional fields related to professional fields.

The emergence of various sub-professional fields will be one of the great changes in employment and it will be up to such experts as you to transmit understanding of what it means to work in these allied areas, these various sub-professional, sub-college, or sub-university fields. And that means, almost automatically, that I think you will be more and more involved in the development of the community colleges. This is probably an area of similar revolutionary impact to the creation of the land grant colleges of over a hundred years ago. Here a new kind of institution is being created, shaped by forces in and out of education. It's being shaped where is works best, and to a considerable extent by a partnership of the educational forces and the employers. And when I say employers I mean both management and labor because in the development of future needs that kind of partnership is inevitable to education.

A little over a year ago I toured the community colleges in California which really to me were taking a look at the future. It is there that the community college is not only a bridge between high school and university or between high school and the employment market, but it has become so fully developed that it now can be bet that 9% of all high school graduates have a community college within commuting distance of their homes.
I have seen these colleges grow up, starting out on beautiful campuses with 7,000 or 8,000 students. And I've seen in those places the kind of vocational development that we are only just beginning to develop here. I saw in one college a classroom which was equipped with the most modern and exotic equipment, about $250,000 worth of such equipment, so up to date that the college was still looking around for someone qualified to teach. I saw in some of these institutions people being trained in everything from fender repair to the most sophisticated advanced work in electronics, in scientific police work, etc. This is the real opportunity of the future - to coordinate the experience of school and vocational work. And this of course is the area in which your kind of work will eventually be most fruitful for the great mass of students who are beyond the high school, but not as far as college and graduate work.

Another area of concern for you is to transmit to business, industry and government the facts about what prevents young people from seeking certain careers. You are the ones who are in closest contact with these young people, you know why they turn against this, you know what keeps them out, you know what the restrictions are, what the limitations are. And it will be increasingly up to you and your professional organizations to tell the community, to tell government and business and industry what the facts are. If conditions are bad then the task is to improve them, not to try to fool the kids because you will find very quickly, as so many of you have found out already, that trying to counsel people into exciting professions in which conditions are very poor is not only difficult, but is in the long run of concern to both the profession and the student. If business fails to inspire young people, don't fall in line and blame the young people for it, but try to tell business. Try to help tell business to re-examine its own aims, to question whether there aren't some reasons, some legitimate reasons why young people are not attracted to business.

The fourth area of activity for you in the future, as I see it, is to accept change but to accept it critically. To put it the other way round, do not accept it uncritically. I commute every night to Long Island, I go to Penn Station every day and make my way through the war torn approaches to the railroad and I come across on these occasions a public relations sign some smart PR man devised which reads something like this: "Pardon the inconvenience while we are building a new station." Of course, that's a lie. They're not building a new station, they're tearing down the old one!

This was one of the examples where we didn't examine the change and accepted it or at least let it come about. This is true with your profession. Don't reject change, don't reject that most talked about change today...the computer and everything it means but learn what it is good for and what it's dangers may be. I would be willing to predict that those of you who will be in this profession within the next ten years will be using computers and some may be now. You will be using the computer greatly. You will be using it to replace some of your files, to help you keep track of people and records and to help you in diagnosing.

I think there are vast areas in which computers will be of great importance. There are equally large areas in which you must resist. You
must resist, for instance, and I think this is a key area in which you have to put up a strong battle, handing your changes over to the computer. Use the machine as a tool. Don't stand in its way or the way of progress, but remain in charge of the ultimate mission. This mission is between you and the student and not between the computer.

The story that is being told on the college campuses at present is of the school that was entirely computerized. All the programs and assignments came through the computer and so did all the disciplinary action. One day one of the students violated one of the dormitory rules and the Dean fed into the computer the appropriate information and nothing happened. The computer didn't transmit any kind of punishment to the student. The Dean was upset but decided to give it another chance. When the next infraction came about shortly thereafter he again fed the information into the computer. The computer did nothing. He stormed into the computer's office and asked him by feeding the proper paper into the computer's mouth what he thought he was doing inasmuch as he had failed to punish the student for doing something wrong. The answer came out of the computer and it said, "I've got a heart."

I think it's good to keep this in mind. It will remain up to you to use the machine, but don't trust the computer. They have a heart, for a long time to come. Mechanize your files but not your minds and thoughts. Study the personalities of your pupils, but don't push the personality and psychology tests just because they're popular. Study them, see what they are worth. Don't accept them unless you think they are really worth something. Prevail against tests that are bad or slipshod. Some of them are bad because of the principle behind them. Some of them are bad because they are badly executed.

I found our little boy doing one of the pre-reading tests which we didn't give to him, but which he found on my desk and was doing. The words started with the same letters so that a child learns to identify the pictures and from it the letters that the pictures were aimed at. Well, when he came to the letter "C"...what was meant to be the letter "C"...there were a couple of pictures. One of them showed a cake, a cake and a candle on it, and to our boy and I'm sure to millions of other children it was not the letter "C" but the letter "B" because a cake with a candle on it is a birthday cake.

When you come across this kind of thing in your work rebel against it. When you come across bad work, slipshod tests, let the authorities know about it. You are the ones at the source who can help inform in an area in which far too much has been accepted because it was commercially available. In other words, be critical without being reactionary.

Fifth, try to spot difficulties in your student, but if they are beyond your expertise don't diagnose it and treat them. Let the health, medical and psychological authorities take over when you discover a potential problem. Most of all, be discreet. I stress this, because we have run into increasing numbers of cases where colleges have actually turned down students because they have had in their past background some kind of psychiatric treatment. This is a potentially serious matter. It can be very damaging to great numbers of students. It is also educationally and medically totally indefensible. The fact that a student has had some psychiatric treatment should certainly not exclude him from college admission. The fact is simply that many students in the past have
have been admitted without any trouble because there was no psychiatric aid. The fact that the care is now being offered shouldn't exclude these students.

Now it becomes doubly important for you to be extremely discreet, to know whom you are working with and whom you are giving the information to. I shudder to think what might happen in some of our more primitive suburbs where sending children to psychologists is the equivalent to letting them learn how to swim. You could virtually exclude all of them from college admission. You would also discourage a great many parents from giving psychiatric treatment to young people who need it and who might very well be helped and salvaged.

Sixth, make yourselves responsible for the training of teachers. Don't hold on to Guidance as an isolated and tightly guarded specialty. The day-to-day teacher can do many things which the best specialists, even under ideal conditions (and I know I've heard it said at lunch today that most of your work is under far from ideal conditions) cannot accomplish through occasional interviews. I think it is desperately important that those of you who are privileged to be experts in this field become, in the future, trainers of teachers so that the teachers can work on an every day basis with the great majority of children while you try to solve the more serious problems of a relatively small number of students.

Seventh, try to make your parents aims lower and your children's aims higher. I think this is a terribly important concept. External pressures, which are the pressures parents bring to bear, can be very bad. But internal pressures or aspirations in children, aspirations to achieve more, are essential. So as you inspire children to aim higher, persuade parents at the same time to aim a little lower. When I say, make your children aim higher, I mean this very sincerely.

I think there is a tendency in all professions, and there is in yours, to think that if you've gotten rid of a case you've accomplished the job. Therefore, there is a tendency to aim low because it's easier to place a child whether it's in college or in employment. I think the challenge ought to be to take risks; to make children aim higher than perhaps they think they can achieve.

Then, of course, there's the over-riding new priority to inspire among your colleagues who are teachers, faith in the ability of disadvantaged students. When I say faith in the ability of these students I don't mean just having tough and firm-minded expectations, but making them know that you have these expectations. This is a tough job, a job of overcoming defeatist apathy without engendering soul-picking. Increasingly this job may have to be carried out in partnership with other professions, with social workers, with teachers, with community agents and with both the employers and the college Deans. But in this area you also must do your part in fighting for equal employment practices, or if they don't exist, in exposing the violations.

Finally, I would say that in a very general way, but an important one, I will expect you to help me scotch the rumor that we are running out
of work. I get terribly distressed when I listen to some educators and some economists with dire predictions that because of the new technology we are about to run out of work and that therefore, education must turn more of its efforts to teaching young people how to face the future by dealing with leisure time.

Dealing with the employment of leisure time has always been an important aspect of education. I don't want to be limited. I remember how shocked I used to be when I was overseas with the Armed Forces and used to see American soldiers, all of whom had completed school, really lost in some of the foreign cities. Some of these cities were great centers of culture with unlimited opportunities of doing things and our soldiers were unable to cope with the time that they were free to do what they wanted to do. So I don't belittle the importance of this by-product of education, of knowing what to do with your own time. But I am very much concerned about the growing idea that we are running out of work.

I don't believe this is so. There may be a few areas of labor in which the work week is getting shorter but in the areas where the work week is getting shorter our past experience has been that people instead of having more leisure, simply take a second job. If you give the Sunday sailorman three days a week he is very likely going to turn himself into a commercial fisherman so your problem of dealing with leisure time becomes rather academic. Instead of this, if you want to join me in the conspiracy to scotch these rumors, get young people to look around them and see what remains to be done. And I am convinced if they look at the schools, if they look at the slums, and the hospitals, and if they look at the foreign countries that need help and our own cities which need to be rescued, they will find plenty of areas in which there is work to be done.

If they think about the air we breathe that has to be purified, and the water we drink that has to be freed again of the pollution; if they think about the enormous tasks of bringing beauty back to the land where it has been destroyed, then I am convinced that there is an unlimited vista of unfinished business. Yours is the task and the opportunity to guide young people and to see how much there is to be done and how endless the challenges are. Yours is, I think, the task of reassuring the young that they are not, or at least need not be, nameless numbers in a mechanized society. You can and you must show them that with hard work and sound reason, even in the age of technology, many can use the new instruments, master them, and still master their own destiny.
PARTICIPANT INFORMATION

All of the participants in the Guidance Counselor Institute for Health Careers were in positions where they counsel young people on health careers.

The educational and professional background of the participants differed considerably. Of the 32 people representing New York City public schools, five were registered nurses. Of these five, two were full time guidance counselors specializing in health careers and three were directors of the health service departments, acting as health careers resource persons for students, teachers and counselors. One participant from the New York City public schools was a physical education teacher responsible for health classes in which health careers was discussed.

All of the counselors from the public schools had taught previously as licensure in guidance is contingent upon two years of teaching experience. Although their teaching areas of specialization differed, all had taken graduate courses in guidance and most had received a masters degree in the field.

All of the people representing parochial schools held masters degrees in guidance.

The seven people representing New York State Employment Service all held B.A. degrees. Two had taken some graduate work in counseling and one held an M.A. degree.

The following gives a breakdown of the participants in the Institute.

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GUIDANCE COUNSELOR INSTITUTE FOR HEALTH CAREERS
UNITED HOSPITAL FUND OF NEW YORK

July 7 through July 22, 1966

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Miss Barbara F. Grumet
Youth Placement Service
500 Eighth Avenue
New York, N.Y. 10018
Lo 3-7660, Ext. 625
Home Address: 2632 West 2nd Street
Brooklyn, N.Y. 10423

Miss Clementine Holmes
Yorkville Vocational High School
421 East 88th Street
New York, N.Y. 10028
Sa 2-1600
Home Address: 29-43 Gillmore Street
East Elmhurst, N.Y. 11369
Hi 6-0095

Alan Horwitz
Employment Consultant Counseling
New York State Employment Service
State Campus, Albany, N.Y.
Gl 7-2315
Home Address: 278 So. Main Avenue
Albany, N.Y. 12208

Miss Dorothy B. Joseph
George Washington High School
549 Audubon Avenue
New York, N.Y. 10040
Wa 7-1845
Home Address: 26 Dorchester Road
Eastchester, New York 10709
914-Wo 1-8426

Sister Dolores Mary Kelly
Cathedral High School
560 Lexington Avenue
New York, N.Y. 10022
P1 5-9106
Home Address: 605 First Avenue
New York, N.Y. 10016

Miss Marjorie Kepp
Wm. Maxwell Vocational High School
145 Pennsylvania Avenue
Brooklyn, N.Y. 11207
Home Address: 35 Spruce Avenue
Floral Park, N.Y.

Miss Em. Korner
Canarsie High School
1600 Rockaway Parkway 11236
Br 2-7103
Home Address: 1017 East 38th Street
Brooklyn, N.Y. 11210

Mrs. Gwendolyn Leapheart
State Office Building Campus
Division of Employment, Bldg. 12
Albany, N.Y. 12201
Gl 7-2315
Home Address: 389 Washington Avenue
Albany, N.Y. 12206
Phone: 465-6083

Mrs. Willie B. Leftwick
Division of Employment
370 Seventh Avenue
New York, N.Y. 10001
Lo 3-7660
Home Address: 477 Decatur Street
Brooklyn, N.Y. 11233
Gl 2-2104

Benjamin Litzwin
Seward Park High School
350 Grand Street
New York, N.Y. 10002
Home Address: 370 Ocean Parkway
Brooklyn, N.Y. 11218

Mrs. Laura B. London
James Madison High School
3787 Bedford Avenue
Brooklyn, N.Y. 11229
Es 7-7055
Home Address: 135-19 230th Street
Laurelton, N.Y. 11413
La 5-2319

Thomas Luskin
James Monroe High School
1318 Boynton Avenue
Bronx, N.Y. 10472
Ty 3-5800
Home Address: 16-44 212th Street
Bayside, N.Y. 11360
Fa 1-2375

Mrs. Gloria F. Manning
Seward Park High School
350 Grand Street
New York, N.Y. 10002
Or 4-1514
Home Address: 287 Van Buren Street
Brooklyn, N.Y. 11221
Gl 2-3758
Miss Maxine F. Marcus
Newtown High School
48-01 90th Street
Elmhurst, N.Y. 11373
592-4300
Home Address: 111-39 76th Road
Forest Hills, N.Y. 11375
Bo 8-7470

Sister Miriam David Masterson, O.P.
St. Nicholas of Tolentine
2335 University Ave.
Bronx, N.Y. 10468
or
Dominican College
Blauvelt, New York
914-El 9-3400
Home Address: 2341 University Ave.
Bronx, N.Y. 10468
Cy 8-2410

Brother Eugene D. McKenna
Counseling Center
Iona College
New Rochelle, N.Y. 10801
Ne 6-2100 Ext. 247
Home Address: Same as above

Brother William McNamara
99 Auburn Street
Lawrence, Mass. 01841
or
Mt. St. Michael Academy
4300 Murdock Avenue
Bronx, N.Y. 10466
Home Address: 99 Auburn Street
Lawrence, Mass. 01841

Miss Eileen P. Meehan
Seward Park High School
350 Grand Street
New York, N.Y. 10002
Or 4-1514
Home Address: 615 East 14th Street
New York, N.Y. 10009
Apt. 10F

Mrs. Sophie Mencher
Canarsie High School
1600 Rockaway Parkway
Brooklyn, N.Y. 11236
Home Address: 675 Wyona Street
Brooklyn, N.Y. 11207
G1 7-1357

Miss Mattie Parson
Mabel Dean Bacon Vocational High School
127 East 22nd Street
New York, N.Y. 10003
Gr 5-6875
Home Address: 471 West 159th Street
New York, N.Y. 10032
Lo 8-7505

Sister Joanne Regina
St. Helena High School
915 Hutchinson River Parkway
Bronx, N.Y. 10465
Home Address: St. Helena Convent
935 Hutchinson River Pkwy
Bronx, N.Y. 10465

Mrs. Lydia Rojas
Junior High School 145
Arturo Toscanini Junior High School
1000 Teller Avenue
Bronx, N.Y. 10456
588-8050
Home Address: 1061 Jerome Avenue
Bronx, N.Y. 10452
Wy 2-6261

Miss Muriel Rybnick
Prospect Heights High School
883 Classon Avenue
Brooklyn, N.Y. 11225
St 3-5890
Home Address: 611 Argyle Road
Brooklyn, N.Y. 11230
Ul 9-3546

Mrs. Maria A. Santos
James Monroe High School
1300 Boynton Avenue
Bronx, N.Y. 10472
Ty 3-5800
Home Address: 2123 Virgil Place
Bronx, N.Y. 10472
Ta 9-9883

Mrs. Florence M. Schneider
Jamaica Vocational High School
Jamaica, N.Y. 11432
Home Address: 84-16 251st Street
Bellerose, N.Y. 11426

Miss Ellen M. Schwarz
John Adams High School
Rockaway Blvd., Ozone Park, Queens
Home Address: 123-60 83rd Avenue
Kew Gardens, N.Y. 11415
Miss Angelina Seccafico  
Washington Irving High School  
40 Irving Place  
New York, N.Y. 10003  
Home Address: 6923 12th Avenue  
Brooklyn, N.Y. 11228  
Be 2-0246

Sister Mary Seraphine, R.S.M.  
St. Simon Stock High School  
2195 Valentine Avenue  
Bronx, N.Y. 10457  
Se 3-9539  
Home Address: St. Simon Stock Convent  
2250 Ryer Avenue  
Bronx, N.Y. 10457

Michael J. Sherlock  
New York State Division of Employment  
601 James Street  
Syracuse, N.Y.  
622-8121  
Home Address: 411 No. Highland Avenue  
East Syracuse, N.Y.  
437-4798

Mrs. Bella Siegel  
Eli Whitney Vocational High School  
257 N. 6th Street  
Brooklyn, N.Y. 11211  
Ev. 7-7658  
Home Address: 1411 Linden Blvd. Apt. 10K3  
Brooklyn, N.Y. 11212  
Hy 6-4817

Miss Leonore I. Simon  
Fort Hamilton High School  
8301 Shore Road  
Brooklyn, N.Y. 11209  
Sh 8-1. 7  
Home Address: 33-06 92nd Street  
Jackson Heights, N.Y. 11372  
Tl 7-8819

Mrs. Anne D. Spiegel  
Junior High School 158  
Oceania Street & 47th Road  
Bayside, N.Y. 11367  
Ba 4-1244  
Home Address: 86-42 Clio Street  
Hollis, N.Y.

Miss Shirley Weinberg  
43-14 60th Street  
Woodside, N.Y. 11377

Mrs. Pauline Weinstein  
Francis Lewis High School  
Utopia Parkway  
Flushing, 11365  
Fl 7-7740  
Home Address: 24-69 Kissena Boulevard  
Flushing, N.Y. 11355

Miss Rita A. Wickman  
Julia Richman High School  
317 East 67th Street  
New York, N.Y. 10021  
Tr 9-6870  
Home Address: 276 First Avenue  
New York, N.Y. 10009

Hyman Wolozin  
Aviation High School  
36th Street & Queens Blvd.  
Long Island City, N.Y. 11101  
Em 1-2032  
Home Address: 587 East 8th Street  
Brooklyn, N.Y. 11218
HEALTH CAREERS QUESTIONNAIRE

1. Do you have sufficient information in your files on the following health careers to feel competent in counseling your students?

<table>
<thead>
<tr>
<th>Career</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiologist &amp; Speech Pathologist</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>Certified Laboratory Assistant</td>
<td>13%</td>
<td>87%</td>
</tr>
<tr>
<td>Cytotechnologist</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Dental Hygienist</td>
<td>54%</td>
<td>46%</td>
</tr>
<tr>
<td>Dental Laboratory Technician</td>
<td>41%</td>
<td>59%</td>
</tr>
<tr>
<td>Dental Assistant</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Dentist</td>
<td>63%</td>
<td>37%</td>
</tr>
<tr>
<td>Dietitian</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>EEG &amp; EKG Technician</td>
<td>1%</td>
<td>99%</td>
</tr>
<tr>
<td>Health Educator</td>
<td>24%</td>
<td>76%</td>
</tr>
<tr>
<td>Home Economist</td>
<td>51%</td>
<td>49%</td>
</tr>
<tr>
<td>Hospital Administrator</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>Housekeeper</td>
<td>17%</td>
<td>83%</td>
</tr>
<tr>
<td>Inhalation Therapist</td>
<td>0%</td>
<td>100%</td>
</tr>
<tr>
<td>Medical Illustrator</td>
<td>8%</td>
<td>92%</td>
</tr>
<tr>
<td>Medical Librarian</td>
<td>31%</td>
<td>69%</td>
</tr>
<tr>
<td>Medical Record Librarian</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Medical Secretary</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Medical Technologist</td>
<td>34%</td>
<td>66%</td>
</tr>
<tr>
<td>Specify Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
2. From what source(s) was the information in Question 1 obtained?

36% The specific professional organization

36% Dictionary of Occupational Titles

66% Occupational Outlook Handbook

29% Health Careers Guidebook

29% Other. Please explain Metropolitan Life Insurance, SRA Chronicle

Government Health Career Booklets

Career Occupational Briefs

3. Do you have the following health resource materials at your disposal?

<table>
<thead>
<tr>
<th>Material</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where to Get Health Careers Information</td>
<td>19%</td>
<td>77%</td>
</tr>
<tr>
<td>Dictionary of Occupational Titles</td>
<td>50%</td>
<td>46%</td>
</tr>
<tr>
<td>Occupational Outlook Handbook</td>
<td>82%</td>
<td>17%</td>
</tr>
<tr>
<td>Health Careers Guidebook</td>
<td>29%</td>
<td>67%</td>
</tr>
<tr>
<td>College &amp; Vocational School Guides</td>
<td>65%</td>
<td>34%</td>
</tr>
</tbody>
</table>

4. Do you use visual aids to help promote health career opportunities?

Yes 55%  No 45%

If yes, from what source do you obtain these aids?

33% Visual Education Department

23% Specific Professional Organizations

13% Other

5. Do you have assemblies to promote health career opportunities?

Yes 38%  No 62%  If Yes, how do you arrange for specific programs?

6. Do your students attend the Saturday Career Conferences?

Yes 71%  No 29%
7. Have you arranged and conducted student tours to interest your students in various careers? 66% Yes 29% No. If yes, in what career areas?

Nursing

If no, why not?


9.(a) Do you encounter difficulties in arousing student interest in health careers? 40% Yes 51% No. If yes, what are they?

1. Limited Aspirations.
2. Limited Intelligence.
3. Lack of Information as to what job entails.
4. Only know of nurses and physicians.

9.(b) Do your students express any reluctance to enter careers in the health field? 34% Yes 52% No. If yes, what reasons do they give? Poor salary, Poor working conditions, Low-status (except for physicians)

10. What do you see as the primary needs of counselors in relation to health careers?

1. Up to date information and materials concerning opportunities, requirements, and rewards (financial and personal).
2. Placing average and weak students including those not going to college.
3. Meeting with authorities in the field.
4. Information (i.e., pamphlets) to be passed out to students.
5. Information on financial aid available.
6. Information on training facilities.
7. Need for more counselors and more time to counsel students (the present overload of clients precludes effective counseling).
Appendix F

MATERIALS DISTRIBUTED AT THE INSTITUTE

OCCUPATIONAL OUTLOOK REPORT SERIES, U.S. Department of Labor, Washington, D.C.

Biological Scientists
Chiropractors
Counseling and Placement
Dental Hygienists
Dental Laboratory Technicians
Dentists
Dieticians
Dispensing Opticians
Home Economists
Hospital Administrators
Medical Record Librarians
Medical Technologists
Medical X-ray Technicians
Occupational & Physical Therapists
Optometrists
Osteopathic Physicians
Pharmacists
Physicians
Podiatrists
Registered Professional Nurses,
Licensed Practical Nurses,
Hospital Attendants
Sanitarians
Social Workers
Speech Pathologists & Audiologists
Veterinarians

CAREERS IN HOSPITALS, American Hospital Association, Chicago, Ill.

CAREER OPPORTUNITIES, New York Life Insurance Co., New York, N. Y.

HEALTH CAREERS GUIDEBOOK, U.S. Department of Labor, Washington, D.C.

GOING TO COLLEGE IN NEW YORK STATE, State Education Department, Albany, N. Y.

NEED A LIFT?, American Legion, Indianapolis, Ind.

PROFESSIONAL SCHOOLS IN THE HEALTH FIELD, Reprinted from Journal of the American Hospital Association

NURSING MATERIALS FROM THE NATIONAL LEAGUE FOR NURSING, New York, N. Y.

School of Professional Nursing
Let's Be Practical About a Nursing Career (with a list of state approved schools of Practical Nursing)
Do You Want To Be A Nurse?
College Education: Key to a Professional Career in Nursing
Look to Your Future in Public Health Nursing
Look to Your Future in Mental Health and Psychiatric Nursing
Nursing Pictorial Chart for a Bulletin Board Display
Books on Nursing (Including Fiction & Biography)
A National Charter for Your Future Nurses Club
Films on Nursing Careers
Men Working for a Career in Nursing
Scholarships & Loans - Professional and Practical Nursing
Fact Sheet - The Nursing Shortage
Nursing - Your College Major
NLN - Pre-Nursing Tests
Nursing Education Programs Today
YOUR CAREER IN SANITARY ENGINEERING, U.S. Public Health Service, Washington, D.C.

THE PROFESSIONAL SANITARIAN, National Association of Sanitarians, Denver, Colo.

HOSPITAL, A HAVEN OF HEALTH AND HOW TO KEEP IT THAT WAY, National Association of Sanitarians, Denver, Colo.

YOUR CAREER OPPORTUNITIES IN PHARMACY, Charles Pfizer & Co., Inc., New York, N.Y.

HOW TO DECIDE ON DENTISTRY, American Association of Dental Schools, Chicago, Ill.

NEW DIMENSIONS IN DENTISTRY, American Association of Dental Schools, Chicago, Ill.

DENTISTRY - A CAREER OF SERVICE, SATISFACTION, AND DISTINCTION, American Association of Dental Schools, Chicago, Ill.

CAREERS IN DENTAL HYGIENE, American Dental Hygienists Association, Chicago, Ill.

THE DENTAL HYGIENIST, Faculty of Dental and Oral Surgery, Columbia University, New York, N. Y.

ACCREDITED DENTAL ASSISTANT PROGRAMS, American Dental Association, Chicago, Ill.

CHOOSE A CAREER IN MENTAL HEALTH, National Association for Mental Health, New York, N.Y.

CAREER OPPORTUNITIES IN THE PUBLIC HEALTH SERVICE, U.S. Public Health Service, Washington, D.C.

RIVERSIDE HEALTH CENTER, New York City Department of Health, New York, N. Y.

REQUIREMENTS AND SALARIES IN NEW YORK CITY DEPARTMENT OF HEALTH, New York City Department of Health, New York, N. Y.

TWENTY QUESTIONS AND ANSWERS ABOUT SOCIAL WORK, Social Work Recruiting Center of Greater New York, New York, N. Y.

TO CANDIDATES FOR GRADUATE PROFESSIONAL SOCIAL WORK EDUCATION, National Committee for Social Work Careers, New York, N. Y.

OPTOMETRY - A CAREER WITH VISION, American Optometric Association, St. Louis, Mo.

OCCUPATIONAL THERAPY HANDBOOK, American Occupational Therapy Association, New York, N.Y.

SPEECH PATHOLOGY AND AUDIOLOGY, American Speech and Hearing Association, Washington, D.C.

TRAINEESHIP ASSISTANCE FOR UNDERGRADUATE STUDY IN PROSTHETICS AND ORTHOTICS, New York University School of Education, New York, N. Y.

CHOOSE MEDICAL TECHNOLOGY, Registry of Medical Technologists, Muncie, Ind.

NEW YORK STATE EMPLOYMENT SERVICE MAY BE ABLE TO HELP YOU, New York State Department of Labor, Albany, N. Y.

THE HEALING ATOM, E. R. Squibb and Sons, New York, N. Y.

WELCOME TO THE NEW YORK HOSPITAL, New York Hospital, New York, N. Y.

NO SMALL JOB, A HANDBOOK OF INFORMATION FOR EMPLOYEES OF THE NEW YORK HOSPITAL, New York Hospital, New York, N. Y.

IPMR, Institute of Physical Medicine and Rehabilitation, New York, N. Y.

UNITED HOSPITAL FUND PUBLICATIONS, New York, N. Y.

United Hospital Fund - A Tradition of Service
Health Careers Chart
Annual Report
Management Memo
Appendix G

FILMS

The Challenge of Dentistry, American Dental Association, Chicago, Ill.
Opportunities in Dentistry, American Dental Association, Chicago, Ill.
Dental Hygiene
The Dental Assistant

Cytology - Part I, Churchill, Wexler Film Productions, Los Angeles, Calif.
The Healers, Montefiore Hospital and Medical Center, New York, N. Y.
People Who Care, National Association for Mental Health, New York, N. Y.
New Beginning, Institute for Physical Medicine and Rehabilitation, New York, N. Y.
Report on the Evaluation of
Guidance Counselors' Institute on
Health Careers
UNITED HOSPITAL FUND

Prepared by
PROFESSIONAL EXAMINATION SERVICE
March, 1967
This is a report on the evaluation of an institute to acquaint guidance counselors with health careers. The evaluation was undertaken by the Professional Examination Service at the request of the United Hospital Fund under a grant from the U.S. Department of Health, Education, and Welfare administered under the Vocational Education Act of 1963.

The Health Careers Program developed as one approach to dealing with the manpower need in the health field. Since high school guidance counselors are in a position to advise students about potential employment opportunities, the United Hospital Fund planned the institute to acquaint a group of New York City counselors with health careers by means of lectures, discussions and tours of various health facilities. The twelve-day institute, which began July 7, 1966, and ended July 22, 1966, was also seen as a pilot project which might serve to establish a pattern for future institutes.

The Professional Examination Service was asked by the United Hospital Fund to develop evaluative tests to measure one aspect of the effectiveness of the institute, namely, the acquisition of knowledge. In order to determine meaningfully the increase in counselors' knowledge of health careers following attendance at the institute, it was agreed that the Professional Examination Service would develop and administer three examinations to the participating counselors, and, in addition, to a control group of counselors who did not attend the institute. These three examinations were to be administered as a pretest, as an immediate post-test to measure learning, and as a delayed post-test, four months after the institute, to measure retention of the materials presented.

Relatively few efforts have been made to make objective evaluations of short-term institutes. Reliance is usually placed on the use of questionnaires and subjective opinions. This project should, therefore, be thought of as a pilot project. It demonstrates that it is possible to measure the effects of a short training period objectively and suggests possibilities for extending the usefulness of such measures.
On April 18, 1966, an Advisory Committee meeting was held at the offices of the Professional Examination Service, 1790 Broadway, New York City. The Committee included the following members:

Mr. Philip W. Morgan, Staff Associate
United Hospital Fund of New York

Mr. Caesar Branchini
Office of Community Service and Public Health
Equitable Life Assurance Society

Dr. Alva C. Cooper
Career Counselor and Placement Director
Hunter College

Miss Caroline Flanders
Director
Women's Activities Division
United Hospital Fund of New York

Dr. Robert E. Kinsinger
Community College Health Careers Project

Dr. Robert Rothermel
Director of Training and Personnel
New York City Department of Health

Miss Mary Leder
Administrative Assistant, Training and Personnel
New York City Department of Health

Mrs. Eleanor Schweppe
Assistant Director
Women's Activities Division
United Hospital Fund of New York

Mrs. Jerome Strauss
Member, United Hospital Fund
Health Manpower Advisory Committee

All members of the Committee were present except Dr. Alva C. Cooper. The Professional Examination Service was represented by Dr. Lillian D. Long, Director; Mrs. Emily M. Schneider, Staff Associate; Dr. Ralph LoCascio, Staff Associate; Mr. Monroe Werthman, Editor; Mrs. Rose Gahan, Consultant in Social Work, and Miss Anna W. Skiff, Consultant in Health Education.
The Advisory Committee focused on three major areas:

1. Definition of the Purpose of the Examinations

   It was agreed that the examinations would:
   a) discover how much the counselors know about health careers before the institute started
   b) measure the increment of knowledge immediately upon the conclusion of the institute
   c) assess retention of knowledge after a period of four months.

2. Examination Content

   The Committee developed the following outline for the examinations:

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Advisory Committee's Suggested Weightings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling Principles</td>
<td>20%</td>
</tr>
<tr>
<td>Scope of Manpower Problem</td>
<td>5%</td>
</tr>
<tr>
<td>Health Career Knowledge</td>
<td>60%</td>
</tr>
<tr>
<td>Use of Information</td>
<td>15%</td>
</tr>
</tbody>
</table>

   It will be noted in the outline that the major emphasis was on Health Career Knowledge.

   An important decision made by the Committee was that the questions in the examinations should not be based on the actual content of the lectures to be given, but that they should each test for information that the Committee hoped would be in the possession of the candidates at the conclusion of the course. Some of this information might have been acquired through direct instruction, some by reading, some by discussion and observation.

   The Committee, in short, knew its objectives for the institute and attempted to convey these, separately, to the faculty and to the evaluators. The extent of its success in doing so can be seen from the discussion beginning on page 7 and presented in Table 1.
3. Item Construction

The Committee was advised that approximately 450 items would have to be constructed for the three forms of the examination. Since there was relatively little time available before the start of the institute, the usual Professional Examination Service procedure for soliciting items would have to be modified to ensure an adequate supply of examination items by June 24, 1966 (the date agreed upon for delivery of the first examination). The Committee members agreed to submit lists of potential item writers as quickly as possible.

Following the meeting, the names of potential item writers were submitted by several members of the Advisory Committee. Attachment 1 is a listing of these names. A letter was sent to these people (Attachment 2) accompanied by a checklist with detailed instructions (Attachment 3), background material on the Health Careers Institute (Attachment 4), and standard instructions on the writing of multiple-choice questions (Attachment 5).

At the suggestion of Dr. Kinsinger, telephone contact was made with Mrs. Margaret D. West, of the Department of Health, Education, and Welfare, to arrange for a meeting with her in Washington, D.C., for the purpose of obtaining items in the area of manpower needs. On May 5 and May 6, Mrs. Schneider and Mr. Werthman of the Professional Examination Service staff went to Washington and worked with Mrs. West and her staff on the writing of items. The total number of items written by Mrs. West and her staff was 36.

The mail appeal, which was followed up by intensive telephone contact, yielded the following results as of June, 1966:

- Number of appeal letters sent (May, 1966): 115
- Number of persons who sent in items: 53
- Number of persons declining: 35
- Number of persons not heard from: 26
- Number of persons who promised to write items - outstanding as of present date: 5
- Total number of items received: 478
The questions were edited by the Professional Examination Service editorial and psychological staffs in consultation with a number of Professional Examination Service subject-matter consultants who were able to provide expert guidance in terms of the content of many of the items. Due to the limited amount of time available for preparation of the three tests the questions were not sent out to review panels as is typically done with items in the Professional Examination Service files prior to their inclusion in an examination, but were reviewed by Mr. Morgan, Dr. Rothermel and Miss Leder (members of the Advisory Committee), and by Mrs. Gahan and Miss Skiff, Professional Examination Service consultants.

Of the 478 new items received, 263 were omitted at various stages of the editing and reviewing procedure and 215 were retained for use in the three examinations. Although each examination was originally planned to include 150 items, this number was reduced to 145 items per examination with the approval of Mr. Morgan of the United Hospital Fund.

To supplement the new items, a search was made of the Professional Examination Service files by all Professional Examination Service consultants. The number of new items and Professional Examination Service file items used in each examination follows:

- Examination I: 83 new items, 62 file items
- Examination II: 72 new items, 73 file items
- Examination III: 94 new items, 51 file items

The Examinations

Each examination consisted of 145 items. The first 30 counseling questions were included primarily to alleviate test anxiety on the part of the counselors by presenting them, initially, with familiar material. In addition, these
questions could yield data for a qualitative analysis of the counselors' knowledge of basic counseling principles. The next eight items were concerned with the scope of the manpower problem; 90 items dealt with the necessary aptitudes, education, and training for health careers, the financial assistance available for receiving training, and the nature of the work; the final 17 items had to do with sources and use of information concerning health careers.

<table>
<thead>
<tr>
<th>Subsection</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counseling Principles</td>
<td>30</td>
</tr>
<tr>
<td>Scope of Manpower Problem</td>
<td>8</td>
</tr>
<tr>
<td>Health Career Knowledge</td>
<td>90</td>
</tr>
<tr>
<td>Use of Information</td>
<td>17</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>145</strong></td>
</tr>
</tbody>
</table>

**Subjects and Procedure**

The United Hospital Fund recruited the guidance counselors who attended the institute (henceforth referred to as the experimental group) by sending letters to all high school principals in metropolitan New York explaining the purpose and nature of the institute, and asking them to relay this information to their guidance counselors. Those counselors who were interested and available were to fill out and return post cards which had been enclosed with the original letter. Examination I was taken by 41 counselors in the experimental group, 40 of whom took Examination II, 36 of whom took Examination III. The statistical analysis is based on the 36 counselors who took all three examinations. The control group (guidance counselors who did not attend the institute) was recruited by letters to high school principals, and also by suggestions of the experimental group as to colleagues who might be willing to serve as controls. All three examinations were administered to 37 counselors in the control group. One of these counselors was randomly excluded in order to have an equal number of subjects in the control and experimental groups.
A list of the raw scores and ranks of each counselor in both the experimental and control groups is presented in the appendix. The control and experimental groups were not matched systematically, but seemed reasonably comparable on an inspection basis.

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Examination I</th>
<th>Examination II</th>
<th>Examination III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Counselors=36</td>
<td>7/7/66 (Before Institute)</td>
<td>7/21/66 (After Institute)</td>
<td>12/10-13/66 (4 months after Institute)</td>
</tr>
<tr>
<td>Date of Examination</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Counselors=36</td>
</tr>
<tr>
<td>Date of Examination</td>
</tr>
</tbody>
</table>

Every effort was made in the construction of the three examination forms to ensure the subject matter equivalency of these forms by careful choice of items. There was, however, no statistical evidence that they were in fact equivalent forms in difficulty level prior to their administration. Pressures of time made it impossible to pretest all items in advance of the construction of the examinations. The purpose of the control group was to provide a means of evaluating the equivalency of the three examinations in order to determine whether changes in scores of the experimental group could be attributed to learning and retention rather than to differences in examination difficulty.

Discussion of Results

In understanding the results it is important to remember that the examinations were constructed by the Professional Examination Service without access to the lecture material to be presented at the institute. After the administration of the first two examinations to the experimental group, staff members at the United Hospital Fund who had attended the institute training sessions went through each item on Examinations I and II to determine whether the
information required to answer the item had been imparted by the institute training. Those items where the information was included are here designated as "covered" by the institute, while those items where the information was not included are designated as "not covered" by the institute. Table 1 presents the number and percentage of items on the Total and subsections of Examinations I and II which were "covered" by the institute. For both examinations more than half the items were "covered". However, the subsections vary in the number of items "covered". The Career Knowledge section is certainly the best "covered" of the subsections. The subject matter of this section was of greatest importance to the Advisory Committee, for not only was this section intended to constitute almost two-thirds of the examination, but a great percentage of these items were dealt with in the institute.

The Counseling section, primarily included to alleviate test anxiety, did not have any of its items "covered" in the institute. It was decided to exclude the results of the Counseling section from the data. Therefore, in the analysis of results, any reference to "Total" should be understood as meaning the combined scores of the Manpower, Career Knowledge, and Use of Information sections (115 items).

Approximately half the items in the Manpower and Use of Information sections were "covered" and since these sections contained the least number of items to begin with, it would not have been very meaningful statistically to treat them separately. They have therefore been combined with the Career Knowledge section to yield a "Total" score.

Table 2 gives the means, standard deviations, and ranges for the Total examination and sub-examinations of both the experimental and control groups. It is interesting to note that the range of the two groups on Examination I shows that out of a total of 115 questions, the highest score obtained in the control group was 71, and the highest score in the experimental group was 77, so that
Table 1

NUMBER AND PERCENTAGE OF EXAMINATION ITEMS "COVERED" BY THE INSTITUTE *

<table>
<thead>
<tr>
<th>Section</th>
<th>Examination</th>
<th>Number of Items &quot;Covered&quot;</th>
<th>Percentage of Items &quot;Covered&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number of Items &quot;Covered&quot;</td>
<td>Percentage of Items &quot;Covered&quot;</td>
</tr>
<tr>
<td></td>
<td>I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>86</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>84</td>
<td>53</td>
</tr>
<tr>
<td>Counseling</td>
<td>I</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Manpower</td>
<td>I</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>6</td>
<td>75</td>
</tr>
<tr>
<td>Career Knowledge</td>
<td>I</td>
<td>75</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>69</td>
<td>77</td>
</tr>
<tr>
<td>Use of Information</td>
<td>I</td>
<td>7</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>II</td>
<td>9</td>
<td>53</td>
</tr>
</tbody>
</table>

* Information not available for examination III.
Table 2

CONTROL GROUP AND EXPERIMENTAL GROUP
MEAN, STANDARD DEVIATION, AND RANGE OF RAW SCORES

<table>
<thead>
<tr>
<th>TOTAL (Excluding Counseling)</th>
<th>MANPOWER</th>
<th>CAREER KNOWLEDGE</th>
<th>INFORMATION</th>
<th>COUNSELING</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONTROL GROUP (N=36)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Mean</td>
<td>61.36</td>
<td>3.69</td>
<td>48.94</td>
<td>8.72</td>
</tr>
<tr>
<td>SD</td>
<td>6.23</td>
<td>1.45</td>
<td>5.33</td>
<td>1.52</td>
</tr>
<tr>
<td>Range</td>
<td>46-71</td>
<td>0-6</td>
<td>36-58</td>
<td>5-12</td>
</tr>
<tr>
<td>EXPERIMENTAL GROUP (N=36)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>63.86</td>
<td>4.50</td>
<td>50.03</td>
<td>9.33</td>
</tr>
<tr>
<td>SD</td>
<td>6.99</td>
<td>1.16</td>
<td>6.43</td>
<td>1.64</td>
</tr>
<tr>
<td>Range</td>
<td>49-77</td>
<td>1-7</td>
<td>37-63</td>
<td>6-13</td>
</tr>
</tbody>
</table>
the "ceilings" of the examinations were presumably high enough. Table 3 gives the results of a comparison of Total mean scores between the two groups on each of the three examinations. On Examination I there is no significant difference between the experimental and control group means, showing that the initial knowledge of health careers of the two groups was at about the same level. On Examination II and Examination III, however, the experimental group scores were significantly higher than the control group scores.

The primary interest in this study is the investigation of score changes between examinations for the experimental group as a measure of learning and retention. Table 4 compares the difference in Total scores\(^1\) between Examination I and Examination II (the measure of learning) and between Examination I and Examination III (the measure of retention) for both the experimental and control groups. One would not expect significant score differences between the examinations for the control group inasmuch as they did not attend the institute and took all the examinations at one sitting. The fact that Table 4 shows a significant increase in score for the control group between Examination I and Examination II and a significant decrease between Examination I and Examination III indicates that the examinations were not, in fact, of equal difficulty. Examination II was the easiest of the examinations, Examination I was somewhat more difficult, and Examination III the most difficult. Since Examination I is harder than Examination II, the significantly higher scores of the experimental group on Examination II are not surprising. Examination III is harder than Examination I and the scores of the control group dropped significantly. The experimental group scores, however, did not show such a drop.

Table 5 gives a comparison of difference score between the experimental and control groups.\(^2\) If score changes for the experimental group are due

2 Ibid, p. 156
Table 3

COMPARISON OF TOTAL MEAN SCORES BETWEEN THE EXPERIMENTAL AND CONTROL GROUPS ON THE THREE EXAMINATIONS

<table>
<thead>
<tr>
<th>Examination</th>
<th>Control</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination I</td>
<td>Control</td>
<td>61.36</td>
<td>6.23</td>
<td>1.60</td>
<td>Not Significant *</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>63.86</td>
<td>6.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination II</td>
<td>Control</td>
<td>66.31</td>
<td>6.73</td>
<td>6.53</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>76.53</td>
<td>6.55</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination III</td>
<td>Control</td>
<td>59.08</td>
<td>7.42</td>
<td>2.77</td>
<td>.01</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>64.11</td>
<td>8.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Inasmuch as there could be no way of predicting whether one group would score higher than the other on examination I, a two-tail test was used. In all other t tests a one-tail test was appropriate.
### Table 4

**TOTAL MEAN DIFFERENCE SCORES (\( \bar{D} \)) ON EXAMINATION I VS. EXAMINATION II AND EXAMINATION I VS. EXAMINATION III FOR CONTROL AND EXPERIMENTAL GROUPS**

<table>
<thead>
<tr>
<th>Examination I vs.</th>
<th>( \bar{D} )</th>
<th>SD</th>
<th>t</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>* + 4.94</td>
<td>5.71</td>
<td>+ 5.19</td>
<td>.001</td>
</tr>
<tr>
<td>Experimental</td>
<td>+ 12.67</td>
<td>5.05</td>
<td>+ 15.06</td>
<td>.001</td>
</tr>
<tr>
<td>Examination I vs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination III</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>- 2.28</td>
<td>6.46</td>
<td>- 2.12</td>
<td>.025</td>
</tr>
<tr>
<td>Experimental</td>
<td>+ 0.25</td>
<td>6.92</td>
<td>+ 0.22</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

* + means that scores on Examinations II or III are greater than scores on Examination I.

### Table 5

**COMPARISON OF TOTAL MEAN DIFFERENCE SCORES (\( \bar{D} \)) BETWEEN CONTROL AND EXPERIMENTAL GROUPS**

<table>
<thead>
<tr>
<th>Examination I vs.</th>
<th>( \bar{D} )</th>
<th>SD</th>
<th>t</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination II</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>+ 4.94</td>
<td>5.71</td>
<td>6.08</td>
<td>.001</td>
</tr>
<tr>
<td>Experimental</td>
<td>+ 12.67</td>
<td>5.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination I vs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination III</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>- 2.28</td>
<td>6.46</td>
<td>1.60</td>
<td>.10 (Trend)</td>
</tr>
<tr>
<td>Experimental</td>
<td>+ 0.25</td>
<td>6.92</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* + means that scores on Examinations II or III are greater than scores on Examination I.
simply to variations in test difficulty, no differences between the difference scores of the experimental and control group should be found. However, if differences between the two groups are found, they can be attributed to the effect of the institute on the experimental group. Table 5 shows that there is a highly significant difference between the experimental and control group on Examination I vs Examination II. Thus, the experimental group improved their scores significantly more than the control group, showing the effect of the institute on learning. When the control and experimental groups are compared on Examination I vs Examination III, the control group shows a decrease in score on Examination III (the hardest examination) while the experimental group does not show this decrease. The difference between the two groups is significant at the .10 level. This is a measure of the persistence of the effectiveness of the institute over a period of time.

**Conclusion**

The findings show that the effect of a short-term institute can be measured by an objective multiple-choice test even when that test is based on the general stated purposes of the institute rather than on specific lecture content. It can further be shown that there is a loss of knowledge increment four months after the institute, but that the level of test achievement of those who attended the institute persists in being higher than that of a control group. One would expect some loss of knowledge over time on the basis of what is known about the normal learning curve. We suggest that the counselors' exposure to the institute may have sensitized them to health material, which could result in further individual learning following the institute. Or, the retention may be of specific material presented in the institute.
It is also worth noting in terms of future institutes, that the particular four month time period between the two post-tests in this study may well have worked against the retention of learning. While the beginning of a summer vacation is for obvious reasons, such as counselor availability, a convenient time for an institute, it is conceivable that during a subsequent ten-week vacation, the forgetting of recently acquired information may proceed more rapidly than it would have if the institute had been given immediately prior to the beginning of school. In the latter case, the counselors could have reinforced their new learning by putting it to use at once in work with their students through informing them of opportunities in the health field.
<table>
<thead>
<tr>
<th>I.D.#</th>
<th>TOTAL (Excluding Counseling)</th>
<th>MANPOWER</th>
<th>CAREER-KNOWLEDGE</th>
<th>INFORMATION</th>
<th>COUNSELING</th>
<th>RANK</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>I</td>
<td>II</td>
</tr>
<tr>
<td>78</td>
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<td>77</td>
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<td>84</td>
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<td>71</td>
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<td>64</td>
<td>72</td>
<td>62</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: The table represents data from an experimental group with raw scores.
<table>
<thead>
<tr>
<th>I.D.#</th>
<th>TOTAL (Excluding Counseling)</th>
<th>MANPOWER</th>
<th>CAREER-KNOWLEDGE</th>
<th>INFORMATION</th>
<th>COUNSELING</th>
<th>RANK</th>
</tr>
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<td>49  62  49</td>
<td>11  9  11</td>
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</tr>
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<td>10  10  13</td>
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<td>43  62  49</td>
<td>10  9  11</td>
<td>18  18  18</td>
<td>26.0</td>
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<td>37  54  44</td>
<td>11  9  8</td>
<td>25  21  20</td>
<td>36.0</td>
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</table>

**EXPERIMENTAL GROUP - RAW SCORES (continued)**
<table>
<thead>
<tr>
<th>I.D. #</th>
<th>TOTAL (Excluding Counseling)</th>
<th>MANPOWER</th>
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Manager, Clinical Investigations
Charles Pfizer Company
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College Entrance Examination Board
College Scholarship Service
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New York, New York 10027

Naomi Weiss
Interdepartmental Health Council of New York City
125 Worth Street
New York, New York 10013

MISCELLANEOUS

Mrs. Jerome Strauss
1185 Park Avenue
New York, New York 10028
LETTER TO POTENTIAL ITEM WRITERS

Dear:

At the suggestion of a committee of the Health Careers Program of the United Hospital Fund, we are writing to ask for your help in the evaluation of an institute for training guidance counselors in the opportunities for careers in health.

The twelve-day institute for 50 counselors from public and parochial secondary schools in New York City will be held this summer. It is being supported through a grant from the Department of Health, Education, and Welfare, under the terms of the Vocational Education Act of 1963. The institute has been planned as a pilot project which, it is hoped, will serve as an impetus to, and provide a format for, future institutes of this type throughout the country. A program of lectures, seminars, and tours of health facilities will acquaint guidance counselors with the many and diverse opportunities and satisfactions of health careers and will teach counselors where to find and how to use health careers materials.

To evaluate the effectiveness of such an institute is a complex task. There are unquestionably many outcomes and results which not only cannot be measured, but which may not even be identifiable. It is possible, however, to measure the increase in the knowledge of the participants, and it is in connection with this task that we ask your help. The plan is to test the participants before, immediately following, and some months after the institute. The Advisory Committee to the project (cf. Attachment 1) is providing direction in the development of the testing material and has engaged the services of the Professional Examination Service because of its 25 years of experience in the construction of examinations for the evaluation of professional competence in the health fields.

We are asking a group of knowledgeable people such as yourself to assist in this important effort by writing up to 10 multiple-choice questions in designated areas. We hope that you will be able to undertake this assignment. Because the institute is scheduled for July 7, 1966, we are going to have to proceed with speed and would like to have such questions as you may be able to write by May 20. Although the usual honorarium paid by PES for questions is $1.25 each, we will pay $3.00 for each question submitted.

For your information, we are enclosing a brief description of the material to be presented at the institute (Attachment 2). The Committee is seeking questions that test for a knowledge of the scope of the manpower problem; occupational characteristics, including advantages and disadvantages of health careers; training resources; essential aptitudes; counselor and counselee needs; and sources and use of information.
In Attachment 3, we have presented a breakdown of the potential content of the test. Will you please use this checklist as a guide in your writing of questions. We are also enclosing a set of instructions for writing multiple-choice questions. Please read this carefully before you start.

This effort to evaluate one aspect of a training program is itself a pilot task and may yield results that will have a significant bearing on other efforts to deal with health manpower shortages.

Please return the enclosed postcard as soon as you receive this letter so that we will know whether or not you are planning to participate. We need your help and look forward to receiving your questions.

Sincerely yours,

Lillian D. Long, Ph.D.
Director

LDL:ms
Enclosures
CHECKLIST INSTRUCTIONS

You are being asked to write 10 questions in the areas you select from those listed on the attached checklist. It was suggested that you are particularly qualified to write questions in the general area of but you may, of course, submit items in any of the areas listed.

We would like you to return one of the enclosed checklists so that we have a record of how many questions are being written in each area. On the line preceding the topic of your choice note the number of questions you will write in that area. Please send the checklist with your questions to:

Emily M. Schneider
Professional Examination Service
1790 Broadway
New York, N.Y. 10019

If you look at the checklist you will see that area 02 is a list of job titles in the health field. These are the health careers that are going to be discussed at the institute (cf. Attachment 2). This list is essentially a reminder to you of the many types of jobs available in the health field that guidance counselors should know something about. Your questions should be designed to find out just how much they do know about these different professional and non-professional health careers.

The area 03 refers to the kinds of information a counselor should have regarding any one of these positions. The areas 04 to 09 focus on the same type of information. The emphasis here, however, is on these aspects of the career as they are affected by the particular setting, e.g., what kind of training, education, financial assistance, etc., does a nurse need who wishes to work in public health, rehabilitation, mental health, etc.

The remaining areas (01, 10, 11, 12) cover more general areas and may or may not be related to a specific job title.

We have tried to make the procedure very explicit, but if you do have any questions, please feel free to call Mrs. Schneider at CI 5-8000, Extension 4.
Attachment 3

CHECKLIST FOR HEALTH CAREERS

01. MANPOWER NEEDS
   __  01. Legislation
   __  02. Current needs
   __  03. Future trends

02. JOB TITLES
   __  01. Audiologist and Speech Pathologist
   __  02. Certified Laboratory Assistant
   __  03. Cytotechnologist
   __  04. Dental Hygienist
   __  05. Dental Laboratory Technician
   __  06. Dental Assistant
   __  07. Dentist
   __  08. Dietitian
   __  09. EEG & EKG Technician
   __  10. Health Educator
   __  11. Home Economist
   __  12. Hospital Administrator
   __  13. Housekeeper
   __  14. Inhalation Therapist
   __  15. Medical Illustrator
   __  16. Medical Librarian
   __  17. Medical Record Librarian
   __  18. Medical Secretary
   __  19. Medical Technologist
   __  20. Nurse Aide & Orderly
   __  21. Nurse, Registered Professional
   __  22. Nurse, Licensed Practical
   __  23. Nutritionist
   __  24. Occupational Therapist
   __  25. Optician, Dispensing
   __  26. Optometrist
   __  27. Osteopathic Physician
   __  28. Orthoptist
   __  29. Pharmacist
   __  30. Physical Therapist
   __  31. Physician
   __  32. Podiatrist
   __  33. Prosthetist and Orthotist
   __  34. Rehabilitation Therapist
   __  35. Sanitarian
   __  36. Social Worker, Medical
   __  37. Veterinarian
   __  38. X-Ray Technician
   __  39. Other

03. GENERAL
   __  01. Job description
   __  02. Aptitudes and education
   __  03. Training (on-the-job, internships, voluntary, etc.)
   __  04. Financial assistance (grants, fellowships- public and private)
   __  05. Working conditions (wages, hours)
   __  06. Advancement opportunities
   __  07. Job satisfaction (service)
   __  08. Other

04. CAREERS IN REHABILITATION
   __  01. Job description
   __  02. Aptitudes and education
   __  03. Training (on-the-job, internships, voluntary, etc.)
   __  04. Financial assistance (grants, fellowships- public and private)
   __  05. Working conditions (wages, hours)
   __  06. Advancement opportunities
   __  07. Job satisfaction (service)
   __  08. Other
05. **CAREERS IN PUBLIC HEALTH**

- 01. Job description
- 02. Aptitudes and education
- 03. Training (on-the-job, internships, voluntary, etc.)
- 04. Financial assistance (grants, fellowships - public and private)
- 05. Working conditions (wages, hours)
- 06. Advancement opportunities
- 07. Job satisfaction (service)
- 08. Other

06. **CAREERS IN OPTICAL FIELD**

- 01. Job description
- 02. Aptitudes and education
- 03. Training (on-the-job, internships, voluntary, etc.)
- 04. Financial assistance (grants, fellowships - public and private)
- 05. Working conditions (wages, hours)
- 06. Advancement opportunities
- 07. Job satisfaction (service)
- 08. Other

07. **CAREERS IN MENTAL HEALTH**

- 01. Job description
- 02. Aptitudes and education
- 03. Training (on-the-job, internships, voluntary, etc.)
- 04. Financial assistance (grants, fellowships - public and private)
- 05. Working conditions (wages, hours)
- 06. Advancement opportunities
- 07. Job satisfaction (service)
- 08. Other

08. **CAREERS IN DENTAL FIELD**

- 01. Job description
- 02. Aptitudes and education
- 03. Training (on-the-job, internships, voluntary, etc.)
- 04. Financial assistance (grants, fellowships - public and private)
- 05. Working conditions (wages, hours)
- 06. Advancement opportunities
- 07. Job satisfaction (service)
- 08. Other

09. **HEALTH CAREERS IN INDUSTRY**

- 01. Job description
- 02. Aptitudes and education
- 03. Training (on-the-job, internships, voluntary, etc.)
- 04. Financial assistance (grants, fellowships - public and private)
- 05. Working conditions (wages, hours)
- 06. Advancement opportunities
- 07. Job satisfaction (service)
- 08. Other
10. SOURCES OF OCCUPATIONAL INFORMATION
   01. General
       a. Publications
   02. Health
       a. Publications
       b. Audio-visual
       c. Community resources
       d. Other

11. DISSEMINATION OF OCCUPATIONAL INFORMATION
   01. Counselor files
   02. Career days
   03. Hospital and health agency tours
   04. Other

12. VOCATIONAL EDUCATION FOR COUNSELORS
   01. In-service health programs
   02. Released time for student tours
   03. Curriculum development
   04. Role of community colleges
   05. Other
The health service industry is one of the nation's largest employers and it is still growing. The need for expanded recruiting and training efforts for health personnel has been compounded by recent governmental health legislation. The problems of attracting qualified personnel are many-faceted and vary in degree of importance. Some of these problems include:

- lack of knowledge about emerging health opportunities;
- ineffective recruitment materials, e.g., literature, films, visual aids, etc.;
- poor image created by unattractive salaries, long hours, and poor fringe benefits;
- lack of health career advancement possibilities;
- lack of training facilities, e.g., public schools, on-the-job, and in-service;
- poor channels of communication between health career organizations, health practitioners, guidance counselors and educators;
- lack of a single source to collect health manpower data to show a total picture of health manpower and related needs.

**Agenda for Institute**

1st day: Testing: Administration of the first test to gain an insight of the knowledge of the participants regarding health careers. The test will be presented before distributing any of the papers prepared by major speakers to be heard during the rest of the institute. This will permit a truer evaluation of the participants' knowledge prior to the institute.

Keynote Address: "The Health Services Industry- Today and Tomorrow."

2nd day: Speech: "Dissemination of Health Occupation Materials."

Speech: "Current and Projected Needs for Manpower in Health Careers." This will relate to both local and national shortages.

3rd day: Explanation of the health careers of pharmacist, hospital administrator, medical librarian, physician and nurse, and of the many types of assistants needed by these professions to aid them. Examples include pharmacy assistants, licensed practical nurses, aides and orderlies, etc.

A tour of a hospital like Mount Sinai will be taken to view the careers discussed in the morning session.
4th day: Presentation of health career opportunities for x-ray technicians, cytotechnologists, medical technicians, inhalation therapists, EEG and EKG technicians, certified laboratory assistants, medical record librarians, medical secretaries, medical illustrators, and housekeepers.

5th day: Presentation of health careers related to rehabilitation. A look at the opportunities to work with rehabilitation counselors, occupational therapists, physical therapists, audiologists, and speech pathologists, and psychologists. Also included will be the careers of the prosthetist and orthotist. A tour of a rehabilitation hospital and/or nursing home.

6th day: A presentation of the para-medical careers related to public health positions, such as health educators, medical social workers, sanitarians, dieticians, home economists, and nutritionists.

A tour of an optical laboratory will illustrate the careers in optometry, orthoptics, optical laboratory mechanics, and dispensing optician.

7th day: Talk on careers in the mental health field and tour of a mental hospital. A tour of a dental school and a presentation of the opportunities to serve as a dental hygienist, dental laboratory technician or dental assistant.

8th day: Presentation of careers not previously covered and small group sessions to discuss tours of the past week. Health careers to be covered here include the assistants needed to aid veterinarians, osteopaths, and podiatrists. A tour of an industry such as Pfizer Laboratory to point out the opportunities for health careers in industrial settings.

9th day: Talk: "Utilizing Community Resources." The talk would tell counselors where to get information on hospital tours, literature for bulletin boards, speakers for assemblies, PTA programs, etc. The talk would also tell of the opportunities for students to work in either paid or voluntary positions in the health industry. (Red Cross Youth Program, Candy Stripers, etc.) A review of the "Dictionary of Occupational Titles," and how it can be used in counseling students.

Talk: "Regional Planning for Health Manpower."
10th day: Talk: "Financial Assistance Available for Health Careers." Discussion of federal and state loan programs, and other financial assistance programs available from sources such as civic organizations, the Urban League, etc.

11th day: A panel presentation of "New Vocational Education Training Programs to Meet Health Manpower Needs." Included would be: in-service health training program needed for counselors, educators, librarians, etc.; released time requirements for counselors to supervise students; curriculum development, and the role of community colleges.

12th day: Small group sessions to consider such questions as: identification of small multi-media approaches which could be used in health careers recruitment; how the information learned in this institute can best be made available to other counselors; the need for additional training institutes for counselors in the health field; adaption of course content to fit into regular curriculum of graduate schools; and the future role of the United Hospital Fund Health Careers Program.
The Professional Examination Service of the American Public Health Association has, since 1941, been engaged in a program to develop written examinations for the evaluation of professional competency. These examinations cover a wide range of fields of training and levels of achievement and are used by state, local and federal government agencies, universities, specialty boards, state licensing authorities and professional organizations. Examinations have been prepared in more than twenty health professions.

In order to obtain the material for these tests, the Service has asked professional people for assistance in writing questions, or items, as they are called. The many thousands of persons who have responded to this request have made an indispensable contribution to the quality of the program. These instructions have been prepared as a guide to writing the type of questions used by the Professional Examination Service.

General Description of a Test Item

It is generally agreed by the specialists that the most satisfactory form of objective question is the multiple-choice form. An item of this type begins with an introductory statement which presents the problem or asks the questions and is followed by five choices, one and only one of which is correct. The task of the examinee is to select from among these five choices the answer which he considers to be correct. Three sample items which demonstrate the versatility of this form of question are given below:

A. In which of the following groups is the overall incidence of cancer highest?
   1. Negroes.
   2. Chinese.
   3. Indians.
   * 5. Whites.

B. The reason why patients with leukemia are prone to infections is that their:
   * 1. leukocytes are immature or nonfunctioning.
   2. thrombocytes are nonfunctioning.
   3. white blood cells are decreased in number.
   4. blood plasma volume is decreased.
   5. erythrocytes are increased in number.

* Answer
C. Of the following, the most important step in the rehabilitation of a postoperative cancer patient is to:

1. provide an absorbing new activity, so that he may forget his experience and the resulting handicaps.
2. dismiss him from the hospital and send him back to his job.
3. introduce him to a group of patients who have recovered from the same condition.
4. *teach him to do as much for himself as his physical and emotional status permit.*
5. prove to him that others have made successful recoveries so that he may always retain hope for his own recovery.

These three items serve to demonstrate not only the basic form of a multiple-choice item (which will be discussed in detail below), but also its applicability to material of varying degrees of complexity. Item A is a simple, memory question. Item B, also a memory question, requires at the same time a higher degree of understanding of the problem for its solution. In the case of Item C, not only is an understanding of the rehabilitation of cancer patients involved, but also some judgment in the application of the principle.

Multiple-choice items, it will be seen, consist of three parts: the introductory statement, or premise; the correct choice, or answer; and the incorrect choice (distractors). Although it is important to consider each item as an integrated unit, the three parts will be discussed separately for convenience.

1. **The Premise**

The premise of an item states the problem or asks the question and is the part the examinee reads first. It may be written either as a question, or as an incomplete sentence which is completed grammatically by any one of the five choices. Several points should be noted when writing a premise.

a. **The premise should be a complete expression of the problem.**

When the examinee has finished reading the premise, he should know exactly what he is expected to look for among the five choices. In all three of the sample items above, this is the case. In the following premise, however, this is not the case:

A fission product is:

This premise might be reworded to read:

Of the following radioactive nuclides, the one that is commonly known as a fission product is:

or:

The group of nuclides formed as a result of nuclear fission are most generally characterized by their:

In the case of the last two premises, the problem is clearly defined; in the case of the first, it is not.

* **Answer**
b. **The premise should state the problem in such a way that it is possible to select a single, correct choice from among the five given.** Frequently the criticism is made that an item does not include the correct answer or does not include all of the possible correct answers. A premise such as "The cause of common colds is;" would be subject to such a criticism. The cause or causes of common colds are too complex to be set up as so simple a test task. There are several ways of avoiding this difficulty, however, such as:

Which one of the following factors is generally considered by scientists to be a contributing cause to the common cold?

or:

Although there are probably many contributing factors giving rise to the common cold, competent authorities consider that one of the important causes is;

or:

Among the following factors that may be contributing causes to the common cold, which one is currently considered by authorities to be the most important?

c. **Premises dealing with controversial problems should explicitly recognize the existence of the controversy.** It is frequently stated that objective items cannot be developed that will sample an examinee's knowledge in areas in which there is divergent opinion. It is certainly true that items intended to sample knowledge of a controversial area cannot be constructed so simply as if there were no controversy. If, however, an objective examination is to rank the examinees in accordance with their relative abilities, the examination must attempt to sample the examinee's knowledge of some controversial areas, since it is likely that the examinee who knows both sides of a controversy is better qualified than one who knows only one side or neither.

The following is an example of a poor premise in a controversial field:

Prepayment medical care plans are superior to the traditional methods of administering health because:

A better way of phrasing this premise would be:

Advocates of prepaid medical care plans advance as one of the arguments in their favor the fact that:

In other words a premise which deals with controversial material can be rendered unobjectionable by specifying the group of individuals to whom the answer is acceptable, or by carefully defining the circumstances under which the given answer will be correct.
d. Negative premises are not desirable, but occasionally may be used effectively. In general, a negative premise is not acceptable. Such items are often inconsequential and examinees report that they find them confusing. Occasionally, however, a negative premise can be used if the answer is an expression of some unacceptable procedure or some fallacy which it is important for the examinee to recognize as such. Examples of acceptable negative premises are:

Which one of the following procedures is not a good practice in the sanitary inspection of milk?

It is important for a public health nurse to know that birthmarks are not attributable to:

2. The Correct Choice

The correct choice is, in effect, the reason why the constructor thought the item significant enough to write in the first place. It should present information which the constructor feels is: a) important for the examinee to possess; and b) likely to be possessed by good examinees and less likely to be possessed by inferior examinees.

a. The relation of the correct choice to the premise. The correct choice should always be formulated so that it is logically and grammatically related to the problem that the premise has presented to the examinees; otherwise, many of the better qualified examinees, finding the correct choice logically or grammatically unsatisfactory, may not select it as the answer. One technique which helps in the achievement of this close relationship is the practice of constructing the correct choice immediately after completing the premise.

b. The correct choice should be clearly and unambiguously stated. The correct choice should be long enough to formulate adequately the expected response. On the other hand, it should not be unnecessarily long. Item constructors sometimes tend to protect the correct choice by adding many qualifying phrases and clauses while they fail to develop their incorrect choices to the same complexity and length. Examinees have been known to obtain good scores merely by marking as correct the longest of the possible choices.

Frequently some of the ideas that the item constructor considers necessary for the proper protection of the correct choice can be put in the premise. This not only shortens the item as a whole but also serves to clarify the problem to the examinees.

c. Use of words which "give away" the answer. The item constructor should consciously attempt to avoid items in which the differentiation between the answer and the incorrect choices can be made solely on the basis that the answer contains many professionally "approved" words or phrases, whereas the incorrect choices not only contain none of these but contain many professionally "unapproved" words. For example, in the field of social work, any choice which includes the phrase "explore with the client,"
or the like, is almost certain to be the answer.

The correct choice should be expressed in the same style as the incorrect choices. The item as a whole should be written so that no one is able to ignore the premise and to select the expected answer by the way it is worded.

3. The Incorrect Choices (Distractors)

The effectiveness of an item depends to a very large extent upon the strength of the four incorrect choices. Unless the incorrect choices are so formulated that they will be attractive to the less well-qualified examinees and "pull" such examinees into selecting them as the answer, and unless at the same time they are unattractive to the better qualified examinees, the item cannot discriminate between good and poor examinees. It is important, therefore, that every bit as much care go into the development of the incorrect choices as goes into the preparation of the premise and the answer.

a. The incorrect choices should be absolutely incorrect. The Professional Examination Service has made it a policy that incorrect choices must be unquestionably incorrect. They should not be slightly less accurate than the answer. Items in which all of the choices are simply gradations of the truth have, in general, been found to be undiscriminating and also tend to irritate the examinees. The only situation in which it is permissible to have five choices of varying degrees of excellence is when the premise clearly asks the examinees which they consider to be the best of the five different procedures or policies listed. In such items, however, the answer must be one which would be generally accepted as being the "best" by persons competent to judge.

b. The incorrect choices should sound plausible. Not only must the incorrect choices be absolutely wrong, they must at the same time sound plausible. An incorrect choice so patently absurd in relation to the premise that no examinee ever considers it to be the answer is useless from an examination point of view. Ideally, the responses of the inferior examinees should be evenly distributed among the four incorrect choices. Plausible, but wrong choices, can be developed by incorporating into them the same kinds of incorrect concepts, illogical conclusions, and erroneous ideas that less well-qualified people tend in general to hold.

c. Efforts to "trick" examinees. The Professional Examination Service conscientiously tries to avoid any "trick" features in its items. It is all too often found that an item which deliberately sets out to trick the examinees will trick not only the poorer people but the better people as well.

d. The incorrect choices should parallel the correct choice in all essential details. The most apparent feature in which the incorrect choices must parallel the correct choice, is, as has been mentioned above, length. If the answer is short, the distractors must tend to be short; if the answer is long, the distractors must tend to be long.

It has been mentioned that the answer must follow logically from the premise. It is just as important that the incorrect choices be logically and grammatically related to the premise. If they are not, the examinee will be
able to reject them, not on the basis of his knowledge, but simply as the result of perceiving that they have no connection with the problem as it is stated in the premise.

The incorrect choices must make use of the same kind of language that is used in the correct choice. In other words, in an item in which the answer is presented in scientific or technical language, the incorrect choices must also be presented in such language.

Evaluation of Items

Just as it is the purpose of an effective examination used for selection to differentiate between qualified and unqualified examinees, so to a lesser degree, it is the task of each item to differentiate between these two categories of examinees. A perfectly discriminating item is one which is answered correctly by all well-qualified examinees and which is answered incorrectly by all poorly-qualified examinees. Few items achieve this happy state of perfection but an item is good to the extent that it approaches it.

One suggestion which will help you to write discriminating items is to ask yourself: what problem in my field would I expect well-qualified examinees to be able to answer? If an examination is to be accepted by professional people as a proper one, the items of which it is composed must represent tasks that are pertinent to the field covered by the examination. Thus you should try to develop items around the subject matter that competent authorities in the field would accept as pertaining to this field. It is admittedly not simple to develop items that will be approved by both subject-matter specialists and examination analysts. This, however, is the task and the Professional Examination Service makes use of the most suitable techniques available in order that the goal may be achieved.

All items submitted to the Professional Examination Service are reviewed for relevance and accuracy by a panel of three to five authoritative persons in the appropriate field before they are used in an examination, and statistical analyses are made to determine the effectiveness of all items.

Sources of Items

Few people can construct items without some reference to source material. In general, good recent textbooks make excellent source material for items because the author, in preparing material for a textbook, has usually surveyed the field and formed a synthesis of the subject matter. On the other hand, some of the most discriminating items that require the exercise of judgment and the application of experience on the part of the examinee cannot be supported by textbook evidence but must emerge from the maturity and wisdom of the constructor.

When an item constructor begins the construction of items for the first time, he will have to learn to read for the recognition of satisfactory item material rather than for the acquisition of knowledge. Some item constructors find it helpful merely to note material which they think could be worked into an item as they read along. Then when they have completed a chapter, they go back and try to work their material into items. Other item constructors list a series of concepts or ideas about which they will construct items and then search for appropriate references.

When an item constructor has found an idea or a situation which appears suitable for
an item, he should bring to bear upon it other related ideas that he has acquired from his reading or experience. A constructor should make maximum use of the experience he has had in his everyday work.

In general, item constructors will probably find their task simplified if they construct an entire item before going on to the next.

Format

In order to guard the confidential nature of the items, it is essential that all items be owned outright by the Professional Examination Service. It is, therefore, requested that the item constructor destroy all copies and rough drafts of the items he prepares. In order that the items may be bound for reference purposes, it is requested that all items be prepared on standard 8½" x 11" paper, if possible in DUPLICATE, and that these rules be followed:

1. Leave at least two inches at the top for binding.
2. Set up the premise.
3. Set up the correct choice immediately below the premise.
4. Set up the four incorrect choices below the correct choice.
   (The five choices are "randomized" in the office.)

Only one item should be placed on a sheet. If you need more space than is available on one side of the sheet, use a second sheet.

At the end of each item, write your name and the source of the item, including the full name of the textbook or authority, the full name of the author, the year of publication or edition, and the page number. The source of the item is important in editing the item, and in providing a legal defense if the item should ever be contested by an examinee. In the case of items developed on the basis of experience and judgment, it may not, of course, be possible to give a reference.

The general form of the item will look like this:

Premise - - - - - - - - - - - - : (?)
1. correct choice.
2. incorrect choice.
3. incorrect choice.
4. incorrect choice.
5. incorrect choice.

Name of Constructor
Source

Items should be mailed to:

Professional Examination Service
American Public Health Association
1740 Broadway
New York, New York 10019