3. A program for the construction of new nursing and other extended care beds to meet expanded needs and reduce hospital costs.

Summary - ($175 million annually or $875 million for 5-years)

A program is proposed to increase the annual authorization for constructing long-term care facilities to $125 million annually and to develop a special project grant program of $50 million to demonstrate the advantages of long-term care complexes specifically designed for the aged. These programs would permit public or non-profit agencies to effectively enter the field that is current dominated by proprietary nursing homes. The program would not, however, detract from the opportunities for private profit making institutions to develop.

The Problem

Recent substantial gains have been made in the provision of chronic disease and nursing home (long-term care) facilities. These facilities are required primarily by the elderly. The number of acceptable beds rose between 1957 and 1964 from 155,000 to 325,000. (The total number of beds is 518,000.) Although it is difficult to establish precise need figures, the States estimate

that less than 40 percent of their long-term bed need has been met and that more than 500,000 additional beds are needed. This estimate is confirmed if the long-term care beds in all States were brought up to the level of the five States with the highest ratios of long-term beds per 1,000 elderly.

Gross as are the present inadequacies in long-term care facilities, the future outlook is for even more serious deficiencies unless vigorous action is taken. Today the population aged 65 and over numbers 18 million; it is likely to reach or exceed 23 million by 1980.

The passage of Public Law 89-97 makes possible the removal of significant economic barriers to the utilization of nursing and convalescent beds by those age 65 and over. This will markedly increase the demand and this is a further stimulus to create the needed facilities and services.

In order to make proper use of the health manpower available to staff these expanding facilities, close coordination of hospital care, home care, and long-term care programs should be developed at the community level. Manpower will be the most critical factor in the next decade.

Objectives

The objectives of the proposed programs are to further the construction of new long-term care beds of adequate physical characteristics; to provide the care within a framework of comprehensive care in the community; to do so in such a manner as to augment voluntary effort and in such a manner as the health needs of the people may be best served.

Present Programs

Financial assistance is available to public and other non-profit agencies owning and operating long-term care facilities, under the Hill-Burton Program. Since the enactment of the programs and its 1954 amendments, a total of nearly 1,000 project applications for long-term care facilities (i.e., chronic disease hospitals and nursing homes covering 54,000 beds) have been approved. The total cost was $734 million, of which $239 million was the Federal share. Of the 54,000 beds, two-thirds were in skilled nursing homes; the balance in other long-term care facilities.

Proprietary nursing homes or convalescent facilities have two possible sources of Federal financial assistance, namely, the Housing and Home Finance Agency and the Small Business Administration. The Housing and Home Finance Agency operates programs of mortgage insurance for construction of nursing homes

and rehabilitation of existing homes which are owned and operated for profit or on a nonprofit basis. The Small Business Administration operates a program of direct loans or loans in participation with private lending institutions for the construction of profit-making nursing homes. The Housing and Home Finance Agency also operates programs of direct loans and mortgage insurance to construct homes for the aged.

At the present time over 85 percent of the nursing homes providing skilled nursing care are operated for a profit. These include about 70 percent of the beds. Many of these, as well as those operated by public agencies or nonprofit organizations, provide substandard levels of care, primarily because of the low rate of reimbursement provided by public agencies, the lack of universal or even State-wide minimum enforceable standards for facilities and services rendered, and because of shortages of qualified personnel.

Although the private sector is apparently responding vigorously to the opportunities presented by the passage of P.L. 89-97, the voluntary and nonprofit institutions have not been as able to enlarge their capacity for nursing home beds, and relatively few community hospitals have developed comprehensive programs to include nursing home and other long-term care facilities.

Proposals

1. Expanded Hill-Burton Program

A. Proposal - Increase the annual appropriation authorization for construction of long-term facilities to $125 million annually, and authorize the reallotment of any unexpended balances from State allotments among the remaining States having the greatest need.

B. What is now being done - The Hill-Harris Amendments (P.L. 88-443) authorized $70 million annually for the construction and equipping of long-term care facilities. These funds will produce approximately 15,000 additional beds, and about 40,000 additional beds will be produced outside the program, primarily in profit-making nursing homes. Since the reported need for additional long-term care beds is in excess of 500,000 it would take 10-years to meet the existing reported need, without considering the impact of the new Hospital Insurance Program or the dramatic increases occurring in our aging population.

C. Objectives of proposal - To accelerate the rate at which nonprofit nursing home beds are constructed, substantial appropriation increases are needed. The Task Force recommends that the present $70 million annual authorization be increased

to $125 million. Because there is considerable variation among the States in the demand for construction of additional long-term care facilities, many States have extensive plans and could use far more funds than the grant formula allows, while other States must press to utilize their allotments, or are lapsing funds in this category. Authority should be secured, therefore, to reallot any unobligated balances in the long-term care allotment among the States which have fully utilized their original allotments and have the greatest need for additional long-term care beds.

D. Other alternative considered and rejected - The possibility of proposing a special project grant program in addition to the current formula grant authorization was considered. This proposal was rejected, however, because it would circumvent the existing and highly acceptable Federal-State relationship being followed in the Hill-Burton program, and place an insuperable burden on a National Advisory Council of picking and choosing among meritorious projects.

2. Development of Long-Term Care Complexes

A. Proposal - A special project grant program of $50 million for each of five-years to demonstrate the advantages of long-term complexes being constructed which include all

services essential to continuity of care for the aged. Public or other nonprofit agencies would be eligible to receive grants.

B. What is now being done - The Hill-Burton program provides grants for the construction and modernization of long-term care facilities owned and operated by public or nonprofit agencies. Seventy million dollars is authorized to be appropriated each year.

C. Objectives of proposal - To demonstrate the advantages of physical facilities being constructed for the care of the aged and research of the aging process on a "one-campus" environment or in close proximity to each other with tight organization affiliations. A great deal of emphasis is being given today to continuity of care for patients with acute conditions but the same emphasis is not being given to continuity of care for the aged. Separate facilities are being built which provide limited services for comprehensive care without appropriate attention to the coordination of services or the referral of patients from one facility to another. Enactment of this proposal would provide a "one-campus" environment, including (a) facilities providing acute care; (b) facilities providing skilled nursing home care, personal care, and custodial care; and (c) facilities for research related to aging. The aged could be admitted for reasons of age or medical condition with full knowledge that

hospital or nursing services are available, as well as home-like, ambulatory environment for custodial or personal care at intervals in which medical conditions are under control. In addition, such a complex would provide the ideal environment within which research could be conducted with regard to the aging population and process.

D. Other alternatives considered and rejected - The possibility of obtaining demonstration installations of this type through joint financial assistance from the various agencies charged with administering the several programs directed towards construction of separate facilities for care of the aged was considered and rejected. The differing eligibility and regulatory provisions, varying types of Federal credit extended, and the complications of State agency participation indicated that a direct grant approach to the problem was necessary.

4. A program for better utilization of existing and prospective nursing and other nonhospital bed capacity.

Summary ($23 million, increasing for 5-year total of $85 million)

The heart of this program is a major expansion of Public Health Service grants for the development of home care services by hospitals. In addition, recommendations are made to provide patient evaluation and utilization review program support.

The Problem

The problems related to the utilization of existing and prospective nursing and other nonhospital bed capacity are difficult to describe with precision because of the past obstacles to the development of comprehensive community medical care resources.

Home care programs which present one of the most significant alternative approaches to nursing homes for the care of the chronically ill have developed very slowly since they were first introduced in 1947. Some of the major obstacles have been (1) exclusion of patient care in the home from coverage by third party payers of hospital and medical care; (2) an indifferent attitude on the part of hospital and community agencies in dealing with extramural programs of this character;

(3) resistance on the part of practicing physicians to an extension of hospitals into areas that have traditionally been the province of physicians. At the present time hospital and community based home care programs are only available to less than 20 percent of the aged population, or others, who require them.

The implementation of P.L. 89-97 with the inclusion of home health services will focus a great deal of attention at the local, State and Federal level. There will suddenly be a good financial inducement for patients age 65 and over to leave hospitals in favor of organizational services which can be rendered at home or in nursing homes.

The utilization review mechanism established under P.L. 89-97 for patients while hospitalized, in nursing homes or requiring home health services will necessitate the development of an effective combination of economic, administrative and physician efforts. Thus far, we have only scratched the surface.

In order that utilization mechanisms be effectively established, it is quite likely that a fee will be required to pay for the time physicians must devote to this activity and an adequate supporting staff must be developed to make the review committee work.

Present Programs

1. The Bureau of State Services, PHS, has supported or conducted a series of studies related to the evaluation of patients in various settings (e.g., hospital, nursing home, home care) and the relationship of patient needs to utilization of facilities. At the present time, the Division of Medical Care is assisting the 50 State licensing agency personnel to organize into a group to improve the exchange of information through a series of regional conferences and improved cooperation.

2. Federal support for hospital or community based organized home care programs has been very limited. There have been a small number of grants to support demonstration projects.

3. There has been no specific grant to support the development of hospital utilization committees.

Objective

To promote better utilization of existing and prospective nursing and other nonhospital bed capacity through the development of expanded home care services and the development of effective utilization mechanisms for hospital, nursing and home health services.

Proposals

1. Evaluation of Patient Needs. A national program to provide leadership and financial support for a broad program of professional education and demonstration projects on patient evaluation is needed. Patients are often referred to nursing homes or other long-term care facilities, not on the basis of actual needs in terms of the type of care required, but rather according to the availability of beds, geographic location and cost. At present, methods are available to improve utilization of appropriate resources by proper patient evaluation and referral. The team approach needs to be more effectively applied, but it will not be without wider understanding and application of present knowledge. The correlation, evaluation, and dissemination of information on the subject of patient evaluation will require development of a consulting service for State agencies administering various review functions under P.L. 89-97. A series of regional conferences should be held during the next three months with personnel in regional offices, State administrative personnel and State program personnel. The cost of this program would be $700,000 during this year, with an annual budget of $1 million thereafter.

2. Home Care Programs. A major expansion of hospital and community based home care programs is urgently needed. The annual expenses of a fully developed, hospital based home care program providing services on a continuing basis for about 80 patients is $40,000. At the present time, there are 70 such hospital based programs. An expansion of existing programs and the development of new programs will be stimulated by the PHS grant program proposed in the supplemental budget request this year ($9 million formula grant program). Additional support should also be given to community based programs, such as home-maker services, visiting nurse services and home health services. This could be done with a $15 million annual PHS grant program, an amount which should be increased within the next few years. It is estimated that $60 million in three years could do a very good job.

3. Utilization Review. A grant program to stimulate demonstration projects studying different types of utilization review mechanisms should be developed and a series of conferences scheduled with national professional organizations, State medical societies, county medical societies and other appropriate groups to periodically review the results of these studies. A budget for this program of $1-2 million annually would be adequate to initiate the program.

5. Additional personnel training proposals to meet both existing and future demands for medical and paramedical personnel.

Summary

($1.02 billion for 5 years, over $200 million average per year.)

New programs are proposed to provide large scale Federal support for the education and training of middle level health professionals (e.g., physical therapists, occupational therapists) and for a program of vocational education for all categories of health workers with 1-2 years of post high school education, based on the existing practical nurse training program. The combined cost of these programs would be $330 million in 5 years or an average of $66 million per year.

Additional programs are proposed to initiate or expand Federal assistance in continuing education of physicians, nurses and other health personnel; in financial support for physicians during internship and residency; to aid in the recruitment of individuals for health careers; and to develop a major staff and research program in all aspects of health manpower. These programs could cost as much as $792.5 million over a five year period. The estimated maximum first year cost could be $152 million.

The Problem

One of the crucial elements in the delivery of health services to the people is trained manpower. Increased knowledge, improved facilities, advances in technology cannot be properly utilized without adequate numbers of well trained health personnel.

The manpower pool of health personnel is large and growing (with a rate of increase of supporting personnel being much more rapid than that of professional personnel); it is predominately female (70 percent); it contains a large number of college-educated or professionally trained people (approximately 50 percent), it is poorly distributed (physicians range from 180 or more per 100,000 population in 3 states to fewer than 80 in 4 states); and its physician component has shown a declining number of family physicians in relation to the population and the apparent demand for services.

There are now about 2.6 million persons in the United States working in some aspect of health services, in hospitals, clinics, health organizations, private offices, laboratories, and remaining places where medical and other health services are provided. Physicians, dentists, and professional nurses comprised 44 percent of the total in health occupations in 1960.

Other professional health occupations with sizeable employment are dietitians and pharmacists. Other health service workers include technicians of various types, such as medical technologists, x-ray technicians, dental hygienists, and dental laboratory technicians. Large numbers are also employed as practical nurses, aides, orderlies, and attendants in hospitals.

The shortages in the supply of physicians, dentists, and nurses has been well documented. The supply of manpower in these areas can barely keep pace with the population growth, and the enactment of the health insurance program for the aged will impose additional demands.

The best known effort to assess the nation's future need for physicians, and also to assess the expansion of the educational programs and facilities necessary to satisfy this need was reported in 1959 by the Surgeon General's Consultant Group on Medical Education. They estimated that the number of medical and osteopathic school graduates would have to increase from a base of 7,400 in 1959 to 11,000 in 1975. This means that 11,000 spaces would be required for first year students if there were no drop outs. There is an attrition rate of about 12 percent in the four years, thus 4,000 new first year places must be created by 1971. At present the number of first year

places is 8,800 and the most realistic appraisal indicates that by 1971 we will be at least 1,700 short of the needed 4,000 new first year spaces in medical schools.

Nursing education has received considerable attention but the problem appears, if anything, to be more severe and acute than the shortage of physicians. The shortage of nurses has been studied at the local, State and national level, including the Surgeon General's Committee 1961-62, yet much remains to be done to achieve a satisfactory solution. Not the least of existing problems are the low pay and existing hours and conditions of work for professional and practical nurses in hospitals and other health care facilities.

The education of physicians, veterinarians, dentists, nurses and other health professionals is dependent on the availability of basic science faculty and teaching facilities. The shortage of qualified basic science faculties is so acute that a number of new medical schools have delayed programs because of the shortage. The problems of human medicine, veterinary medicine, dentistry and nursing must be tackled simultaneously with those of basic science.

It is generally recognized that increased and more effective use of auxiliary medical personnel will assist in the alleviation of current and projected shortages in the supply of key professional medical personnel.

Parallel shortages exist in practically all of the health occupations. Our national supply of physical therapists is about 12,000, as compared to a national need for 15,000. The demand for qualified physical therapists is likely to exceed the supply unless the number of graduates from approved programs increase sharply.

There are about 8,000 qualified occupational therapists in the country and the national need is estimated at 12,000, with 4,000 new graduates needed annually. This compares with the current graduation rate of 400.

There are 38,000 registered medical technologists, but only 28,000 work full-time and an additional 25,000 are needed. There is a similar shortage in radiological technicians and in cancer cytology technicians.

Roughly 25,000 dental laboratory technicians are currently employed. The anticipated growth in population, rising income, the growing public awareness of the importance of preventive dentistry, the mounting number of people in the older age groups, and, with it, the number of people requiring artificial dentures point toward the need for more dental laboratory technicians.

According to the American Association of Medical Record Librarians, about 3,000 registered record librarians were employed in 1962 compared with a national need for at least double that number. The increasing number of hospitals and the volume and complexity of hospital records will contribute to a growing demand for medical record librarians. Fulfillment of the requirements for keeping adequate medical records in the hospitals, nursing homes, and in home health agencies under the health insurance program for the aged will substantially increase the demand in this area.

Approximately 225,000 practical nurses were employed in 1962, many of whom were not licensed. The supply of licensed practical nurses has not kept pace with the demand generated by the establishment of new programs and positions, the growing proportion of older people in the population, and increased need for trained practical nurses in private homes, nursing homes, rest homes, and homes for the aged.

There is evidence that there are current shortages in virtually every health occupation and the present rate of training cannot meet the shortages. The health

insurance program for the aged with its provision for hospital care, outpatient diagnostic services, nursing home care, and home health services, will greatly increase the need for paramedical personnel.

Currently, there are approximately 39,000 interns and residents in the United States, of whom 4,100 are in some form of Federal service. The financial plight of the non-Federal intern and resident is well known and is of considerable concern to the intern and resident and has been the subject of discussion by professional associations. Although this problem has been frequently discussed by the American Medical Association, there has been no agreement regarding resolution of the problem.

Today, most interns and residents are married; the greater proportion marry while attending medical school. Average salaries for interns and residents are considerably lower than an income of $520 to $600 monthly stated by the U. S. Department of Labor as necessary to maintain a minimum standard of living for a family of four. It is well known that house-staff physicians take on outside work in addition to their extensive work load and time schedules in hospitals. Insurance examinations, covering for private practitioners on nights and weekends, and staffing industrial health clinics are some common forms of intern and resident moonlighting.

Traditionally, education is the primary purpose of internship and residency programs. However, these young staff physicians provide a valuable service to their hospital through their patient care activities. Moonlighting activities detract from the ideal by placing the intern and resident in a position where he may not be able to gain as much as is desired from an established educational experience, and such outside activities may also be a factor producing a lower quality of care in the service he is capable of providing.

Outside financial activities of interns and residents produce emotional and ethical problems as well. Wives and children are denied the attention they deserve; professional reading and other self-educational activities are minimized; and, frequently there is violation of the contract between house staff and their hospitals. Such contracts usually state, in effect, that the hospital has the sole right to the medical services of interns and residents.

As the needs of society change, and our population increases, the health professions will not be able to maintain the capability of providing present levels of patient care even if the number of physicians, dentists, and nurses is increased. The entire spectrum of health manpower, at all levels, must be improved qualitatively and increased quantiatively.

The Federal Government had done relatively little to stimulate a large-scale build-up of paramedical personnel. Federal support in this area is scattered among various agencies, including the Public Health Service, Office of Education, and Department of Labor. (These programs are described in more detail below.) There is a definite need for new programs to:

1. Provide a comprehensive and coordinated Federal program within the Department of Health, Education, and Welfare for education and training of medical manpower, including paramedical personnel, technical health workers and health aides, and to provide liaison among the agencies and programs concerned with health manpower;
2. Provide Federal funds for unrestricted grants to colleges, universities, and accredited technical schools for education and training of paramedical personnel, technical health workers, and health aides;
3. Expand existing Federal programs for in-service and on-the-job training of paramedical personnel, technical health workers, and health aides.

There is no present mechanism for coordinating the existing programs for the support of health manpower or relating the demands of competing programs with the available or potential

supply of manpower or the requirements of health programs accorded high priority. Each of the many programs in the Department of Health, Education, and Welfare, the Department of Labor and the Department of Defense is directed toward filling a specific gap. No mechanism exists to review and assess total needs, the effectiveness and adequacy of current programs, the coordination of professional and auxiliary training and related matters.

Present Programs

The Federal Government supports a variety of programs to relieve the national health manpower shortages. Under the Health Professions Educational Assistance Act of 1963, the Public Health Service provides aid for the construction of new or expanded schools of medicine, osteopathy, dentistry, optometry, pharmacy, and podiatry; and for low-cost loans to needy medical, osteopathic, dental, and optometry students. Construction grants totalling $175 million were authorized for the 3-year period ending June 30, 1966. As of April 12, 1965, 44 applications had been approved and funded, with the Federal share coming to slightly over $92 million. Increased enrollment resulting from these projects included 540 medical students and 296 dental students, among others. The loan program went

into effect in fiscal year 1965 with the full authorized appropriation of $10,200,000. Under this program, 147 out of 152 eligible schools of medicine, osteopathy, dentistry, and optometry have applied for and received contributions to their loan funds. By January 29, 1965, more than 10,500 students had obtained loans averaging $915. The percentages of total students enrolled who had borrowed were: medical, 21%; dental, 23%; osteopathic, 26%; and optometry, 31%.

To broaden the attack on problems presented by the acute and growing shortage of well-qualified medical and dental personnel, the Administration has sponsored the Health Professions Educational Assistance Amendments of 1965. These amendments, now pending in Congress, would extend for an additional period of years the construction program for medical, dental, and other health professions schools. They would extend the student loan program and increase the maximum loan for any one student from $2,000 to $2,500 per year. They would authorize a new program of grants to schools of medicine, osteopathy, and dentistry for scholarships, in a total amount that would grow by the end of 4 years to $2,000 times 1/10 the number of full-time students in the schools, with a maximum individual scholarship of $2,500 per year. Finally, the amendments would authorize a new program of improvement grants to schools of

medicine, dentistry, and osteopathy, with the appropriation for this purpose to start at $20,000,000 in fiscal year 1966.

The Health Professions Educational Assistance Act of 1963 does not provide loans for individuals engaged in internship or residency programs. There is no program of Federal grants to hospitals to support either internships and residency programs or continuing education for physicians, nurses, and other professional, technical or auxiliary staff workers.

Section 306 of the Public Health Service Act provides for traineeship grants for residency training. Institutions and agencies offering approved residency programs in General Preventive Medicine, Preventive Medicine-Public Health and Preventive Dentistry are eligible to apply for traineeship grants for support of specific individuals who have been accepted for participation in those programs. The purpose of the program is to encourage physicians and dentists who have completed their basic professional training to prepare for positions of leadership in public health practice and teaching. Stipend levels vary from $6,000 for a first year resident to $8,000 for a third year resident; $500 is provided for each dependent up to a maximum of $2,000. Because the program is quite recent, information regarding it is not available.

With the exception of the military services and certain research residency programs the above program appears to be the only Federal support of residents in medicine or dentistry, and is specifically limited to one category of professional training. With the exception of the military services, the Federal government does not appear to support internship training.

The Nurse Training Act of 1964 authorized up to $283 million during the next five years of Federal aid to nursing. These funds are for extension and expansion of traineeships for nurses in teaching, supervisory, and administrative positions and for four new aid programs: project grants to help schools of nursing improve their training; payments to reimburse diploma schools in part for training students whose enrollment may be attributed to the Act; long-term, low-interest loans for students of nursing; and grants to construct, expand, renovate, and replace training space in new or existing nursing schools.

Public Law 88-851, the Nurse Training Act of 1964, provides both traineeships and loan funds. The purpose of traineeships are for the training of professional nurses to teach in various fields of nurse training, to serve in administrative or supervisory capacities, or to serve in other professional nursing specialties determined by the Surgeon

General to require advanced training. Such traineeships are to be awarded through grants to public or nonprofit private institutions providing the training. The following authorizations for traineeships are stated in the Law:

Fiscal Year	Amount (millions)
1965	$ 8
1966	9
1967	10
1968	11
1969	12

Loan provisions under Public Law 88-581 provide a maximum of $1,000 per student during the course of an academic year. Such loans may be made only to students who are in need of the loan to pursue a full-time course of study leading to a baccalaureate or associate degree in nursing or an equivalent degree, or a diploma in nursing, or a graduate degree in nursing. Loans are repayable in equal or graduated periodic installments over a ten year period which begins one year after the student ceases to pursue a full-time course of study at a school of nursing. Interest rate is 3 percent per year on the unpaid balance, or the going Federal rate whichever is greater. In fiscal year 1965, $3.1 million was authorized, appropriated and allocated to the schools. In fiscal year 1966, $8.9 million was authorized; $4.45 million is currently available to schools.

The following information was supplied by the Training Resources Branch, Division of Community Health Services, Public Health Service:

Item	Fiscal Year 1965	1966
Participating schools	402	575
Students enrolled	63,224	96,125
Potential borrowers	10,100	16,900
Funds needed (millions)	$5.5	$10.0
Funds available	$3.1	$8.9

Other information for evaluation of the Nursing Student Loan Program is not readily available. The program has not been in existence long enough to determine whether it has assisted in attracting persons into the nursing profession. However, it is of interest to note that the number of participating schools has increased, and that the estimated need for funds has exceeded the appropriation for the two years in which the program has been in existence.

Federal support of the paramedical professions consists of a conglomeration of programs located in a multitude of offices and agencies. In many cases, the paramedical trainee cannot be identified by the program description, the number actually trained is difficult to ascertain, and emphasis is placed on the graduate professional and researcher.

Three Federal agencies currently provide some support in this area: Public Health Service, Office of Education, and the Department of Labor in conjunction with the Office of Education. The following summarizes the programs, the type of medical personnel covered, the legal basis, and the dollar amounts allocated:

1. Public Health Service Training Programs

Public Health Service training of paramedical personnel is included in many programs. The following outlines the training program and the attached table summarizes the financial data, legal basis, and type of trainees under each program.

a. Air pollution training

Air pollution training grants consist of traineeships and institutional training grants. Traineeships are made for post-graduate professional training in research or control activities relating to air pollution programs. Grants are made to academic institutions for research training, curriculum development, and support in air pollution.

b. Cancer control training

Training grants are made for the support of curriculum and of students for cytodiagnostic training, for the support of senior clinical traineeships for

physicians, and for continuing medical and other professional education. During the fiscal year 1963, 186 new and continuation project grants were awarded as follows:

Type of Project	Number	Amount
Training of cytotechnologists	56	$1,111,538
Senior clinical traineeships	99	857,000
Other training projects	21	519,782

c. Dental auxiliary utilization training

Dental auxiliary utilization training grants are available to help establish, expand, or continue within dental school curricula, programs for teaching undergraduate dental students the proper and effective use of dental auxiliaries, particularly trained chairside dental assistants. As a result of such training, future utilization of these auxiliary personnel by the dentist oriented to their proper use should provide a partial solution to the developing dental manpower shortage.

d. National Institute of Mental Health

An appropriation of $3,304,000 in fiscal year 1964 was made to establish the in-service training program.

Current emphasis is on subprofessional personnel, including psychiatric aides, volunteers, attendants, and others involved in direct care of patients.

e. Neurological and sensory disease service training

Grants are made available for training physicians and allied medical personnel for community services in the detection, diagnosis, treatment, and management of individuals with neurological disorders. Training programs, including seminars, short courses, regular academic programs, etc., may be directed to any level of training, except residency training.

f. National Library of Medicine training

The National Library of Medicine plans to support programs designed to foster the training of specialists in the communication of recorded medical and allied knowledge as this relates to the functioning of the biomedical library. Training activities in the following fields are eligible for support: medical librarianship, biomedical science information specialties, information management and processing technology, biomedical science writing and editorial work, history of the life sciences.

g. Public health - graduate training

Grants are made to any public or private nonprofit

institution which provides graduate or specialized training in public health for the purpose of strengthening or expanding graduate public health training. The following accredited institutions qualify:

(1) Schools of public health accredited for the degree of MPH;

(2) Schools of nursing providing graduate or specialized preparation in public health;

(3) Schools of engineering providing graduate or specialized preparation in public health;

(4) Departments of preventive medicine in schools of medicine;

(5) Departments of preventive or community dentistry in schools of dentistry.

h. Public health traineeships

The program of public health traineeships is designed to (a) increase the number of professional health personnel with graduate or specialized training in public health and (b) to recruit new professional health personnel into the field of public health.

The traineeships may be awarded either directly to individuals or through grants to training institutions. Members of all health professions such as physicians, nurses, engineers, nutritionists, social workers, dentists, dental hygienists, health educators, veterinarians, sanitarians, statisticians, and others whose skills are required in modern public health practice are eligible for Federal aid.

Approximately 4,400 individuals working in public health or related fields will have received training in fiscal year 1964 under the provisions of these training programs.

i. Public health training - schools of public health

These grants are awarded to schools of public health for the provision of comprehensive professional training, specialized consultative services, and technical assistance in the fields of public health.

These grants are intended to support the provision of public health training in schools of public health by offsetting a portion of the deficit which occurs as a result of the disparity between income from tuition and the cost of instruction of Federally sponsored students.

j. Radiological health institutional training

Grants for training in radiological health are made to universities and other educational institutions to strengthen curricula for the training of radiation health specialists, the highly qualified professionals needed to plan and direct radiation protection and control programs; and for the training of radiation health technicians needed in the operation of these programs. The funds are used primarily to support the salaries of faculty members, to meet equipment purchase costs, and to furnish tuition and stipend assistance to students.

k. Training and traineeships--NIH

The general purpose of these awards is to support graduate training leading toward careers in research in sciences relating to medicine and health or toward increased competence in the treatment of disease. "Undergraduate" training grants are awarded to medical, dental, osteopathic schools, and schools of nursing and public health. In any one year, the Heart Institute can award up to $15,000 to schools of public health.

l. Water supply and pollution control training

The purpose of training grants is to support new and improved curricula, to expand facilities, and to provide stipends

for students selected for graduate training.

Institutions are encouraged to develop specialized and multidisciplinary training of a wide variety of scientists, engineers, and administrators for the water pollution control field.

2. Office of Education Training Program for Paramedical Personnel

The Vocational Education Act of 1965 (P.L. 88-210) authorizes grants to assist, maintain, extend, and improve existing programs of vocational education, to develop new programs, and to supply part-time employment for youths needing financial support to allow them to continue their training.

Funds under this Act may be used for vocational education of persons attending high school, for high school graduates or dropouts, for persons currently in the labor market who need training or retraining to achieve stability or advancement in employment, for vocational training of those having social, academic, economic, or other handicaps. Funds may also be used for construction of school facilities for vocational training and teacher training and program development. The programs funded by the Office of Education under this Act do not supply funds to the student, but to the teaching program for administration, supervision, teacher education, instruction, research equipment and guidance. The States must match the Federal funds dollar for dollar.

In the health field, support is available for full-time vocational training and as a part-time supplement for a person who is employed. The occupations for which training is offered include the following: practical nurse, dental assistant, dental technician or mechanic, dispensing optician, medical assistant, medical laboratory assistant, nursing unit management assistant, nurse aide, operating room assistant, physical therapy assistant, and x-ray assistant or technician.

In fiscal year 1963, the Federal funds for this program amounted to $4,542,878.50; State and local contributions were $6,494,597.75, for a total of $11,037,476.25 for the training of 53,957 people in the skills of the health field. In fiscal year 1964, preliminary figures indicate that 67,081 people were given training. Of these, 50,085 were full-time students and 16,996 were receiving supplemental education.

3. Department of Labor-D/HEW (Office of Education) Training Programs

The Manpower Development and Training Act of 1962 (P.L. 87-415) and the Manpower Act of 1965 (P.L. 89-15) provide funds for training and retraining of those unemployed or underemployed people who cannot reasonably expect to secure appropriate full-time employment without training. These Acts also provide a subsistence allowance while training is in progress. The

Department of Labor is responsible for selecting counseling and testing of trainees and the Office of Education is responsible for arranging the training through State Vocational Education Agencies.

P.L. 87-415 authorized $97 million for FY 1963, $161 million for FY 1964 and FY 1965; P.L. 89-15 authorizes $385 million for FY 1966. This latter Act also authorizes $22 million for programs to be placed in areas designated as redevelopment areas by the Secretary of Commerce under the Area Redevelopment Act.

Two major types of training are in effect under this program: on-the-job training and institutional training.

a) In fiscal year 1964, on-the-job training in the health field was given to 5,832 people at an instructional cost of $1,966,697 and a training allowance cost of $170,397.

b) Training in health skills in institutional settings was given to 16,659 people at an estimated cost of $17,407,000 for instruction and subsistence.

Overall Objectives

To provide all the people with access to good health and medical services. The right of every individual to adequate health services is fully accepted by the public. One of the major barriers to the achievement of this goal is the

shortage of health manpower at all levels. The purpose of the health manpower development program is to alleviate this barrier through the further development of education and training programs in all health sciences and to provide career opportunities, at all levels of health manpower, for appropriately qualified students regardless of race, color, creed or social class. In addition, programs should be sufficiently flexible to permit movement from one discipline to another (e.g., nursing to medicine) without re-entry at the lowest undergraduate level.

The achievement of both short-term and long-term goals in the development of health manpower in the United States requires expansion of existing programs, the development of new programs and the development of a mechanism for the adequate analysis of manpower needs and resources.

A series of specific programs will be required to achieve the objectives. The Task Force, therefore, recommends:

(1) Federal grants for education and training of middle-level health professionals (paramedical personnel).

(2) An expanded Federal program of grants for vocational training for practical nurses, home health aides and other auxiliary health workers.

(3) Federal support for a program of continuing education of physicians, nurses, nurse-midwives and other health personnel.

(4) Federal initiative to help reduce the disparities in the geographic distribution of physicians, dentists, nurses, nurse-midwives and other health personnel.

(5) A program of Federal support to provide continuity of financial assistance to physicians during internship and residency.

(6) A comprehensive and coordinated Federal health manpower program.

(7) Federal support for research studies in all aspects of health manpower.

(8) Financial support for a nationwide program of public education and recruitment for health careers.

Proposals

The following proposals are suggested as a means of implementing the Task Force's specific recommendations on health manpower.

1. Federal grants for the education and training of middle level health professional (paramedical) personnel

One serious gap in Federal support of training is the lack of aid for middle professional workers--including

physical therapists, occupational therapists, medical technologists, radiologic technicians, medical record librarians, and dental hygienists among others--with training at the bachelor's or master's degree level. Although need exists for aid to promote the training of these groups, so far the relatively small numbers of schools involved and the diverse patterns of education followed have hampered development of a program of assistance. Recently a few coordinated teaching programs have developed in university medical centers. Usually training at least three groups, these programs have brought promise of greater quality and economy of education and represent a possible basis for a new program of Federal aid. Expansion of the number and scope of these centers would provide better career preparation, would further the orderly development of curricula in relation to local needs, and would offer attractive career opportunities of high visibility to college undergraduates. Legislation should be sought to aid in the establishment and expansion of centers. As a minimum short-range goal, authority and funds should be requested to double the present number of university medical center programs and to expand and strengthen their programs and curricula.

The estimated cost of this program is $80 million over a five-year period. The funds would be used to support the salaries of faculty members, meet equipment purchase costs and furnish tuition and stipend assistance to students.

Costs of unrestricted grants to colleges, universities, and accredited technical schools for education and training of paramedical personnel, technical health workers and health aides were based on the following assumptions:

(a) Four- and five-year college programs for training of professional paramedical personnel would require $1,500 annually per student to cover tuition and subsistence allowances. Included in this group are the following: dietitians; nutritionists; health educators; medical laboratory technologists; medical record librarians; optometrists; podiatrists; physiologists; rehabilitation counselors; social workers; occupational, physical, speech and hearing therapists; and other allied health professions.

(b) The annual cost of one- and two-year programs for training of subprofessional personnel amounts to $500 per student to cover tuition. Included are practical nurses, x-ray technicians, medical laboratory technicians, dental assistants, and allied technical health occupations.

(c) Short-term training (two weeks to less than one year) would cost $250 per student to cover tuition. Included are nurses aides, orderlies, home health aides, and similar nonprofessional health occupations.

2. An expanded Federal program of vocational training for practical nurses, home health aides and other auxiliary health workers

A new concept in training technical and other non-professional personnel for the health services is emerging through the cooperative efforts of public vocational and technical education, hospitals and other community health agencies, organized health groups, and the consumers of health services. Clusters or groups of similar occupations have some identical content in their curriculums. A common core can be identified that makes possible the sharing of instructors, classes, facilities, library, clinical resources, and other educational services. These efforts need to be extended, but in a context of total health manpower planning and development rather than in isolated programs.

The present programs supported by the Department of Health, Education, and Welfare have raised the present level of training of practical nurses and related subprofessional (auxiliary) health workers to about 60,000 per year. These efforts will need to be quadrupled in order to meet the demands

imposed by increasing population, an increased number of aged, changing patterns of disease and new methods of financing medical care.

To undertake such a task, subprofessional health worker training centers will be needed in every large city in the nation, and in many smaller communities with hospitals and other health facilities and services. An estimated 500 such centers will be needed. These will require Federal, State and local support. Many communities will need assistance to construct, renovate and expand facilities, purchase equipment, support instructional programs, provide pre-service and in-service teaching educational programs, identify areas in which training programs are needed and develop curricula to meet those needs.

Priority and substantial Federal financial support must be given to training if these programs are to develop at a rate commensurate with the need.

At the simplest level of auxiliary training, the proposed program for training of "home health aides" should be implemented as quickly as possible. In view of the expected demand for home health care, there will be growing need for persons who, under the supervision of a public health nurse or other health professional, can give simple personal health services in the home. Under Section 314(c) of the Public Health Service Act, there is authority to support a training program for such persons. Appropriations would be required. Training stipends would probably be paid by an agency other than the Public Health Service. Candidates for training should be drawn from all appropriate age groups.

Support of training for other types of aides should also be considered. For example, the Federal Government could provide financial and technical help for training city neighborhood residents as sanitarian aides to work under health departments in community clean-up and fix-up campaigns. This could be done under Section 301 of the Public Health Service Act as amended, if sufficient funds were provided. Another type of aide that could be trained would be urban health agents to help isolated lower-income Negroes learn about existing health services and how to use them.

At a somewhat higher level of auxiliary training, Federal assistance might go to training programs for men to serve as medical emergency technicians (or some similar title). Problems of staffing hospital emergency rooms and ambulances are now acute and, with the increasing tendency of the public to seek care from emergency rooms, are likely to become greater in the future. Competent auxiliaries are needed. Ohio State University and the Ohio State Department of Education are currently experimenting with a training program for such auxiliaries; programs of this type deserve all possible Federal backing.

The Federal Government might also give expanded support for 2-year post-high school training of general physicians' assistants. Such assistants can free physicians, nurses, and higher-level technicians from many routine tasks. Duke University is just initiating a pilot training program for such assistants which will give training similar to that of medical corpsmen in the military service.

The in-service and on-the-job training programs already in existence should be expanded to support more training in the areas of health manpower. This in-service and on-the-job training will work particularly well for the health jobs needing less skilled persons, including nurses aides, ward clerks, medical facility housekeepers, orderlies, food handlers, home

health aides, and similar jobs. The largest share of the trainees receiving in-service and on-the-job training would be located in medical care institutions where there is a great need and an increasing demand for supportive services and personnel. Programs directed at supplying aides and orderlies for nursing homes and home health agencies could be of enormous value to these organizations. The increased supply of non-professional but competent people in the nursing home field would do much to raise the quality of care by allowing the professional nurse to spend a larger percent of her time in performance of professional duties. There are several real advantages to in-service training for semi-skilled and service personnel in the health field:

(a) It is cheaper to train a person while in-service or on-the-job because the trainee will be supplying labor as well as learning;

(b) The trainee will be familiar with the job situation as he will be trained on site and he can become fully productive under completion of his training; and

(c) On-the-job training leads to a higher level of job stability.

A disadvantage is that the trainee only knows one job and one way to do it. In semi-skilled jobs, this is not a real drawback; in highly skilled, managerial or professional jobs, this may be a real handicap to advancement.

The cost estimates of implementing this program for the expansion of existing Federal programs and the creation of new categories for support are made on the assumption that training allowances will be increased, full financing of the program by the Federal Government will be continued and the number of persons trained in the health field will be increased financially. With these considerations in mind, the estimated cost of the program for five years is $250 million, or $50 million annually.

3. Federal support for a program of continuing education of physicians, nurses, and other health personnel

The full implementation of the Heart, Cancer and Stroke legislation (regional medical complexes) should do much to improve the continuing education of physicians, nurses, medical technicians and allied health personnel. The regional complexes should be able to provide the framework for the rapid development of more formal programs for the continuing education of health personnel at all levels. A center for continuing education, within the regional medical complex, should be developed and it could provide living quarters for students (practitioners of medicine, nurses, etc.) requiring extended courses, and give a wide array of courses

utilizing the existing faculty in the complex. These could become modern learning centers utilizing techniques effective for learning among adult professional groups.

While the Public Health Service has made a beginning in the field of continuing education, much more needs to be done. Cooperative activities with many interested groups--professional societies, educational institutions, hospitals, voluntary agencies (e.g., regional medical complex)--should be developed rapidly. The pattern of the regional medical complexes, however, need not be followed in all areas.

A large number of nurses are lost to the health manpower pool through marriage. After several years many of the married nurses desire to re-enter clinical nursing. Often they are unable to do so because of rigid restrictions on hours of work, hospital practices, lack of available academic and practical refresher courses, lack of financing for refresher training and relative low salaries. An intensive program to recruit and retrain nurses should be initiated. Re-education programs need to be developed

and given through existing nursing schools or continuation education centers. In addition, the other barriers (e.g., hours, salary) to re-entry into clinical nursing must be removed.

The cost of a program for the support of continuing education should be borne on a formula-matching basis (Federal/State) based on health manpower needs and resources. The regional program for heart, cancer, stroke and other related diseases will have a three-year authorization of $35 million. The emphasis in this program will be continuing education. To support other programs a special authorization to finance continuing education should be sought with an initial annual authorization of $50 million. In addition, $15 million should be sought to support the Audio-Visual Center, PHS, in an intramural and extramural program to support continuing education.

The retraining of nurses will require funds for fellowships as well as an expansion of existing nursing school faculties. This program should be initiated with a grant and fellowship program of $10 million annually.

4. Federal initiative to help reduce the disparities in the geographic distribution of physicians, dentists, nurses, and other health personnel.

Another area in which Federal initiative is needed is in the reduction of disparities in the geographic distribution of health personnel. Pinpointing variations in health manpower supply, followed by minimum goal setting, could have a catalytic effect in stimulating action to meet these problems. Enough is known about the productivity of physicians and dentists to set minimum goals for States and even for small areas. In the not too distant future, similar targets could be set for other categories of health workers. Publication of data on communities lacking minimum medical and dental services would focus attention on the dimensions of this problem and stimulate remedial programs. In addition, grants for the construction of facilities and the training of health personnel should accord appropriate priorities to areas of greatest needs.

The cost of the special manpower studies required by this recommendation would be approximately $200,000 annually. The allocation of grants for construction of facilities and the training of health personnel would not increase currently projected costs but would require a careful, detailed reexamination of existing laws to determine if new formulae should be developed to achieve this objective.

5. A program of Federal support to provide continuity of financial assistance to physicians during their internship and residency

A program to provide continuity of support should now be developed by Federal grants to hospitals to support internship and residency programs. Details of the relative Federal/State/local institution contribution should be developed. The Federal share in this program should be based on regional needs for manpower with more Federal funds in those areas of relative manpower shortage. Special consideration should be given to university and/or medical college programs and the programs in institutions affiliated with these medical schools. The advantages of such Federal support would be:

(a) minimization of moonlighting activities;

(b) raise compensation to a more adequate level;

(c) increase the quality of care;

(d) attract capable and qualified persons into the medical, osteopathic and dental professions;

(e) mitigate indebtedness.

The disadvantages of the program are:

(a) break in the traditional manner of providing salaries for interns and residents;

(b) may be an expensive proposition.

The estimated cost of implementing such a program would be about $100 million a year. Internships and residencies would be fully financed by $6,600 and $7,200 grants, respectively.

Program	No. Students	First Year Cost
Interns and Residents	39,000	$100,000,000

As the cost of education and training programs continue to increase, it appears prudent to consider Federal programs to remove the financial barriers to the receipt of health professional education. Therefore, alternative proposals associated with private financing were not considered for this report.

An additional means of meeting the objective came to mind in the preparation of this report. Time does not permit more than a descriptive statement of an alternative proposal:

> Federal subsidy of the <u>total</u> costs of producing qualified health manpower. This proposal includes Federal subsidy to schools of medicine, osteopathy, dentistry, and nursing for the purpose of underwriting a significant portion of all the costs involved in educating and training professional health manpower. In addition, the proposal includes Federal unrestricted grants to such

training institutions for the purpose of providing stipends to assist the students in meeting their living expenses.

6. Comprehensive and coordinated Federal health manpower program

There is a definite need for some organizational entity to be responsible for the development of a comprehensive program for trained manpower for the delivery of personal and community health services commensurate with the nation's needs. This function should be centralized in the Department of Health, Education, and Welfare, preferably the Public Health Service, whose major concern is for the improvement of health programs and services in the United States. This organizational entity would also provide the focal point for all Federal health manpower programs and provide liaison among the various Federal and non-Federal agencies and programs concerned with manpower. The following advantages may be listed:

(A) The coordinating function will eliminate duplication and waste among various government agencies engaged in some phase of education and training of medical manpower.

(B) A central agency would serve as a clearinghouse for all information relating to present and future needs and resources for health manpower, and for current sources of financing.

(C) The development of a comprehensive Federal program for education and training of medical manpower will stimulate the establishment of a rational policy on the training and utilization of personnel in the health field.

(D) A coordinated medical manpower program will provide the basis for appraisal of health requirements and the full development of human resources in relation to problems of automation and other technological developments, unemployment, poverty, and changes in the structure of the economy.

An initial budget of $500,000 for staff and special studies would be needed.

7. Federal support for research studies in all aspects of health manpower

Research studies in all aspects of health manpower--resources, development, utilization, financing--need to be substantially increased. Expansion of funds for PHS research grants and intramural studies is necessary to improve programs of health manpower recruitment, development and utilization. Studies on current practices in the utilization of health manpower (e.g., solo and group practice of physicians, hospital nursing services, home health services), methods

of training, and possible alternative approaches are urgently needed.

There is considerable evidence to show that group practice is one of the more efficient ways to provide comprehensive health services. Yet, few medical, dental or nursing schools introduce the concept. Students should be exposed to the values of group practice and whenever possible have experience in a group practice. In order to achieve this, the major group practice clinics within reasonable proximity of medical schools should be encouraged to develop joint programs of training, research and patient care with medical schools.

There is an urgent need for medical schools to undertake bold experiments in medical education, curriculum reform and programs of community service. A program to provide full support ($1-2 million per year) in ten medical schools could be initiated in the next year with support planned for a period of ten years.

The research grants program should be within the organizational unit described under proposal number one. This should be in the Public Health Service with at least Division status. The cost of the program, including coordination, administration, research and demonstration would be

$1 million initially (except for the proposed experiments in medical education) rising to $12 million annually in five years.

8. A program of Federal financial support for a nation-wide program of public education and recruitment for health careers

The National Health Council could provide invaluable assistance in recruitment of individuals for health careers if provided adequate financial support. They have developed a five-year program which could do much to inform the public and particularly high school students about the many career opportunities in the health field. If the objectives of this program are to be achieved the following areas of activity must be adequately financed for five years:

A. A cooperative and coordinated approach to the recruitment of health personnel by the national professional associations concerned with this subject.

B. Coordination of the careers activities of the Council's member organizations with the related interests of appropriate national counseling, educational and youth centered associations.

C. Promotion of a cooperative and coordinated approach to careers programs at the State and community level.

D. Development of generalized recruitment materials for the use of the health field.

E. Creation of a climate of public understanding and sympathy for the manpower needs and career opportunities in health.

The National Health Council is a voluntary agency with no vested interest in a specific professional, technical or auxiliary discipline, but with a broad approach to all health occupational needs. This program could be initiated on a modest scale for $100,000 annually, but a more realistic and effective program would cost $1-2 million annually.

ATTACHMENT
5-45

SUMMARY OF PUBLIC HEALTH SERVICE TRAINING PROGRAMS, BY TYPE OF PROGRAM, FISCAL YEAR 1964 (cont)

Program	Federal Obligations 1964	Legal Basis	Type of Trainee
Public Health Traineeships	$4,184,532	Section 306, PHS Act (42 USC 242g) as amended by P.L. 88-497	Physician, Nurse, health engineer, nutritionist, social worker, dentist, dental hygenist, health educator, veterinarian, sanitarian, statistician, other health professional
Public Health Training-Schools of Public Health	1,900,000	Section 314(c) PHS Act as amended (42 USC 246 c)	Public Health professional
Radiological Health Institutional Training	2,452,377	Sections 311 & 314(c) PHS Act as amended, (42 USC 241 & 246); P.L. 88-605	Radiation health specialist, radiation health technician, radiation control and protection administrator
Training and Traineeships NIH	2,150,417	Sections 301(d), 303(a)(1), 402(c), 412(g), 422(f), 433 (a) and 444, PHS Act of 1944, as amended (42 USC 241 (d), 242a(a)(1), 282(c), 287a(g), 288a(f), 289c(a), 289(g)	Students in Public Health Medicine, Dentistry, Nursing, and Osteopathy
Water Supply and Pollution Control Training	1,993,475	Section 4.(a)(2) of P.L. 660 (84th Congress) as amended	Scientist, engineer, and administrator in water pollution control field

1/ Appropriation for fiscal year 1965

Source: U.S. Department of Health, Education, and Welfare, Grants-in-Aid and Other Financial Assistance Programs, 1964-1965 Edition; and U.S. Department of Health, Education and Welfare, Annual Report, 1964, "Public Health Service."

ATTACHMENT 5-46

SUMMARY OF PUBLIC HEALTH SERVICE TRAINING PROGRAMS, BY TYPE OF PROGRAM, FISCAL YEAR 1964

Program	Federal Obligations 1964	Legal Basis	Type of Trainee
Air Pollution Training	$ 868,889	Section 3, Public Law 88-206	Post-graduate professional in air pollution research or control
Cancer Control Training	1,800,000 1/	1965 Appropriation Act (P.L. 88-605)	Cytotechnologist, physician, other professional
Dental Auxiliary Utilization Training	2,160,999	Section 422 (f), PHS Act of 1944, as amended	Dentist, dental auxiliary
National Institute of Mental Health	3,304,000	None (in-service training)	Psychiatric aide, volunteer, attendant, other subprofessional
Neurological and Sensory Disease Service Training	1,500,000 1/	1965 Appropriation Act (P.L. 88-605)	Physician and allied medical personnel
NLM - Training	65,000 1/	Section 301 (h), PHS Act of 1944, as amended	Medical librarian, biomedical science information specialist, information management and processing technologist, biomedical science writer and editor
Public Health - Graduate Training	1,993,620	Section 309, PHS Act as amended (42 USC 242 g)	Graduate student in Public Health nursing, Public Health engineering, student in preventive medicine and dentistry

6. Other program proposals which could achieve significant medical gains in a relatively short time.

(1) Full support should be given to the World Health Organization programs for the worldwide program for the eradication of smallpox. This will require a U. S. contribution of up to $30 million over a five-year period. In addition, technical assistance for vaccine manufacture will be required in Africa and for program implementation in Latin America.

(2) A nationwide program for the early detection and treatment of cervical cancer should be carried out over the next five years with the object of reducing the number of deaths by one-half. Special emphasis should be given to health education, the development of adequate cytology laboratories, the training of technicians and period cervical smears for all adult women.

(3) A program for the development of adequate intensive care facilities and services in every community hospital in the United States larger than 100 beds should be carried out. This will require renovation of facilities, new equipment, special training of personnel and augmentation of staff on a 24-hour basis. The initial objective should be to provide facilities and services in 1,000 hospitals that currently do not have such services available for the patient suffering from acute myocardial infection or other conditions requiring

intensive care. The cost of such a five-year program might be $50 million.

(4) A nationwide training program for ambulance drivers, hospital emergency room personnel and others called on to provide medical emergency care should be initiated, with full Federal support. The training would be more than the conventional first aid and would include procedures that could be carried out independently and those requiring supervision.

(5) Salmonellosis is probably the most common disease transmitted from animal to man. In recent years human outbreaks have been increasing in frequency and severity. One of the major sources of human infection is from poultry and/or their eggs. A program to clean up the facilities utilized by the chicken feed industry to provide sanitary control of animal feeds, to encourage hygienic poultry husbandry practices, to permit proper investigation of outbreaks when needed could go far to reducing the nationwide morbidity from gastroenteritis due to salmonella. This could be done for $2-3 million per year.

(6) A joint PHS/AID program should be developed for the mass measles immunization program in 16 African countries. This will cost $22 million in five years, but it would protect over 15 million children and would prevent more than one million deaths.

(7) A special program of project grants to support the establishment of health information systems in hospitals, large group practice clinics, medical schools, medical libraries and health departments. Statewide experimental systems should be established in some States. The programs could be funded under existing authority by the Public Health Service. It is estimated that significant demonstration projects could be initiated with $20 million annually for three years rising to $50 million annually.

(8) A nationwide program to prevent dental caries should be supported by Federal grants for the fluoridation of community water supplies and for a vigorous public and school health education program.

(9) A program of community health care project grants which could be used to permit major metropolitan or rural areas to have a flexible Federal financial base of support in order to effectively utilize all the existing public and private sources of funds. The large array of Federal and local public programs still leave major gaps in meeting health care needs (e.g., upper west side of Manhattan and west Harlem). The funds should be available to meet gaps in existing programs, whether for planning, administration, construction of facilities or program operations. Annual funding of $100 million for five years

could achieve very significant gains in urban and rural health care.

(10) A nationwide program to encourage physical fitness and proper nutrition, particularly among children and youth. This will require a significant expansion of the President's Physical Fitness Program, funds for the development of adequate physical education programs, in primary and secondary schools, and a broad program of public education.