Education for Primary Health Care at the University of Pennsylvania

September 1975

THE COMMISSION ON EDUCATION FOR PRIMARY HEALTH CARE

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REPORT OF THE COMMISSION ON EDUCATION FOR PRIMARY HEALTH CARE

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Almanac

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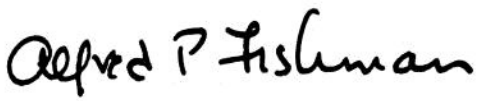
The term "primary health care" is variously interpreted by society and by institutions of higher learning. As a result, the aims and products of the educational process are far from uniform. However, all concerned do appreciate that, to be effective, the organization of primary health care will inevitably be complex and involve an interplay of professional and non-professional personnel. Also, both the organization and interplay will unavoidably grow more complicated as care moves from the hospital and acute care facility to less costly and more appropriate community settings and as the emphasis shifts from episodic medical care to continuing health care, health education and aggressive preventive and occupational medicine. Thus far, the administrative and coordinating mechanisms within the University of Pennsylvania have proven no more capable of dealing with these new requirements than the currently existing mechanisms for health care reorganization and coordination in society at large.

As momentum gathers for creation of an effective system for delivering health care at all levels, including primary health care, forces tending to slow or resist change in the educational system will become apparent. Particularly formidable in this respect are the traditional components of the present system for health care—the linkages between established health institutions, the complicated financial and administrative relationships between hospitals and medical schools, professional and administrative hierarchies, large capital investments, and traditional academic priorities that favor training professionals for the management of complex illness. A variety of legal and political encumbrances, economic influences, and entrenched professional interests severely inhibit joint planning at all political and educational levels. Perhaps the most significant force for restraint is the fear that the excellent components of the present system will be sacrificed in any major change.

Yet, changes unquestionably will be required in the traditional relationships among education, research and service: boundaries of conventional schools of medicine, dentistry, nursing, allied medical professions (and veterinary medicine) will grow less distinct; new personnel, trained in behavioral science, preventive medicine, health economics and health care administration will be developed; and health care will rely more heavily on a team of health professionals than on solo performances by individual products of the current educational system. To develop the team concept, new models for health education are required in which the preprofessional is given practical experience in related aspects of health care, and becomes aware of the societal, economic and political forces within which he will conduct a lifetime of professional activities. Not only will subsequent generations of health students require different programs of education, but present professionals will undoubtedly have to be reeducated and redirected in order to avoid undue delay in redressing imbalances and correcting deficiencies in current health care.

But, in the process of generating new modules and correcting deficiencies, particular care will be required to trim certain elements to appropriate size without compromising the quality of the system. Thus, in redeploying resources from medical specialties and hospital care towards general ambulatory care, prevention of disease and health maintenance, it would be myopic to curtail unduly the continued output of professional personnel who can exploit fully the concepts and methods of modern technology for the diagnosis and treatment of serious illness.

All of the above suggests that modifications of the present health care system will have to be tempered so as to preserve its tested and needed elements. The report that follows is predicated on the assumption that deliberate change is possible without compromising or sacrificing the worthwhile elements of the present system.



Chairman, Commission on Education for Primary Health Care

Education for Primary Health Care at the University of Pennsylvania

The Commission on Education for Primary Health Care was established to advise the Vice-President for Health Affairs and the Provost concerning the proper responses that the University might make to the perceived nationwide demand for enlarged and easier access to high quality health care. It is worth noting that the stimulus for the appointment of the Commission came from outside the University, which has played little part in defining or anticipating the national need for primary health care. Recognizing that the University has a responsibility to participate in meeting societal needs for health services, the Commission questions whether this *reactive* posture is appropriate for our institution.

The Commission believes that the societal and University concerns which called for its establishment stemmed from deficiencies in current health care services that can best be identified as: a) the allegedly inadequate supply of "personal physicians" who can provide continuous, broad spectrum, family-oriented care; b) difficulty of access to health care professionals in certain geographical regions (inner city and rural areas), which is generally believed to be a function of maldistribution of health care providers in both geographical and specialty practice terms; c) legal and customary barriers to the provision of certain health services by professionals other than physicians; d) inadequate or nonexistent means for providing noncrisis services connected with health maintenance, prevention of illness, rehabilitation of post-crisis patients, and maintenance of achievable health status on the part of chronic patients; e) deficiencies in the kind and variety of organizations of health professionals for achieving the broad purposes of primary health care.

The Commission also believes that the demand for primary health care can be met only through a combination of strategies among which the educational tactic is the only one over which the University exercises principal control. The education of health professionals should be coordinated with current and anticipated strategies for health care delivery as far as these can be foreseen, with due attention to legislative fiscal changes at both national and local levels, to technological developments in medicine, and to the actual needs of consumers of health services: on the one hand, the aims of educating health professionals should not be simply subservient to the immediate demands for health care; on the other, the educational system should not simply go its own way, ignoring probable future societal needs for particular health personnel.

From the point of view of consumers of *primary* health care, the professional schools of health have perhaps oriented the training of personnel toward research and specialized medical care to an excessive degree in recent years. This orientation is the joint product of historical forces which emphasized the scientific basis for medical education, a hospital locus for training, and technological advances in treatment. However laudable such response to these historical forces may be, it seems to have overshot the mark in the sense that it has led to a deficiency in the education of generalists and personnel for providing basic or elementary care. We address the question of changing this emphasis in our *Recommendations* below.

What is far less clear to us is the extent to which graduates of the medical school over the last two decades are actively engaged in the enterprise we have designated "primary health care." The evidence is simply inadequate to give a satisfactory answer. The Commission does believe that a substantial fraction of the graduates of the University of Pennsylvania do provide primary health care. However, because of the nature of their specialized training, they generally offer a restricted version of primary health care.

There is still ample opportunity for the University to take leadership in education for health care. There will surely be further changes in demand for health care and related services to which the University should respond. Some of these changes can be predicted with confidence. For example, current demographic trends suggest an increasing demand for geriatric services and a slackening in demand for pediatric services. There must be new modes of providing continuing care for patients who are afflicted with chronic diseases, particularly those who are unable to fend for themselves. A host of undiscovered occupational diseases will accompany technological advances. Pressures will mount for environmental control to prevent the occurrence of some diseases and to minimize the exacerbation of others by pollutants. It will undoubtedly prove advantageous to identify influences that predispose individuals to disease ("risk factors") and to promote early detection and intervention for the sake of arresting pathologic processes at their beginning. These examples are merely intended to suggest that it is possible to anticipate and to prepare educationally for future needs in health care. By recognizing these needs explicitly, the University can assume a leadership role in matching its educational potential to societal requisites and minimizing the number of occasions on which it will be obliged to react to crises by *ad hoc* methods (such as the present Commission). Furthermore, by maintaining a continuing alignment between its goals as a University and the changing opportunities for education and research in the

health sciences and services, the University will be in a position to distinguish between activities that would be appropriate or inappropriate to its total mission. We will return to the subject of societal needs and the University's choices in the *Recommendations.*

Conventional health care, as delivered by physicians, nurses, dentists, and other health professionals, is only one of the many influences on the achievement and maintenance of good health. Many of these influences are outside the scope of University control. But within the purview of the University is the education of the future health professional; and his or her attitudes, values and interests are strongly influenced by that education. The decision as to what sort of health career one will follow is shaped in school. The type of practice one seeks is guided by the models displayed to the student. Rarely does the contemporary product of this educational process provide comprehensive health care. More often, the care is circumscribed, fragmented and discontinuous. Since styles of practice are strongly influenced by the educational process and since the current deficiency is in general health care, the training of professionals must be considerably broadened. The Commission believes that such a broadening is mandatory and this assumption underlies the specific *Recommendations.*

No matter how liberal the definition of the practice of primary health care or how extensive are the revisions in the educational process for the training of health professionals, the Commission believes that success in meeting the national goals for health care will be exceedingly modest unless there are accompanying substantial changes in the modes and mechanisms of *delivery* of primary health care. Indeed, the Commission is convinced that unless the delivery system offers realistic career opportunities for health professionals, as well as realistic supply of services for which there is clear need or demand, neither an enlarged scope of training nor a reorientation of the aims of practice of health care will be of any avail. Accordingly, in the *Recommendations* that follow, the Commission, while emphasizing the educational responsibilities and missions of the University, assumes that appropriate changes in the system of health care delivery will also take place and that the University will be a knowledgeable and willing partner in the larger effort to change the entire system.

Finally, it will be clear in the sections that follow that the Commission has exceeded its assignment. Although the charge to the Commission was confined to *primary* health care, it is inescapable that *primary* health care must be considered within the broader context of total health care and that any change in education for *primary* health care may have substantial implications for the larger system of which it is a part.

Alternatives

The Commission has concluded that the University currently has to choose among three broad options:

1. To *retain* without important change the present practice of educating health professionals in its undergraduate schools. This involves emphasis on undergraduate training in medicine by subspecialists and the separate, distinctive and usually unrelated education of professionals in dentistry, nursing, and allied health professions. The current emphasis on biomedical research would also be retained. In effect, this would leave the University *status quo ante.* Strictures could then be imposed by the availability of opportunities for postgraduate specialty

WORKING DEFINITIONS

Allied Health Professional is a generic term which includes a variety of non-physician, non-nurse health care workers (e.g., medical technologists, physical therapists, occupational therapists, speech pathologists, medical social workers). These persons function in referral and consultative relationship with physicians and other practitioners of the healing arts to provide the full scope of preventive, diagnostic, therapeutic and rehabilitative services necessary. Traditionally, allied health personnel have served as secondary or tertiary contacts within the health care system but recent developments in some fields will move these contacts forward toward detection of special problems which currently escape recognition or early identification.

Health Care Delivery System is the system responsible for protecting and restoring health. It includes the units of allied health professionals, dentists, nurses and physicians working privately or in public employ, located in offices, clinics and hospitals. It includes components devoted to maintenance of health, early case findings, long-term rehabilitation as well as those units which respond to patient complaints in a diagnostic and therapeutic manner.

Nurse Practitioner is a nurse with additional training enabling performance of tasks beyond nursing function. Such persons practice independently or interdependently with other health professionals to provide a mix of nursing and medical services. The nurse practitioner is directly responsible and accountable to the client. Nurse practitioners may function on primary, secondary or tertiary levels. Nurse clinicians, through graduate study, attain greater depth of knowledge and skills than do nurse practitioners who are trained chiefly through continuing education. There are a number of situations in which nurse clinicians are currently practicing independently.

Physician Extender is a non-physician, non-nurse health care worker who assists the physician by sharing some of the latter's tasks or responsibilities in delivery of general or specialized medical care. The worker's knowledge and skills are medical and performed under physician direction. Some of these workers function in primary care settings and others at the secondary or tertiary care level.

Primary Care Physician is that physician component of the health care system who is principally concerned with delivery of personal primary health care. Such an individual may be an osteopathic generalist, a general practitioner, a family practitioner, an internist or pediatrician, less usually an obstetrician-gynecologist, rarely, the psychiatrist or general surgeon. With the exception of the family practitioner and recent graduates of primary care residency programs, each is a specialist who may have only limited professional capacity to cope with a broad range of presenting problems in a typical community practice. It should be noted that "first contact" care is increasingly provided by nurse practitioners, physician extenders, and allied health professionals.

Primary Health Care is used to encompass the general idea of first contact between patient and provider; dependable access to continuing and coordinated health care; periodic access, as necessary, to specialized health services and facilities; and the provision of services designed to prevent illness, maintain health, and rehabilitate the patient recovering from illness or disability, including the restoration of psychological and social function as well as biophysical functioning. As indicated above, when used in this sense, the term "primary care" refers to a part of the total system of comprehensive, personalized health care.

training, thereby promoting the number of generalists simply by limiting access to specialty training after graduation.

This option presupposes that the present educational exposure is optimal in content, sufficiently broad in scope and diverse in opportunity to serve as a general underpinning for a career as a health professional. This option may also be viable if the University is willing to commit its future in health education to the premise that such specialty training will continue to be in demand and that its programs, students and professional products will be able to compete successfully with counterparts in other institutions which may elect to pursue the same route.

On the other hand, this option may be foreclosing the opportunity of the University to contribute responsibly and innovatively to changing needs in health education. It also has the disadvantage of assuming a posture that seems to ignore a widespread popular demand for change. Finally, this decision may entail self-denial of resources that promise to become available to meet the needs and rights of society for health care.

2. To *redirect completely* the emphasis in undergraduate education of health professionals to the training of generalists instead of subspecialty training. Concomitantly, plans could be developed for joint training of "health team" personnel and for creating new roles in health care delivery based on function rather than title. The scope of training of these teams could be sufficiently broad to include management of health delivery enterprises, psychosocial services, preventive and health maintenance services, and a more active outreach into the community.

This revolutionary option has the advantage of responding to current popular demand, of meeting a possible moral obligation of the University, and of putting the University in a position to benefit from presumed legislative and funding developments. It would require extensive institutional changes in the format of education, in administrative arrangements, and indeed, in the educational responsibility of existing faculty and staff. However, exercise of this option would disruptively alter the course of an institution that has an established record of excellence in health affairs for two centuries; it would fail to exploit certain talents of an excellent faculty and certain interests of the student body; it would underuse the extensive resources now committed to scholarship and research in the health sciences.

3. To *retain* some emphasis (not necessarily the current level) on subspecialty education and research at the undergraduate level while *adding* a new component, specifically directed toward the education of generalists and health care teams as outlined in option 2 above. If need arose to curtail the number of postgraduate slots for specialty training, those who elected generalist training would have a better undergraduate background and orientation than is currently provided. Clearly, exercise of this option would depend in great part on either the availability of additional resources or some reallocation of present resources. It would represent a serious commitment on the part of an institution that is already hard pressed financially to discharge its existing responsibilities. It would, however, have the advantages of the first two options, but neither of their drawbacks.

The Commission believes that the last of these options is the proper choice. Our assessment of the future is that there will be continuing need for subspecialty medicine, perhaps on a more restricted scale than now, and for medical researchers; and that the University of Pennsylvania can compete effectively in this sphere. At the same time, the Commission believes that there is and will continue to be a greater need and demand for a variety of health professionals who have been prepared to deliver and to manage the delivery of primary care services. Furthermore, the Commission believes, on the basis of the evidence brought before it, that there is a substantial current interest in learning to meet this demand on the part of contemporary students in the health professions; and that this interest is frustrated by the current pattern of education for health careers at the University.

On these grounds, we offer the following conclusions and recommendations.

Eight Recommendations

CONCLUSION 1: EDUCATION FOR PRIMARY HEALTH CARE REQUIRES A TEAM APPROACH.

In the minds of many, primary health care is the province of the physician. The Commission recognizes the importance of training physicians for primary care and the central role the Medical School must play; but the Commission is persuaded that primary care should not be left to physicians alone. Considerations of efficiency as well as potentialities for improved access to care suggest that some version of the "health care team" concept will become a more common model of practice in the future. If this is so, training for primary care should be oriented toward such a model.

The Commission was repeatedly reminded of the deficiencies in primary care education that arise from the separateness of training of physicians, nurses, dentists, and allied health professionals. The highly-touted current training programs for health professionals make little provision for shared experiences or mutual understanding of professional goals and interrelationships. Nor are serious attempts being made to familiarize the emerging health professional with community resources that relate to health care or to allied professionals who may provide help and direction for achieving health goals for individual patients. The Commission was convinced that the educational process should promote interplay among the diverse professional components of the delivery system. Furthermore, attention of the Commission was repeatedly directed towards the likelihood that sequestration of faculty in separate schools had led to needless duplication of personnel and resources, and to overlapping curricular offerings at some expense to the University.

RECOMMENDATION 1: Establish a new program

A new program of education for primary care should be offered by an inter-health school faculty teaching as an interdisciplinary team, and training together the collection of professional occupants who can expect to work together on the job in the future. Students should have shared academic and clinical experiences and these should be jointly planned by an integrated subset of the faculties of the now separate health schools. This new program must have sufficient autonomy, resources and influence to provide attractive educational alternatives to the current, established programs. It will need to have equal access to students and faculty and an education-service-research site(s) over which it exercises sufficient control to assure excellence of program.

The Commission favors this alternative over certain commonly suggested others such as: the establishment of a new department of family practice in the School of Medicine; the delegation of responsibility for primary care to the existing department of community medicine (which we find not oriented toward teaching the practice of medicine); or the creation of other units exclusively

within the School of Medicine. To be sure, the School of Medicine must play a vital role in the new program, but we believe that the future lies with team training and team practice.

CONCLUSION 2: SUITABLE SETTINGS AND MODELS ARE ESSENTIAL FOR EDUCATION IN PRIMARY HEALTH CARE

Suitable settings for education in the provision of comprehensive health services are central to the educational process envisaged by the Commission. For this purpose, a traditional university hospital cannot provide the full range of comprehensive health service. In this light, the Commission has concluded that the Hospital of the University of Pennsylvania does not provide the full sweep of educational and service activities that is necessary for a complete exposure to primary health care. Nor is it likely to provide the proper ambience or breadth of experience despite proposed modifications by clinical departments. Indeed, although the Commission is sympathetic to the measures that have been described to it as plans for improving education in primary health care at the Hospital of the University of Pennsylvania, it is concerned that overzealous attempts to reorient the practice and teaching at this hospital toward the full sweep of primary health care may seriously compromise the high quality of secondary and tertiary medical care that is currently exemplified without accomplishing new goals in primary care. Because of these reservations, the Commission has focused on other components of the health educational system at the University in order to provide proper settings and personnel for education in primary health care.

RECOMMENDATION 2: Provide practice models

The Commission believes that the proposed new program in primary health care should carry out its training functions at carefully selected sites where health care is being delivered on or near the campus of the University. Each site should be selected as a component of the total University objective in education for primary health care; together they should provide a coherent pattern of primary health care in its full dimensions, including preventive medicine and the protection of health as well as the traditional devotion to diagnosis and treatment. The operation of these sites should also illustrate modern managerial and technological approaches to efficient health care delivery. These sites should not duplicate the educational setting of the Hospital of the University of Pennsylvania which will also, quite naturally, be evolving its own contributions to education in primary health care. Instead, their major educational responsibility would be on the primary aspects of health care.

Early in its deliberations, the Commission recognized that fulfillment of its aims for a new program for education in primary health care would be greatly expedited if the responsibility for this type of education could be located in a single institution under the control of the University. Indeed, the Commission examined this option in detail but dismissed it for several reasons:

1) Central to the recommendations of the Commission is the premise that henceforth all health students should be exposed to education for primary health care. There is no single site related to the University that could assume this function for the present numbers of medical, dental, nursing and allied health students.

2) At the present time, if a single site for education in primary health care were to be identified, it would probably be an affiliated hospital. This choice might have several unfortunate consequences: the contrived reorientation of a medical staff that is currently directed towards specialty and inpatient care; the risk that insufficient University resources would be allotted for the reoriented institution to achieve equal professional and budgetary status with that of the University Hospital; the likely prospect that if sufficient resources were allotted for enhanced growth of the affiliate, the final product might well be a competitive replica of the University Hospital that would operate to the detriment of both without satisfying the need for education in primary health care.

3) One of the University goals with respect to education for primary health care should be research on optimal systems for health care services. Accordingly, since it is unlikely that a single system will prove optimal for the wide range of primary health care services that society will require, it is appropriate for the University to explore different models of health care delivery, thereby enhancing its educational goals not only by exploring new modalities for the delivery of primary health care but also by incorporating within the design of these facilities new opportunities for research and evaluation as part of its total mission as a University.

It cannot be overemphasized that in selecting prospective sites for education in primary health care, the population that is to be served should be clearly identified, its health needs analyzed and its advice should be sought concerning the design of services and their modes of provision. Access and continuity can be expected to be of particular importance. Provision should be made at the outset for continuing exchange between the providers of health services and the constituency that is being served.

The Commission is well aware of the difficulties that are entailed in implementing the sort of educational program for primary health care that is being proposed. Repeatedly in the course of testimony it was reminded of the preponderance of expensive failures over even modest successes along this line at other Universities. It has no misconceptions about the difficulties that are entailed in accommodating educational opportunities in a primary health care facility that is obliged to be financially self-supporting especially during the formative days. Because of this awareness, the Commission would not presume to present a comprehensive solution for these problems. Instead, it advocates that plans for establishing sites for education in primary health care make provision for adequate financial assistance for the educational component in order to avoid untoward financial consequences for a primary health care facility that otherwise could be solvent as a service enterprise.

CONCLUSION 3: NO SINGLE HEALTH SCHOOL CAN ASSUME RESPONSIBILITY FOR THE PROGRAM IN PRIMARY HEALTH CARE EDUCATION

The installation of a new program in primary care education with integrated faculty and curriculum as outlined above will require that budgetary and academic responsibility for it not be within the sole jurisdiction of any single existing health school.

RECOMMENDATION 3: Create administrative linkage

A coordinating office and continuing mechanism for setting and implementing goals in education for primary health care should be created promptly at the highest administrative level of the University. Since the Commission does not comprehend fully the administrative overlap between the Office of the Provost and of the Vice-President for Health Affairs, it can be no more specific in this recommendation. However, organization at this level is necessary in order to implement the establishment of the new program in education for primary *health care and its incorporation into the* total *health care system.*

Clearly (see Recommendation 7) this advocacy of the prompt establishment of a coordinating organization represents only a first phase in long term planning in education for primary health care. It is anticipated that, in time, it will be succeeded by a more elaborate and structured integrating mechanism as interplay among the various health schools accelerates and becomes more comprehensive. The coordinating office is advocated now as a way to promote education in primary health care and to set initial goals.

CONCLUSION 4: PRESENT PRIMARY CARE TRAINING FOR PHYSICIANS IS INADEQUATE

The Commission is persuaded that the current training of physicians at our School of Medicine neglects primary care. Within the limits which the faculty of medicine has defined for its educational purposes, a high quality of medical care and research is taught and practiced throughout the School and its teaching hospitals. By committing itself to these selective goals, the Medical School has failed

to provide a comprehensive educational experience for a career in medicine. As a result, not all of its students are provided with a full view of current opportunities for achievement and self-fulfillment according to their individual interests and talents.

Recent recognition by clinical departments that particular imbalances exist with respect to education for primary health care has led to proposals for new programs to train residents, nurse-clinicians and undergraduate medical students in primary health care at the University of Pennsylvania Medical Center. Extensive modernization of ambulatory practice has been initiated. In large measure, these programs are directed toward objectives that the Commission endorses. But, the Commission believes that they are inadequate in capacity and in the breadth of experiences essential for preparation for primary care. Furthermore, although they will enlarge the students' experience in *medicine*, they do not address certain other deficiencies in respect to *health* care, especially preventive medicine, management of health services, and the behavioral and social aspects of health.

RECOMMENDATION 4: Enlarge the scope of medical education

In all possible ways, the School of Medicine must enlarge the scope of career opportunities for its students in contemporary medical practice as well as in research and education. This should be done within the broader context of health care and prevention of illness. Among these opportunities should be exposure to physicians practicing primary health care in a proper setting. The prospects and prerequisites of a career devoted to primary health care should be understood by the student as part of the educational experience. To these ends, the programs noted above should be supported and extended: 1) through reexamination and reorientation of the medical curriculum to remedy deficiencies and to undo distortions, and 2) through addition of new experiences in primary health care including private offices, group practices, neighborhood clinics, and community hospitals.

CONCLUSION 5: RESEARCH ON HEALTH SERVICES AND HEALTH CARE DELIVERY IS ESSENTIAL

In the course of its review of primary care, the Commission found that many of its questions about health care could not be answered by convincing, dependable evidence. There appears to be profound ignorance about such topics as the utilization of services, the distribution of illnesses and patient complaints, the costs of various health care systems and the appropriateness of the training of mid-level practitioners for the responsibilities they do or might assume. What is "known" about these and other significant questions is often anecdotal and it is reasonable to suspect bias or, at least, unrepresentativeness in the information. Few attempts have been made to subject innovations in health services to experimental testing or to the equivalent of randomized clinical trials.

The Commission believes that systematic research on health services is as legitimate an area of responsibility for the University as the bio-medical sciences. Furthermore, we believe that a viable and academically sound program in education for primary health care must be accompanied by a sound and far-reaching program of research on health services and health care delivery. There is much to be learned about how people use health services and why they make the choices they do; about the cost effectiveness of various modes of providing services and staffing facilities; about occupation-induced disorders and preventive medicine; about the effectiveness of various common therapies in defined populations. Such research is not unknown at the University, but the present level of activity is inadequate and the new program in primary care can serve as a stimulus to needed growth.

RECOMMENDATION 5: Conduct programmatic research

Provision should be made for increase in research activity related to health sciences and health care delivery. Collaborative research should be facilitated and current activities should be incorporated into a cohesive program that has generation of new knowledge concerning health services and health care delivery as its major concern.

CONCLUSION 6: EVALUATION OF HEALTH EDUCATION IS CURRENTLY INADEQUATE

Numerous education programs in the health professions have been begun, continued or dropped without adequate assessment of how well they were achieving the aims set forth in their establishment. The craft of program evaluation is underdeveloped, crude and sometimes quite judgmental. Nonetheless, it is not without value in suggesting ways to improve our educational process. It is particularly important to introduce the notion of evaluation at the beginning of a new program, not only in order to collect adequate data but in order to avoid the implication that announcement of an evaluation is necessarily a declaration of war upon the program.

RECOMMENDATION 6: Evaluate the new programs

The launching of a new program in primary care should be accompanied by a plan to evaluate it and to feed back the results into future program planning for improvement. A similar procedure should be followed for other proposed programs in primary care at their inception; and where feasible, for existing programs that are in operation. An appropriate organizational locus for the evaluation activity would be in the office responsible for establishing and coordinating the proposed new program in primary care.

CONCLUSION 7: HEALTH SCHOOLS AT THE UNIVERSITY OF PENNSYLVANIA ARE INSUFFICIENTLY COORDINATED

The Commission views the integration of educational planning, research, teaching and learning as important and essential in its own right as far as primary care is concerned; but we also believe that it would be of benefit to the University as a totality and especially to its students in the health fields if an even wider integration of the now separate faculties of the several health schools could be achieved. We recognize that the inherent tendency toward specialization is desirable. We do not believe that desirable specialization will be inhibited by reducing the existing administrative walls between the several health professions and that much flexibility and economy of effort could be obtained by a greater union.

RECOMMENDATION 7: Merge the faculties?

For cooperative planning and conduct of health education and service programs, and for optimal use of resources, the Commission recommends that the University explore the feasibility, advantages and disadvantages of organizing the faculties of the several health schools into a single faculty, perhaps following the example of the recently organized Faculty of Arts and Sciences.

CONCLUSION 8: CONTEMPORARY HEALTH EDUCATION AT UNIVERSITY OF PENNSYLVANIA IS INORDINATELY INFLUENCED BY EXTRAMURAL FORCES

The political, economic and social forces that prompted the establishment of this Commission and occasioned its charge are largely extramural. Nevertheless, they have significant institutional impact and are themselves suitable to conventional academic investigation—an activity for which the University is an appropriate locus. There will surely be further impingement of external forces upon the health education activities of the University and it seems more desirable to anticipate them, perhaps even to help shape them, than it does to wait until we must react—often suddenly and without opportunity for analysis. The University has an opportunity to exert leadership in developments of health policy and it currently has resources and capabilities for this in several areas, including the School of Public Policy, the Leonard Davis Institute, and the Department of City and Regional Planning. Support for such policy planning activities will certainly become available.

RECOMMENDATION 8: Form a health policy institute

Existing programs or units concerned with public policy should be invited to propose a continuing program of health policy planning. Should there be reason to believe the existing units are insufficient, unwilling or unable to respond, a multidisciplinary Institute of Public Policy in Health should be created.

Postscript

Finally, the Commission regretfully appends a list of six topics that came to its attention during the course of hearings, but which we did not have time or opportunity to discuss sufficiently to achieve clear conclusions or recommendations. We list these below as unresolved questions with the conviction that they will have to be explored further, presumably by another body, since they are importantly related to the central issue of the role of the University in education for primary care.

First, we believe it is important to consider further what are the University's responsibilities and opportunities for service and education in its immediate surroundings, West Philadelphia. We have not had adequate opportunity to study the facts but we have ample reason to believe that this area is underserved by primary care providers; that many of its inhabitants suffer from chronic degenerative disease, disorders of nutrition, treatable infectious diseases and environmental hazards to health. How great is the University's obligation in primary health care services to its neighbors? How might health education be extended to this population? What sorts of services would best meet existing needs? Can the provision of such care also serve educational needs for health professional students? How might such activities be financed? Such particular questions need much more appraisal than we were able to afford in the time allotted for our task.

Second, we believe that consideration should be given to "regionalization" of educational and service programs and facilities on the part of Philadelphia's five medical schools and their associated hospitals. It seems unnecessary to replicate all programs and facilities in five institutions and there may be possibilities for substantial rationalization and coordination of efforts that could produce money savings as well as better education, perhaps even more efficient services. We recognize the complexity of this question and feel no apology is needed on our part for not having resolved it.

Third, turning inward upon the University itself, we were reminded by several witnesses that the standards and criteria for admitting students to the various health schools, but especially to Medicine, may bear reexamination if the generation of primary care health personnel becomes a serious commitment of the University. At first sight, this comment might seem to apply mainly to the content and focus of the pre-health curriculum, particularly with respect to the question of biological science vs. sociology and behavioral science; but we believe it is broader than that. Are there personal or demographic characteristics that should perhaps be weighted more heavily than they currently are in selecting students for admission? One view is that students from a rural background, for example, are more likely to return to one when they practice. It may be possible to select students with special aptitude and interest in primary care (or for scientific research) by techniques other than achievement tests and course grades. Such questions as these are unsettled and require much more study, or, more likely, systematic research. We simply underscore here the need to reexamine the selection and admissions processes of all health schools to see whether some changes might further the objectives of a new emphasis in educational programs on primary care.

Fourth, we suggest that further attention to the pre-professional education of candidates for health careers is warranted. A number of witnesses suggested that current "pre-medicine requirements" (coupled perhaps with intense competition for admission) exercised very undesirable pressures upon undergraduate students, dampened their interest in humanistic study, and strongly suggested a "scientific biology" view of medicine that downplayed the emotional supportive aspects of much of health care. A second strand of testimony emphasized the undesirability of segregating the study of certain aspects of human structure and function in health schools, asking whether human physiology, anatomy and the like (as well as didactic courses in health and disease) might not be profitably made available to university undergraduates, whether or not they had already opted for health professional training. Such exposure, it was argued, might inform the career-choice process and could not help but educate individuals to be more knowledgeable consumers of health care.

Fifth, we heard enough testimony on the subject of "mid-level practitioners," "physicians' assistants or extenders" and "auxiliary health personnel" to make the Commission conclude that such occupations or roles are likely to become more important in the future; are ill-defined and variously understood now; and should be carefully examined to decide how they fit into primary care. We are uncertain, for example, what sorts of paraprofessional practitioners should be employed in the primary care institution we have recommended; and we are not decided on how or by whom they should be trained. We have noted, with endorsement, the beginning of a nurse-clinician program at the University; and the absence of any plans to train "physicians' assistants" or their equivalent for semi-independent, limited medical practice. We are not certain that the University should undertake an educational effort in this area but we do believe the matter needs further study, including a better understanding of the variety of roles such individuals might play in delivering primary care, as well as potential demand for their employment.

Finally, the increasing commitment of the health schools to activities concerned with health care rather than research, will require provision for the academician who devotes the bulk of time in providing health care and in serving as a model for health practice. This problem is exaggerated by the proposal of an integrated faculty for team teaching, the prospect of a unified faculty concerned with health sciences, care and affairs, and the prospect of increasing involvement of community physicians and other health professionals in the educational process. Inevitably, these considerations will be associated with questions concerning University status and benefits. Since some of these questions are currently being explored in other contexts by the administration and faculty, it would seem reasonable to enlarge the scope of those explorations to include provision for the changing scene in education for primary health care.

Our unfinished agenda was, we believe, not as urgent as the central task that we were given. But we are convinced that sooner or later these last questions will have to be faced if the University chooses to follow our recommendations regarding education for primary health care. Indeed, for a University so deeply committed to health education, it seems likely that these questions are unavoidable no matter how it elects to respond to the advice of this particular commission.

A History, An Inventory and Some Comparisons

> What counts in the things said by men is not so much what they may have thought or the extent to which these things represent their thought as that which systematizes them from the outset, thus making them thereafter endlessly accessible to new discourses and open to the task of transforming them. (Michel Foucault, *The Birth of the Clinic: An Archeology of Medical Perception*).

The Commission undertook to review the history of education/service/research in primary health care at the University of Pennsylvania as a prerequisite for appreciating current attitudes and for predicting certain responses. In particular, a glimpse into the history of this medical school over the past two hundred years might reveal how the form of our present programs in primary care developed. It might urge the Commission to accelerate or, conversely, to pause as the advantages and liabilities of new courses of action were placed in historical perspective.

From the birth of the Commission, data collection suffered from an embarrassment of riches in some areas and an almost complete dearth of relevant material in others: Philadelphia is full of biographies of eminent physicians and chronicles of affiliate institutions; but documentation of what has happened over the years to the typical graduate in his time is rare, indeed. Even more invaluable but equally rare is the patient's view of the professional encounter between physician and client.

Nonetheless, a framework for self-appraisal has emerged and certain trends have become evident.

Primary health care is distinct from primary medical care. The charge to the Commission was a consideration of issues relative to the former. Most documentation treats medical care as health care. The historian can recognize functions performed by physicians. With much less specificity, nursing activities are also identifiable. In still less detail one can observe the work of other health professionals. Some examination of the place of the self-care system by lay persons is available. Similarly occasional references to the health care roles of self-ordained practitioners are traceable. All this is unsatisfactory for the student of primary health care—presumptions made about medical care must be extended, sometimes in error, to the total health sphere.

As defined elsewhere in this volume (see page 4) primary health care is concerned with care of first access; care characterized by longitudinal responsibilities for patient care; care of which the hallmark is horizontal integration across a spectrum of providers of primary, secondary and tertiary care. Not surprisingly, exact historical verification of this pattern is difficult.

For convenience and with some logic one can describe seven periods of medical history at this University, which are discussed in some detail below.

In each period a number of related issues surface: These are (a) the University as locus for medical education; (b) the movement toward biomedical science; (c) the role of the patient in teaching; (d) national conformity in health care education; (e) the (changing) objectives of medical schools; (f) the development of specialization; (g) the mode of financing health care education; and (h) educational differences between other schools.

Within each of the seven time frames discussed below, it has proved meaningful to describe, however imperfectly, the relationships which exist among:

the state of the art (i.e., the practice of the health professions);
health education in the United States;
health education at this university; and
the consequences for primary care of such education

AN OVERVIEW OF HISTORY

Prologue—British and European Antecendents

Before 1765, (and for a long time afterward) a variety of health professionals delivered primary and sometimes specialty care throughout the colonies. A few were graduates or at least attendants of medical schools and/or universities. Leadership in medical education had progressed from Padua to Montpellier, Leyden to Edinburgh (1). As would be expected some British colonists had trained in the London hospital schools. Although the principal founder of the University of Pennsylvania School of Medicine, John Morgan, attended the University of Edinburgh for his training in medicine, he was familiar with the English non-university models (2). In Morgan's time, there was virtually no specialty care; certainly medical care was not hospital based. By the 1760s it had become evident that travel and study abroad was insufficient for a growing America's needs.

18th Century Origins

And so, in 1765, John Morgan in his *Discourse upon the Institution of Medical Schools in America* (3) proposed just that—a medical school in Philadelphia. Such a school was established on the Edinburgh model. Teaching was to have a 'Scientific Basis', the institution linked to a university. Instruction was by didactic lectures without laboratory work. A prior outpatient and inpatient apprenticeship became a pattern. There was bedside exposure. The die was cast toward increasing specialization by Morgan's insistence on separation of medicine, surgery and midwifery. Medical education was financed by students through lecture fees. Formal nursing instruction was nonexistent. Midwives were trained sporadically. Most graduate health professionals practiced "primary care." A few taught and did rudimentary research while engaging in practice.

Early 19th Century

In this period other medical schools opened both with and without university affiliation. Most physicians continued to act as generalists. At Pennsylvania the impact of French scientific advances was being felt (4). Didactic lectures were supplemented with laboratory work and dissections. An attempt was made in this period to offer university training to pharmacists —this failed. Dispensaries served as a form of on-the-job training for young physicians (5). William Rush, the spokesman of the era, expressed a belief that physicians lacked clinical training and length of training appropriate to the times (6). Few took heed, the founders died, the old and newer protagonists for educational reform were unsuccessful. In summary, medical science was moving ahead; medical practice and medical education were advancing little.

Late 19th and Early 20th Centuries

In this period medical schools of variable quality continued to proliferate. After the Civil War, the growth of specialization, as we know it, was rapid. This medical school moved to West Philadelphia and made a commitment to inpatient care with the construction of the nation's first University Hospital in 1874 (7). In the same decade Johns Hopkins University was founded on the model of the European (German) academic institution (8). The movement toward full-time faculty accelerated but was not successfully implemented. Pennsylvania continued to generate a mix of primary care practitioners and consultants. In patient care and bedside teaching, the Medical School achieved prominence during Osler's years. William Pepper Jr., concentrating on the reorganization of clinical facilities, exercised strong leadership throughout this period (9).

The early American schools of nursing organized on the Nightingale system were in New York, New Haven and Boston in 1873. The element of public health nursing was strong from the inception of organized education for nurses in the United States. However, as reported by a Rockefeller Foundation Committee in 1918 "nursing schools were operated for the most part as adjuncts to the management of hospitals and not primarily as educational institutions" (10). The beginning of nursing education at the University of Pennsylvania was no exception to this trend. The Hospital of the University of Pennsylvania School of Nursing was founded in 1884.

Between the Wars

After an initial setback for medical science just before the First World War, the basic science foundation of modern medicine was firmly established. A combination of inpatient care, laboratory work, dissection and didactic science served to prepare the medical student for practice after graduation. Ambulatory care experience was limited to office contact with some part-time faculty and the "clinic" rotations. Again the records yield little quantitative data regarding the primary care activities of Pennsylvania alumni. But the days of the poorly trained generalists of pre-Flexnerian diploma mills were clearly over. Indeed, this institution had begun "post-Flexnerian" reform 30 years before the watershed report (11). Midway through this period, the medical school underwent a thorough evaluation through the able offices of A. Newton Richards and T. Grier Miller. The union of medical education and basic research was insured (12).

The Committee on the Grading of Nursing Schools was established in 1926, as a response to the need for highly qualified, well-trained nurses in the community. The Committee recommended in 1934 the movement of nursing education into institutions of higher education. The University of Pennsylvania responded to the trend by establishing the Department of Nursing Education in the School of Education in 1935. Thus community-based nursing education at the University of Pennsylvania was initiated and has continued to grow. The first curricula offered graduate nurses major study in public health nursing.

Post-World War II

During this era, federal and state monies, designed to develop a biomedical research establishment, served to subsidize medical education as well.

Nursing education likewise was extended and expanded at the University during the Post-World War II era. The School of Nursing of the University of Pennsylvania was established by the Trustees of the University in 1950. From its inception as a unit of the health affairs division, community nursing has been an integral part of each undergraduate nursing student's educational experience. The emphasis on community nursing was also exemplified by the inclusion of a master's program in public health nursing when the Trustees authorized the establishment of the Graduate Division of the School of Nursing in 1961.

Postgraduate health education remained within the province of teaching hospitals but the function of medical schools changed in response to the growth of residencies. By the mid-1950s, schools no longer intended in four years to produce practitioners. Instead, they were structured to produce graduate physicians who were steeped in basic sciences related to medicine (13). Clinical experience was relegated to postgraduate training. Alumni records from this time fail to show explicit commitment of the University of Pennsylvania to generating primary care physicians. Instead, the University continued to nurture faculty and hospital based specialists.

The Last Decade

In the 1960s, the "extension of democracy" took the form of acceptable protest by nursing and other health professionals toward expansion of their roles and a heightened recognition of their contribution to patient care.

Similarly "ward" patients became the beneficiaries of Title XVIII and XIX payments and in a limited way became involved in purchase of services.

The American public, professional leadership and health care students began to investigate speciality and geographic redistribution of physicians and the broader problem of cost and quality control throughout the health enterprise (14).

The term Primary Health Care came into wide circulation. A detailed history of Primary Health Care at the University of Pennsylvania, including an extensive bibliography, will be published in monograph form as part of Volume II.

AN INVENTORY OF PRESENT EFFORTS AT THE UNIVERSITY OF PENNSYLVANIA

In the fall of 1974, an inventory of health and health-related activities at the University clearly identified a strong health interest in all areas of the University. Only one school did not have at least one course clearly identifiable as health or health related and that school, the Annenberg School of Communications, had courses that would be valuable to health professionals. Resources of the University in education for primary health care fall into three categories: (1) current and proposed primary health care educational programs; (2) clinical activity in primary health care delivery; and (3) courses which might secondarily enrich primary health care programs, or which might provide building blocks for new programs.

Current and proposed education programs

School of Allied Medical Professions: There are baccalaureate programs in Medical Technology, Occupational Therapy and Physical Therapy. In addition, post-baccalaureate programs in Occupational and Physical Therapy are offered to students with baccalaureate degrees in other areas.

School of Dental Medicine: A sub-baccalaureate program is offered in Dental Hygiene. However, there are proposed baccalaureate and master level programs. In addition to the basic DMD program, there is a proposed residency program in general dentistry for a primary health care team.

School of Medicine: Included in the basic MD program is an elective experience in a comprehensive family care program. An interdepartmental primary care fellowship has been proposed in General Medicine, General Pediatrics and Obstetrics and Gynecology. One affiliate has developed a residency program in Family Practice.

School of Nursing: In addition to the baccalaureate program in nursing, there are five programs at the Master's level. The Family Nurse Clinician program prepares nurses to deliver primary health care to families. The other more specialized programs prepare clinicians in Community Health, Maternity, Pediatric and Psychiatric Nursing.

Wharton School: The Master's program offers a major in Health Care Administration.

School of Social Work: The Master's program has a health specialization which prepares students for work in primary care settings.

Clinical activity in primary health care delivery

There are a great number of clinical sites used by the programs identified in the previous section, some more directly related to primary health care than others. Many of the affiliations that have been developed have the potential for expanded use in the future. For example, an increased number of students will be able to gain experience at the Penn-Urb Health Services Center as its enrollment increases; programs similar to the residency in family practice in Williamsport Hospital may be developed in other affiliated institutions; different utilization may be possible of the HUP outpatient departments and the University Student Health facility.

Courses which might enrich primary health care programs and which might provide building blocks for new programs

Aside from courses offered by the schools in the Health Affairs Division of the University, health related courses are offered in the following undergraduate departments: Anthropology, Biology, Chemistry, Environmental Studies, History, History and Sociology of Science, Insurance, Law, Military Science, Philosophy, Psychology and Sociology. At the graduate level, courses are offered in Anthropology, Biology, City and Regional Planning, History, Sociology, Education and Law. These courses include the subject areas of the study of culture and human institutions, environmental and evolutionary biology, life and health insurance, sociology of health care, the family, health care delivery and management, and behavioral aspects of urban design.

SIMILAR EFFORTS IN COMPARABLE INSTITUTIONS

In the brief time available for preparation of this report it was possible to visit only three comparable institutions and to receive a detailed description from a wholly different sort of institution.

The Commission sent a representative to Johns Hopkins, Harvard and Yale (a) to inventory the range of formal primary care activities underway and (b) to ascertain the mechanism for coordinating the various activities.

Johns Hopkins University

At Johns Hopkins, the immediate stimulus for investigation of primary care activities was a 1974 university-wide meeting to discuss the various extramural forces which impinged on that university community in the 1970s. Members of the health community already had an interest in primary care and were well aware of the number of exogenous forces for changes in health care education. Committee meetings followed and in the last several months a critical mass of persons concerned with improving primary care education has formed. Most of these advocates are located in the School of Health Services.

In terms of program, Johns Hopkins is involved with the nurse-practitioner movement, two health maintenance organizations (East Baltimore and Columbia, Md.) and a restructuring of the wards into resident-firms. Johns Hopkins does not yet have an on-campus health system which functions as a complete primary care unit with secondary and tertiary backup.

There is consideration of a series of open university-wide workshops to focus specifically on future recommendations for primary care educational activity.

Harvard University

At Harvard University, faculty interest within the Department of Medicine led to applications for a postgraduate (MD) primary care training grant. The Robert Wood Johnson Foundation insisted on a single application, which was submitted and the grant awarded. Harvard's situation is somewhat unique since the university controls none of its hospital settings. Postgraduate training at Harvard is really training at the Massachusetts General Hospital, Peter Bent Brigham Hospital, Beth Israel and other less well known affiliates.

Additional coordination in primary care activities is achieved through evaluation by Harvard's Center for Community Health and Medical Care.

Harvard has no nursing school and its dental school is principally a school of graduate dental medicine.

Nurse practitioners are trained at some of the affiliated hospitals. Harvard is also affiliated with an expanding (and solvent) health maintenance organization—the Harvard Community Health Plan. In addition to present post-MD training in primary care, a family practice residency is under consideration. Medical students can elect courses (clinical and academic in primary care areas) but no comprehensive primary care curriculum exists.

Yale University

The institutional environment at Yale University is such that primary care activity is a subset of the section of general medicine in the department of medicine. The School of Medicine and its departments, sections, programs do not have close ties with the other elements of Yale University.

Primary care efforts at Yale began initially as efforts to improve the quality of emergency room medicine at Yale-New Haven Hospital. From this has evolved a restructuring of the major general medicine and pediatrics clinics and the emergency room. A new facility is under construction, recruitment for faculty underway and the development of a new patient record in process.

The entire venture will result in a self-contained, mixed educational and service program fitting into rather than altering Yale's basic medical school/postgraduate training structure. Physicians, nurse practitioners and physicians' assistants will teach and serve alongside residents and health students in the new facility.

A multidisciplinary committee has been constituted to advise in research and evaluation.

In summary, Yale is moving slowly but steadily toward a greater investment in primary care. Students believe the investment is not rapid or thorough enough. Faculty and administration are cautious, insisting that service be carefully coordinated with research and teaching.

University of Missouri

Dr. E. Grey Dimond of the University of Missouri, Kansas City, presented the very different picture of a medical school devoted principally to preparation of primary care providers practicing in teams, as part of a coherent regional system of primary care. Pre-professional and professional training in this institution are consolidated. The module for education is a docent unit of senior faculty, house staff, and students at all levels. Additionally, students spend mandatory clinical clerkships in rural primary care settings. The school is too new to evaluate even short-term results save to say that by present academic standards students show no deficiency when compared with conventionally trained students. The school's symbolic phrases are "an open medical school" and "a community of scholars." Perhaps neither is precisely replicable or appropriate for the University of Pennsylvania. Familiarity with this very different approach is, however, desirable.

In summarizing all these exchanges with the four schools, three points stand out:

1) The peculiar history of each institution, its present idiosyncracies of funding and programmatic arrangement make it difficult to apply in a direct way the successes or failures of any other institution to the University of Pennsylvania. In short, there is no one transferable model, no optimal comprehensive plan for primary care education everywhere.

2) At the same time, one feature is common to all. One cannot pay too great attention to the careful articulation of service and educational responsibilities. High-volume education cannot be funded out of current service revenues. Nor is service by students at any level synonymous with their education.

3) Finally, in any university setting one must consciously nurture new modes of research to serve as the secure academic base for both the service and educational components of a university primary care unit.

The Commission and Its Work

EVOLUTION OF THE COMMISSION

Before the establishment of a Commission on Education for Primary Health Care, there had been at Pennsylvania a number of antecedent attempts to rationalize the University role in education for health care delivery. "In February 1972, President Meyerson appointed the University Development Commission and charged it to review his proposals, which included the reallocation of existing funds and the planning of future growth using the concept of selective excellence to strengthen undergraduate education and to promote particularly strong graduate fields to national rank. The Commission was to examine other available plans, and advise him in some detail how in the light of the University's needs a major funding effort could achieve a leap forward in educational excellence. While the overall thrust of the Development Commission's work was thus academically oriented, it nevertheless contained a strong fiscal component. It was that Commission's earliest conclusion that nothing less than a general overview of existing planning in all aspects and by all segments of the University could serve this purpose. This vantage point, providing a unique opportunity to view problems across historic and structural boundaries within the institution, led to the development of a One University concept." (1, p. 1) Such a concept has significant implications for the health schools in our "One University."

One of the recommendations made by the Development Commission in its report issued in January 1973 was "That the President appoint a task force to report in 12 months on the feasibility of a School of Health Science Education and Preventive Medicine that could incorporate and strengthen the Schools of Nursing and Allied Medical Professions and could draw upon the Wharton School and the Graduate School of Education as well as the School of Medicine. The task force should reevaluate the Preston Committee Report recommending phasing out the HUP program to train registered nurses." (1, p. 16)

In September 1973 Provost Eliot Stellar appointed the Task Force on Nursing, Allied Medical Professions and Related Health Sciences. In its report submitted in December 1973 (2), the following recommendation was made:

> That there be a Council of Health Sciences formed under the Vice-President for Health Affairs. This council should include representatives from the faculties of the School of Nursing, the School of Allied Medical Professions and other University faculties in order to develop the close coordination that is required for satisfying the overall goals of the University with respect to the health sciences.
>
> This council will develop collaborative programs that will exploit fully both the intellectual and physical resources of the University of Pennsylvania and avoid needless duplication.
>
> The Office of the Vice-President for Health Affairs should develop funding mechanisms to promote collaborative programs involving the Schools of Nursing, Allied Medical Professions and related schools in order to prevent their encumbrance by the "responsibility center" concept, which requires that a school's income exceed its direct expenses by a target amount set by the central administration.

In response to this recommendation on September 30, 1974, Dr. Thomas W. Langfitt, Vice-President for Health Affairs (VPHA) circulated for discussion a memorandum proposing the establishment of a Council on Primary Health Education and Health Delivery at the University of Pennsylvania. The responses overwhelmingly supported the idea that some form of coordination was needed but opposed the proposed structure. The VPHA and Provost turned to the Provost's Committee for advice and the general subject was discussed at the Committee's meeting on November 5, 1974. At this meeting the decision to form a Study Commission was made and the members offered assistance in developing a panel of possible members. The recommendations for membership were discussed at the December 2, 1974 meeting of the Provost's Committee, after which Dr. Alfred P. Fishman and Dr. Henry W. Riecken agreed to assume the responsibility for the Study Commission. At a Health Affairs Division retreat held December 6, 1974, the VPHA announced the formation of the Study Commission.

During the remaining weeks of December, in consultation with the Chairman Dr. Fishman, Vice-Chairman Dr. Riecken and the Secretary Dr. Denis Lucey, the VPHA refined the charge to the Commission and formulated the membership structure. The charge achieved final form on January 8, 1975 (reprinted in full on page 13 of this report) and the recruitment of commission members began. The full Commission was convened for its first meeting on January 10, 1975.

The members of the Commission appear at the beginning of this report. Exclusive of the Chairman, Vice-Chairman and Secretary, the Vice-President for Health Affairs selected members according to major constituencies rather than because of their potential roles as advocates of particular approaches to health care policy.

On January 14, 1975, a press conference was held announcing the charge, meeting dates and the format under which the Commission would function.

METHODS OF INQUIRY

The brief period allotted for this formidable assignment called for an unusual strategy in gathering relevant information. On the one hand, there were many intramural views to be sampled and a considerable literature to be reviewed. On the other, the Commission felt an urgent need to benefit from the advice and experience of extramural experts who had been deeply concerned over the years with education for primary health care. Accordingly, the following approach was employed:

A. Literature Search

At the outset of its activities, the Commission began to assemble relevant published reports which represented diverse points of view for the edification of the Commission. A point of entry into the large literature was the *Institute on Education for Primary Care* that was held in Chicago in September, 1974, under the aegis of the American Association of Medical Colleges. Another invaluable source was *The Education of Physicians for Primary Care* by Charney and Alpert (1). In addition, the Commission members exchanged periodicals and drew heavily from *Cumulated Index Medicus* and a MEDLINE search. This mounting pile reached

threatening proportions as the extramural consultants contributed their own books and reprints. But, a third landmark among reprints was an unpublished OECD (Organization for Economic Cooperation and Development) document entitled *New Directions in Education for Changing Health Care Systems* (2). This document underscored common denominators in international thinking about primary health care and services, and summarized current approaches endorsed by experts from developed nations.

In Volume II will appear the inventory of current activities in Education for Primary Health Care and an analysis of the History of Primary Health Care at the University of Pennsylvania. Volume III will contain the abstracts of much of the material presented as testimony in the course of the Commission's deliberations. More than anything else, the Commission was impressed with the use of open forums and full exchange of ideas as the basis for enlightenment and for achieving consensus about an intricate and potentially incendiary topic. Volume IV will contain verbatim accounts of the proceedings of the two large symposia.

B. Testimony

Eight open meetings were publicized widely, by posters and in University publications, encouraging interested parties to present points of view as well as current experience at the University and related institutions. Presentations were to be brief so that full discussion could follow. The single prerequisite for a place on the program was a brief document (1-2 pages) summarizing the presentation. This stipulation was imposed for two reasons: 1) to avoid needless duplication in oral presentation and 2) to gather material directly from the author for inclusion among the records of the Commission. (Documentation received from those testifying to be included in Volume III).

Persons who gave testimony are listed on page 14.

C. Symposia

Two open meetings were held with extramural experts. The first symposium on February 4, 1975, was directed towards defining the forces that are shaping the interest of the University of Pennsylvania in education for primary health care. The second symposium on March 20, 1975, dealt with the patterns of response that have been adopted elsewhere and might be applicable to the University.

The presentations by the consultants were made in the morning. Each had been provided in advance with relevant information about the University. On each occasion, vigorous exchange occurred between the members of the Commission, the large audience (numbering about 300 and including deans, faculty members and students) and the consultants.

In the afternoon, leaders of programs at the University presented them, in similar format, for consideration by consultants and the audience. Again, the audience, the speakers and the Commission members exchanged views. By this device, general concepts concerning education for primary health care were related to specific programs at the University.

The agendas for the symposia are listed on page 15.

CHARGE TO THE COMMISSION

Since its earliest days, the University of Pennsylvania has had a strong commitment to health education. This commitment has resulted in several pioneering ventures. Among the accomplishments were the first medical school (1765) and the first University-owned teaching hospital (1870). Throughout its history, the University has modified its programs in health education in accord with the changing needs of scholarship and society.

Once again the University of Pennsylvania appreciates the need for major developments in its health education programs. Society and governments are calling for remedies for inequities and inadequacies in health care delivery that they have identified in recent years. Although solutions have been proffered from many sources, the problem of delivering primary health care efficiently and equitably remains exceedingly complex. On the one hand, the nature and the magnitude of the primary health care needs of the country have not been clearly defined. On the other, a number of solutions offered are considered to be inimical to the character and educational missions of the University of Pennsylvania.

The health programs at the University of Pennsylvania are large and complex: five separate health schools; two University-owned hospitals and nine affiliated hospitals; a wide variety of health related courses in the other schools within the University; a University-based Health Maintenance Organization; programs in health economics and health management; a program in the organization and delivery of emergency services; affiliation with two family practice residency programs in Commonwealth communities; and a wide variety of health education and patient service programs throughout eastern Pennsylvania and southern New Jersey. Because of the great size and rapid growth of these activities, their relationship to University goals in education, research and patient services has not been defined well.

During the past few years the University of Pennsylvania has adopted the concept of "One University" as a guiding principle and reaffirmed its commitment to excellence in higher education. Accordingly, it is appropriate for the University to apply these principles and diverse talents and resources to the pressing national problem of inadequate primary health care. Inherent in this approach is appreciation that primary health care is but one facet of total health care and education. A major challenge for the University is to develop imaginative and responsive programs in primary health care while at the same time it pursues its more traditional goals in teaching, research, and patient services that have established the University of Pennsylvania as one of the major academic health centers in the nation.

The charge to the Commission on Education for Primary Health Care is based on the foregoing propositions. Its mission is to develop a number of alternatives that will shape future University activity in primary health care. The final document should contain a definition of primary care for the purposes of the University of Pennsylvania, an analysis of current programs within the University, a summary of relevant activities within other institutions, a set of goals and programs within the context of a long range plan for primary health education and delivery, and specific mechanisms for implementing the programs and achieving the goals.

The Commission will report its observations and recommendations to the President, Provost, and Vice-President for Health Affairs by April 15, 1975.

—Thomas W. Langfitt, M.D.
Vice-President for Health Affairs

PERSONS WHO TESTIFIED IN OPEN HEARINGS

Susan Barleben, R.N., Student, Family Nurse Clinician Program, University of Pennsylvania*

Alan Brett, Medical Student ('76), University of Pennsylvania

Dr. Stanley Brody, Professor of Community Medicine, University of Pennsylvania

Dr. Paul Brucker, Department of Family Practice, Jefferson Medical College

Dr. Gene Cayten, Director, Center for the Study of Emergency Health Service, University of Pennsylvania

Dr. Jean Cortner, Chairman and Professor of Pediatrics, Children's Hospital

Sandra Crandall, R.N., Student, Family Nurse Clinician Program, University of Pennsylvania*

Dr. E. Grey Dimond, Provost for the Health Sciences, University of Missouri-Kansas City

Dr. John Eisenberg, Robert Wood Johnson Foundation Clinical Scholar, Department of Community Medicine, University of Pennsylvania

John Ginnetti, R.N., Student, Family Nurse Clinician Program, University of Pennsylvania*

Dr. Charles D. Hertz, Director, Comprehensive Care Program, University of Pennsylvania

Martha Hill, Adult Nurse Practitioner, Hypertension Division, Hospital of the University of Pennsylvania

Dr. David Hornick, Family Physician (Homebound) ('69 University of Pennsylvania, School of Medicine)

Dr. George Huggins, Assistant Professor, Department of Obstetrics and Gynecology, University of Pennsylvania

Anne Keane, Associate Professor, School of Nursing, University of Pennsylvania*

Dr. Francis Krakowski, Postdoctoral Fellow, Department of Community Medicine, University of Pennsylvania

Dr. Howard Kremer, Assistant Professor of Clinical Medicine, Graduate Hospital

Jane Kummerer, R.N., Student, Family Nurse Clinician Program, University of Pennsylvania*

Martha Lamberton, R.N., Director, Family Nurse Clinician Program, University of Pennsylvania

Mark Levitan, Executive Director of University Hospitals, University of Pennsylvania

Dr. Samuel Martin, Professor of Community Medicine and Medicine, University of Pennsylvania

Kathleen O'Brien, R.N., Student, Family Nurse Clinician Program, University of Pennsylvania*

Dr. Arnold S. Relman, Chairman, Department of Medicine, University of Pennsylvania

Andy Rowland, College Student ('75), University of Pennsylvania

Dr. Truman Schnabel, Vice-Chairman and Professor of Medicine, Penn Medical Service, VA Hospital

Dr. Henry A. Sloviter, Professor of Biochemistry, Harrison Department of Surgical Research, University of Pennsylvania

Dr. Helen Smits, Assistant Professor of Medicine and Community Medicine and Health Care Systems, University of Pennsylvania

Edward Sparer, Professor of Law, University of Pennsylvania

Dr. Louise P. Shoemaker, Dean of the School of Social Work, University of Pennsylvania

Dr. Humphrey Tonkin, Vice-Provost for Undergraduate Studies, University of Pennsylvania

Robin Wells, R.N., M.S.N., Nursing Instructor, School of Nursing, University of Pennsylvania*

Dr. J. Edwin Wood, Director, Department of Medicine, Pennsylvania Hospital

Dr. D. Stratton Woodruff Jr., Director of Family Practice, Residency Program (Family Medicine), Bryn Mawr Hospital

* *written testimony only*

SYMPOSIUM I

Morning Session

FORCES SHAPING THE PROBLEM OF PRIMARY HEALTH CARE

The Concept of Primary Health Care
Dr. Kerr White, Professor of Health Care Organization, School of Hygiene and Public Health, The Johns Hopkins University

The National Need for Primary Health Care (the nature and magnitude of the problem)
Dr. William Roy, Director of Medical Education and Professional Services, St. Francis Hospital, Topeka

Present Systems of Practice That Limit Models That can be Developed
Dr. Henry M. Seidel, Associate Dean of Health Services, The Johns Hopkins University

Economic Forces That Shape the Nature of the Problem
Dr. Rashi Fein, Professor of Economics of Medicine, Harvard Center for Community Health and Medical Care

Socialization of Physicians and Other Participants in Health Care Delivery
Dr. Samuel Bloom, Professor of Sociology and Community Medicine, Mt. Sinai School of Medicine

Afternoon Session

THREE RESPONSES TO THESE FORCES
AT THE UNIVERSITY OF PENNSYLVANIA

The Internist as a Primary Care Physician
Dr. Arnold S. Relman, Chairman, Department of Medicine

The Williamsport Model
Dr. Herman Rannels, Vice-President and Medical Director, Williamsport Hospital, Williamsport

The Penn-Urb Model
Dr. Patrick Storey, Director, Penn Urban Health Service Center, Graduate Hospital

SYMPOSIUM II

Morning Session

MODELS OF PRIMARY HEALTH CARE

Opening Remarks
Dr. Eliot Stellar, Provost, University of Pennsylvania

A Prospect on Comprehensive Health Care as it Relates to the University of Pennsylvania
Dr. Robert Kalinowski, Senior Program Consultant, The Robert Wood Johnson Foundation, Reston, Va.

Family Practice Model
Dr. John Bjorn, Family Practice at the Promis Clinic, Hampden Highlands, Maine; Assistant Professor of Medicine, University of Vermont

Multispecialty Group Model
Dr. Joseph L. Dorsey, Medical Director, Harvard Community Health Plan, Boston

Team Approach and the Physician Extendor Model
Dr. David Lawrence, Director, MEDEX Northwest, University of Washington, School of Public Health and Community Medicine; Assistant Professor, Department of Health Services, University of Washington

General Multispecialty Practice
Dr. Frederick Knocke, Director and President, Hunterdon Medical Center, Flemington, N.J.; Associate Clinical Professor of Orthopaedic Surgery, New Jersey College of Medicine and Dentistry, Rutgers Center

Afternoon Session

THE HEALTH SCHOOLS AND PRIMARY HEALTH CARE
AT THE UNIVERSITY OF PENNSYLVANIA

Dr. Dorothy A. Mereness, Dean, School of Nursing
Dr. D. Walter Cohen, Dean, School of Dental Medicine
Dr. Sidney Rodenberg, Dean, School of Allied Medical Professions
Dr. Edward Stemmler, Dean, School of Medicine
Dr. Thomas W. Langfitt, Vice-President for Health Affairs—Concluding Remarks

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EDUCATION FOR PRIMARY HEALTH CARE AT THE UNIVERSITY OF PENNSYLVANIA *is Volume I in a four-part report of the Commission on Education for Primary Health Care at the University. It includes summaries of material in the remaining three:*

Volume II:	*An inventory of current activities in education for primary health care; an analysis of the history of primary health care at the University of Pennsylvania*
Volume III:	*Abstracts of material presented as testimony in the course of the Commission's deliberations*
Volume IV:	*Verbatim accounts of proceedings at the two large symposia*

These are available in the reference department of the Van Pelt Library and in the libraries of the health areas schools of the University, or on request from Dr. Alfred P. Fishman, at 871 Maloney, Hospital of the University of Pennsylvania, Philadelphia, Pennsylvania 19104.

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