THE ALLIED HEALTH PROFESSIONS: THE PROBLEMS
AND POTENTIALS OF MATURITY

EDMUND D. PELLEGRINO, M.D.
PROFESSOR OF MEDICINE

THE 5TH TROMSØ SEMINAR IN MEDICINE, JUNE 17, 1976
TRAINING OF HEALTH PERSONNEL IN A REGIONALIZED HEALTH
CARE SYSTEM

TROMSØ, NORWAY
The Allied Health Professions: The Problems and Potentials of Maturity

Few undertakings are so perilous - or at the same time so necessary - as discerning which of our present events will significantly shape the future. But, if we are to have a hand in what the future looks like, we must attempt this risky discernment. For, without it, we cannot plan rationally, and this is an especially urgent necessity in the field of health services.

An especially pertinent case in point is the phenomenal growth of the allied health professions.* They have, in a brief decade, expanded in number, kind, and scope of services. They are now essential to any concept of optimal health care. These professions have literally come of age. But, the potentialities and the problems of that fact are just becoming discernible.

It is these problems and possibilities to which I wish to draw your attention today. For, the development of the allied health professions has an importance beyond their intrinsic functions. Their continued growth along present lines can have profound effects on the patterns of medical care and

*See p. 3 for the way this term is used in this paper.
THE ROLES AND FUNCTIONS OF THE PHYSICIAN, AS WELL AS THE OTHER
ESTABLISHED PROFESSIONS. IT IS THESE INTERRELATIONSHIPS,
WHOSE MEANINGS ARE BEGINNING TO EMERGE, WHICH DEMAND OUR CON-
SCIOUS ATTENTION.

THE ORDERLY GROWTH AND OPTIMAL USE OF ALL HEALTH CARE
PERSONNEL IS CLOSELY RELATED TO THE WAY ALLIED HEALTH PROFES-
SIONS WILL BE USED IN THE FUTURE. IF SOME ORDER IS TO BE CON-
SCIOUSLY PURSUED, WE ARE REQUIRED TO ADDRESS THE MAJOR ISSUES
CONFRONTING THE ALLIED HEALTH PROFESSIONS TODAY. I WOULD LIKE
TO FOCUS ON SIX OF THESE ISSUES AS THEY APPEAR TO ME. I APOLO-
GIZE FOR LIMITING MY OBSERVATIONS TO THE U.S., BUT MY EXPER-
IENCE OF OTHER COUNTRIES IS TOO SUPERFICIAL TO WARRANT ANY
STATEMENTS ABOUT THEM.

THE ISSUES I HAVE CHOSEN FOR DISCUSSION TODAY ARE THE
FOLLOWING:

I. NUMBERS, KINDS AND FUNCTIONS - THE NEED FOR CONVERGENCE;
II. THE PROBLEM OF COORDINATION - TWO LEVELS;
III. EDUCATION - GENERIC AND SPECIAL;
IV. PRIMARY CARE, CHRONIC CARE, AND PREVENTION;
V. INDEPENDENT - DEPENDENT FUNCTIONS;
VI. TOWARD A GREATER HEALTH PROFESSION.
I. Numbers, Kinds and Functions - The Need for Convergence

It is notoriously difficult to arrive at what numbers of health professionals any society will need. This is the consequence of our uncertainty about what services we wish to provide, what distribution we wish to make of these services, and how they shall be deployed among existing and future health workers. I shall not attempt a rigorous analysis of this problem, although it is manifestly what must be done to deal with the current dilemmas about the size and shape of our manpower resources.

The matter is compounded even when we attempt to determine how many allied health workers there are, and what functions they perform. The Department of Labor in the U.S. classifies more than 300 occupations as "health related." For the purposes of this discussion, I will limit my remarks to those programs which provide some formal education in institutions of higher learning, and grant an associate, bachelors, masters or doctoral degree. The majority of these programs are accredited through the Council on Medical Education of the American Medical Association in collaboration with some 30 professional organizations. Even with this limited definition, we would be including some 25-26 or more different professions, enrolling some-
THING LIKE 46,096 STUDENTS, AND GRADUATING 26,108 IN 1973 (1,2),
THERE HAS BEEN AN OBVIOUS EXPONENTIAL GROWTH, EVEN IN THIS
GROUP AS NEW PROGRAMS HAVE BEEN ADDED YEARLY,

THIS EXUBERANT GROWTH IS LARGELY THE RESULT OF THE EX-
PANDED TECHNOLOGICAL BASE OF MODERN MEDICINE, WHICH HAS CREATED
A HOST OF NEEDED FUNCTIONS WHICH PHYSICIANS AND NURSES HAVE
RELEGATED TO OTHER HEALTH WORKERS QUITE WILLINGLY. NEW
TECHNOLOGIES SEEM OVERNIGHT TO CREATE THE NEED FOR NEW
TECHNICIANS, ESPECIALLY IF THEY DO NOT FIT THE PRECISELY
DEFINED PERIMETERS OF ANY OF THE EXISTING HEALTH PROFESSIONS.
AN EXAMPLE IN POINT IS THE RAPID SPLINTERING OF THE FIELD OF
MEDICAL TECHNOLOGY INTO CYTOTECHNOLOGISTS, HISTOLOGIC TECH-
nICIANS, LABORATORY ASSISTANTS, MEDICAL LABORATORY TECHNICIANS,
MEDICAL TECHNOLOGISTS, NUCLEAR MEDICINE TECHNICIANS,
NUCLEAR MEDICAL TECHNOLOGISTS, AND BLOOD BANK SPECIALISTS.

NEW ALLIED HEALTH PROFESSIONS ARE FITTED TO THE NARROWEST
FUNCTIONS IF THOSE FUNCTIONS HAPPEN TO FALL BETWEEN THE PERI-
METERS OF ESTABLISHED PROFESSIONS, OR IF THEY ARE NEGLECTED
BY EXISTING PROFESSIONS. THERE IS LITTLE QUESTION THAT NEW
TECHNOLOGIES REQUIRE NEW SKILLS, AND COMPETENCE DEPENDS UPON
DIVISION OF LABOR. BUT, WHERE DOES THE FRAGMENTATION END?
The result today is a confusing array of technical and professional personnel working in compartmentalized tasks, often closely overlapping each other in some facet of their work and frequently out of communication with each other about the patient whom they presumably both serve. Each profession quickly establishes a professional organization, often vying with the others for prerogatives. The multiplication of personnel increases costs and complexity, and diminishes the personal aspects of medical care. Education for each profession becomes formalized and lengthened in an attempt to attain status, and thus, is increasingly expensive. As each group matures, it seeks to develop a cadre of its own assistants, which only replicates the cycle of proliferation, duplication, and cost escalation.

Let us admit unequivocally that allied health personnel are absolutely essential in providing the complex technical services modern medicine entails. The question is not one of returning to some pristine simplicity which would obviate their use. Instead, the real issue is how to bring about some convergence in function and numbers. The present course of unguided proliferation is socially untenable and fiscally unsupportable.
The first question, then, is: How many and what kind of allied health professionals do we need? Clearly, some contraction in the kinds of technicians and some consolidation of their functions is mandatory. What are some of the steps necessary if the disastrous consequences of unchecked growth are to be avoided?

The first and most fundamental step is to hark back to the spectrum of functions now being performed by the whole category of allied health workers and, by the method of task analysis, reduce these to their commonalities and similarities. The model for this approach is the detailed study conducted by Capt. Ouida Upchurch for the U.S. Navy (4). Finding the duplications of tasks and the related tasks, whoever performs them, provides the information for the next step, which is to reduce these tasks to as few categories as possible. As we will point out later, this is an essential step if the education of the allied health worker is to be rationalized, as well.

If this step is successful, and if it includes all health workers (physicians as well as nurses and all others), the tasks can then be realigned on the basis of their similarities,
AND REASSIGNED TO EACH OF THE HEALTH PROFESSIONS WHO HAVE A BASIC EDUCATION SUITABLE TO THE TASKS IN QUESTION. USING THIS APPROACH, I BELIEVE WE WOULD FIND THAT THERE ARE SOMETHING LIKE 5-6 BASIC PROFESSIONAL FUNCTIONAL GROUPINGS - FOR EXAMPLE:

1) **Diagnostic Services** - history, physical examination, laboratory, x-ray, nuclear medicine, ECG, EEG, Sonography, computerized scanning, and the rest. These are all directed to finding out what is wrong, and they share a common orientation and overlapping techniques.

2) **Manual and Manipulative Therapies** - this would include surgery, physiotherapy, and diagnostic techniques requiring invasions of bodily integrity, like cystoscopy, culposcopy, etc., and radiotherapy.

3) **Chemical and Dietary Therapies** - all branches of pharmacy, especially the clinical pharmacist and dietetics, have common principles, and could be combined.

4) **Psychosocial Therapeutics** - including psychiatry, social work, psychology.

5) **Preventive Health Care, Patient Education**.

In each of the functional categories, one might envision two levels of responsibility and sophistication. The technical and the fully professional, requiring two levels of education and offering the possibility of upward mobility in each category.
For brevity's sake, I can only sketch in this idea as an example of the directions the allied health professions must take - and in cooperation with all other professions - to reduce the divergent state of these professionals today. Such a scheme would be based in an education coordinated with functional categories, so that a health worker could move to other jobs within his major category and avoid the dead-end nature of so many allied health positions today.

II. The Problem of Coordination - Two Levels

The magnitude and complexity and nature of the task analysis which is fundamental to convergence and condensation of categories leads into the second great issue - coordination in the allied health professions. This should be considered at two levels: A) coordination between professions in the assessment, alignment, and mutual acceptance of roles and functions; B) coordinating the efforts of individual health professionals when they function as members of the health care team. Let us look briefly at the problem and the possibilities at each level.

A. Coordination of task assessment. Nowhere do we as yet have a mechanism for deciding cooperatively how the health professions can best realign tasks among them. This
CANNOT BE DONE, AS IT IS PRESENTLY, WITH ANY PROFESSION IN ISOLATION FROM THE OTHERS. CURRENTLY, EACH PROFESSION TRIES TO RESPOND TO PUBLIC NEEDS WITHOUT REFERENCE TO WHAT OTHERS MAY BE PLANNING OR DOING. AS A RESULT, NO COMMON AGREEMENT ON TASKS AND FUNCTIONS IS POSSIBLE, COMPETITION RESULTS, AND THE PUBLIC IS CONFUSED AND DISILLUSIONED.

THE TASK OUTLINED UNDER SECTION I CALLS FOR SOME LOCAL AND NATIONAL MECHANISMS WHICH CAN ENJOIN A COOPERATIVE ATTACK ON THE PROBLEMS OF DUPLICATION, FRAGMENTATION, AND OVER-NARROW SPECIALIZATION WHICH LEAD TO UNPLANNED PROLIFERATION OF PROFESSIONS. THIS IS THE SECOND MAJOR REQUIREMENT IF THE FUTURE OF THE ALLIED HEALTH PROFESSIONS IS TO BE DEVELOPED IN A SOCIALLY RESPONSIBLE MANNER. THE REGIONALIZED ACADEMIC HEALTH CENTER IS INDISPENSABLE IN EFFECTING THIS COOPERATIVE EFFORT, SINCE IT PROVIDES A COMMON ACADEMIC MISSION FOR SEVERAL SCHOOLS IN THE HEALTH SCIENCES (4).

B. THE NEXT LEVEL OF COORDINATION - AND ONE WHICH REPRESENTS ONE OF THE MOST SERIOUS OBSTACLES TO OPTIMAL HEALTH CARE DELIVERY TODAY - IS HOW TO INTEGRATE THE EFFORTS OF THE SEVERAL HEALTH PROFESSIONS IN THE HEALTH CARE TEAM. SO MUCH HAS BEEN WRITTEN, AND SO MUCH HAS BEEN DEBATED, THAT I HESITATE TO ADD TO THE CONFUSION. NONETHELESS, AS I HAVE POINTED OUT ELSEWHERE, HEALTH CARE IS IMPOSSIBLE IN MODERN MEDICINE WITHOUT A VARIETY OF TEAMS AND A VARIETY OF FORMS OF LEADERSHIP AND ORGANIZATION
TO GET THEIR SERVICES TO THE PATIENT (5). MOST HEALTH TEAMS ARE TRANSITORY IN COMPOSITION AND LEADERSHIP, DEPENDING UPON THE PATIENT'S NEEDS. THEY MAY ALSO BE SEMI-PERMANENT OR PERMANENT WHEN THEY ARE DESIGNED TO MEET RECURRING NEEDS OF PATIENTS—PRIMARY CARE TEAMS, OPERATING TEAMS, AND THE LIKE.

WITHOUT LABORING THIS WELL-WORN SUBJECT, I MERELY WANT TO UNDERSCORE ITS ESSENTIALITY IF THE COORDINATION ISSUE IS TO BE MET SQUARELY. THIS WILL REQUIRE, IN THE U.S. AT LEAST, MUCH MORE EXPERIENCE WITH A VARIETY OF MODELS, FORMS OF LEADERSHIP, AND EDUCATION OF TEAM MEMBERS. WE ARE STILL LARGELY MORE AT THE STAGE OF PROMISE AND HOPE THAN ACTUAL PERFORMANCE OF TEAM CARE, EXCEPT IN SUCH LONG-ESTABLISHED AND EASILY DEFINABLE SITUATIONS AS THE OPERATING THEATER.

III. Education in the Allied Health Professions

The problems of fragmentation, proliferation, isolation from one another, overspecialization and duplication we described for service of health professions, are replicated in their education. Indeed, the same deleterious features of education influence practice, and vice versa. Education should be geared to the task analyses we described earlier. The convergence of functions and establishment of a limited
NUMBER OF CATEGORIES MUST BE PROVIDED IN EDUCATIONAL PROGRAMS. EDUCATION, THEREFORE, SHOULD BE FUNCTIONALLY- AND TASK-ORIENTED. THIS IS VOCATIONAL EDUCATION IN THE GOOD, AND NOT THE PERJORATIVE, SENSE OF THAT TERM.

WHEN THE COMMON BASES OF FUNCTIONS, AND THE SKILLS AND KNOWLEDGE REQUIRED TO PERFORM THOSE FUNCTIONS, ARE IDENTIFIED, THEN CERTAIN GENERIC EDUCATIONAL CURRICULA CAN BE DESIGNED TO FIT THEM. IT IS ESSENTIAL THAT ALLIED HEALTH WORKERS BE GIVEN SOME GENERIC FORM OF EDUCATION WHICH THEY CAN USE AS THE BASE FOR AMPLIFICATION LATER, IF A CAREER CHANGE IS INDICATED. TECHNOLOGIES COME AND GO, AND NO EDUCATIONAL PROGRAM IS SUCCESSFUL WHICH AIMS AT SO NARROW A GOAL THAT THE STUDENTS CANNOT MOVE LATERALLY FOR SOME DISTANCE, AND VERTICALLY AS WELL.

THERE IS AN URGENT NEED TO IDENTIFY THE COMMON COMPONENTS OF THE CATEGORIES OF ALLIED HEALTH PROFESSIONS, PROVIDE A COMMON EDUCATION FOR THEM IN THE BASIC AND SOCIAL SCIENCES, AND THEN ADD TO THIS GENERIC BASE THOSE SPECIAL FEATURES EACH JOB REQUIRES. THIS MEANS THE SAME SORT OF COORDINATION
AND COOPERATION IN EDUCATION THAT WE DESCRIBED IN SERVICE. IT ALSO IMPLIES INTERDISCIPLINARY EDUCATION AS A MEANS OF ECONOMY, AS WELL AS PROVIDING A COMMON LANGUAGE ALL HEALTH PROFESSIONALS CAN SHARE. BUT, INTERDISCIPLINARY EDUCATION IS AS SADLY DEFICIENT IN MOST HEALTH SCIENCES CENTERS AS ACTUAL EXTENSIVE EXPERIENCE WITH HEALTH CARE TEAMS (5,6).

Clearly, what I have been emphasizing is that the first three issues - convergence, coordination, and education - must occur simultaneously. They are so intimately linked to each other that separation, even for the purposes of this discussion, does violence to them. The challenge to all educators, administrators, and practitioners is to recognize that the issues must be joined, despite the inherent difficulties.

The regionalized academic health center, as a multi-school cooperative venture with a common mission, is admirably suited to foster solutions to these educational and professional problems which grow out of the maturation of the allied health professions. It is difficult to see how this can be accomplished without the leadership of these regionalized centers (7).
IV. PRIMARY CARE, CHRONIC ILLNESS AND PREVENTIVE MEDICINE

A very pressing problem which has just begun to show itself is the challenge to the role and image of the physician. For the last four or five years in the United States, the public, and the profession as well, have been turning to allied health workers and to other professionals, the nurse for example, to fill the gaps in three areas of health care. These are primary health care, the care of the chronically ill and preventive medicine.

If there is a major deficiency in the United States today in health care, it is in the provision of primary health care for all the citizens of our nation. Primary health care includes two concepts, really. One is the process which occurs on first contact between a patient and the health care system. It concentrates on assessing the patient's problem, making some decision about its gravity and deciding whether the problem is a simple one which can be handled immediately or whether it requires referral to secondary or tertiary care levels - that is, to a community or to a university hospital. The second facet of primary health care is the provision of continuous, comprehensive services for individuals or families with the same physician or physicians and a spectrum of services ranging from the curative to the preventive.
There seems to be a very significant and widespread feeling that primary care defined in this sense should be made available to all our citizens. Since the distribution of physicians in the United States is such that primary care cannot now be made available for all, the other health professions have been asked to assume that part of the task. The physicians' assistant to the primary care physician and the family nurse practitioner as well as the pediatric nurse practitioner have moved quickly into this arena.

What we have here for the first time is the delegation of certain tasks which traditionally had been limited to the physician to a variety of health workers. Many of the functions in primary care assessment, the history and the physical examination, and even the decision about the gravity of a presenting problem are being made by nurses or physicians' assistants. What they have demonstrated is, with the proper training and operating within an organized system of health care, physicians are not necessary to carry out most of the functions involved in the care of the ordinary ills of mankind. In addition to the function of primary care, there are an increasing number of programs preparing the physicians' assistant to function as assistants to specialists. Most of the surgical specialties from plastic surgery to urology and
ORTHOPAEDICS WERE DEVELOPED OR ARE DEVELOPING NON-PHYSICIAN ASSISTANTS WHO CAN CARRY OUT A SIGNIFICANT PERCENTAGE OF THE MANIPULATIVE AND TECHNICAL TASKS OF THE SURGICAL SPECIALTIES.

TWO QUESTIONS ARE POSED BY THIS PARTICULAR FACET OF THE ALLIED HEALTH MOVEMENT. THE FIRST OF THESE RELATES TO THE SORTS OF QUESTIONS WE HAVE BEEN DESCRIBING ABOVE. THERE IS AN UNFORTUNATE COMPETITION BETWEEN PHYSICIANS' ASSISTANTS, FAMILY NURSE PRACTITIONERS AND PEDIATRIC NURSE PRACTITIONERS TO FUNCTION IN THE ROLE OF PRIMARY CARE. THE QUESTION, THEREFORE, IS THE SAME ONE OF CONVERGENCE AND COORDINATION WHICH WE RAISED ABOVE. SUCH QUESTIONS APPLY TO THESE REALMS AS WELL EVEN THOUGH WE ARE DEALING WITH MATTERS WHICH ARE MUCH LESS TECHNICAL THAN THE USUAL RUN OF FUNCTIONS PERFORMED BY ALLIED HEALTH PROFESSIONALS.

BUT THE LARGER QUESTION REALLY IS THE DEGREE TO WHICH, IN THE FUTURE, WE SHOULD PLAN TO PROVIDE PRIMARY CARE VIA THE USE OF PHYSICIANS' ASSISTANTS AND AUXILIARIES OF VARIOUS KINDS. THE SAME WOULD APPLY TO CHRONIC ILLNESS, WHICH IN SOME EXPERIMENTS ALREADY CARRIED OUT IN THE UNITED STATES, CAN BE PROVIDED BY TEAMS OF NURSES AND PHARMACISTS AND ALLIED HEALTH WORKERS ACTING UNDER THE SUPERVISION OF PHYSICIANS. (8,9) IN THE FIELD OF PSYCHIATRY, IT IS ALREADY WELL ESTABLISHED THAT PSYCHOLOGISTS AND SOCIAL WORKERS CAN CARRY OUT SIGNIFICANT PORTIONS OF THE PSYCHOTHERAPY PROVIDED FOR PATIENTS WITH EMOTIONAL PROBLEMS. IN ANOTHER REALM, THE ROLE OF THE PHARMACIST IN THE UNITED STATES
HAS BEEN EXPANDING TO INCLUDE SUCH FUNCTIONS AS A DRUG SPECIALIST IN THE CLINICAL SETTING, WORKING WITH THE PHYSICIAN, INSTRUCTING THE PATIENT IN THE TAKING OF MEDICATION, PROVIDING FOLLOW-UP ON SIDE EFFECTS AND HOW THE DRUG IS BEING USED, AND, IN GENERAL, ASSUMING AN INCREASING RESPONSIBILITY FOR THE SUPERVISION OF THE DRUG REGIMEN. (10)

workers and, possibly, physicians' assistants.

Which of these two paths a nation chooses will have important implications for the cost of medical care and, also, the kinds of opportunities provided for the young people of that nation. We face a very serious question. Should society expect the physician who is trained at high cost and over a long period of time to increase his numbers and to provide services which it is has been demonstrated others can provide equally well? Or, should the physician of the future be a member of a smaller group educated and trained with the idea in mind that he would not be providing most of the direct care to most of the patients who seek medical assistance in any community?

It is the emergence of the allied health professions and their rapid proliferation and extension into almost every facet of health care that has posed this most fundamental question. We cannot long permit the allied health professions, on the one hand, to extend their perimeters and boundaries, and physicians on the other, to retain theirs. There is already a backlash in some parts of the United States indicating that physicians have become concerned about incursions into their traditional functions by physicians' assistants and nurse practitioners.
The image of the physician, his role and function in society, and even his utility, require re-examination if we are to address this issue in a rational fashion. These important fundamental questions are just being addressed. Their fundamental nature may stand in the way of the direct and critical examination they require.

In the United States, there is underway a critical reappraisal of the number of physicians we might need by the year 2000 (12). Whereas a decade ago we were concerned about serious shortages the current climate suggests the possibility of an excess at least in certain categories. Medical schools have in this same decade doubled the size of their entering classes. If we continue to maintain the current size of entering classes, and maintain the same rate of entry of foreign medical graduates, by the year 2000, the U.S. will have one physician for every 255 people.

Will the needs in acute care, chronic illness and preventive medicine be met by this expanded number of physicians? Or is it more economical, and perhaps more effective, to delegate these tasks to allied health professionals. In my own opinion, we will not be able to provide preventive medicine on a national scale without heavy reliance on allied health workers rather than physicians.

How will these two trends - increases in numbers of physicians highly trained and expensively trained - be reconciled with
INCREASING NUMBERS OF ALLIED HEALTH WORKERS WHO CAN PERFORM MANY OF THE SAME TASKS AND AS EFFICIENTLY AND SAFELY? THE SOCIAL, ECONOMIC AND POLITICAL IMPLICATIONS OF SUCH A QUESTION ARE FAR FROM TRIVIAL.

V. INDEPENDENT AND DEPENDENT FUNCTIONS

The developments we have outlined under IV have given rise to another critical problem which is far from solution. Physicians' assistants, family nurse practitioners, pediatric nurse practitioners, psychologists and social workers - all of those who have demonstrated that they can undertake significant portions of the physicians' professional functions - are beginning to ask whether or not they should be permitted to practice independently of the physician. In the United States in several places, this has already become an issue with nursing, and one can predict that it will surely become an issue for the physicians' assistant and for the nurse practitioners of various kinds.

The answer to this question will also have profound implications for the way medicine is practiced. Should independent practice be permitted by law and licensure? If so, the tendency might be for even further fragmentation in the health care system, and for overt competition between physicians and nurses and
ALLIED HEALTH WORKERS, PARTICULARLY IN THE REALMS OF PRIMARY
CARE, CHRONIC ILLNESS AND PREVENTIVE MEDICINE. SUCH COMPETITION
CAN HARDLY BE IN THE PUBLIC INTEREST AND WOULD PRODUCE THE SORT
OF ACRIMONY WHICH CAN ONLY HAVE ITS FINAL NEGATIVE EFFECT ON
PATIENTS AND THE SERVICES THEY RECEIVE.

On the other hand, there is considerable justification for
the physicians' assistant and the family nurse practitioner who
is constantly and efficiently carrying out the functions of
primary care to ask why a more independent role in the care of
the patient should not be taken. The issue becomes compounded
when the difference in compensation for the same services is
brought forth as an arguing point by physicians' assistants and
family nurse practitioners.

Without trying to enter into the merits of either of these
points of view, my purpose is simply to point them out as another
of the indirect effects of the emergence of the allied health
professions as a significant force in health care delivery.
While their incursions into primary care, chronic illness and
preventive medicine are of a limited extent, the questions
raised by these incursions are profound indeed. They all
correlate questions which time does not permit me to discuss,
but I should mention them. I refer here to the debates on
accreditation, licensure and certification. This is another domain of conflict, rivalry and some considerable confusion. Each group seeks to set up its own accrediting processes and to be in control of that process. The increasing emphasis on public accountability for all professional groups and institutions is becoming a factor in accreditation as well. Again, these issues, like those cited in I, II and III, are all so closely inter-related that decisions cannot be taken in one field without having a profound effect on the other.

VI. Toward a Greater Health Profession

The five issues I have outlined above appear to me to be essential outgrowths of the appearance of the allied health professions as mature participants in the provision of health care all converge on the eventual necessity of a "greater health profession." By this, I mean that the traditional separation of the persons who provide services to patients must be profoundly altered. Each and every one of the issues confronting us in trying to plan for the allied health professions illustrates the need for a closer communication, cooperation and common assumption of responsibilities for the health care of the nation. No longer can we regard this responsibility as lying with only one profession - the physician. And, no longer can we assume that what the physician decides or desires will necessarily bind all other
HEALTH PROFESSIONS. In a contemporary world in which the idea of democracy has extended to the professions as well as to the general society, it becomes essential that there be a much higher degree of participation by all health professionals in the future of health care delivery (13).

If it eventually becomes possible to think in terms of a relatively small number of categories of health professionals classified according to functional needs of the patient, it may well be possible to make them all part of one greater health profession. The implications of such a move are clear cut. A greater health profession would have corporate responsibility for meeting the health care needs of the nation. So far as the number, kinds and distribution of health professionals was concerned, this could only be achieved by cooperative and coordinated effort at defining the tasks to be performed, deciding who shall perform them, establishing means for the coordination for the delivery of health service and health care teams and establishing the ways in which health care teams should be governed. Questions of accreditation, compensation, independent and dependent functions are all of mutual and common concern and could be more easily approached if all health professionals were associated in a single health profession, each with his own category and with his own level of sophistication.
This would entail, also, the emergence of a common code of professional ethics which would spell out the obligations of all health professionals. Since these obligations all derive from the relationship of health professionals to individual patients or to society, the common features of a new general code of ethics for the health professions would not be possible to deduce (14).

As I have indicated elsewhere, the regionalization of health care services and their coordination with regionalized academic health centers can greatly facilitate the engagement with these problems. (15) Indeed, I would suggest that without regionalized academic health centers which unify the educational efforts of all the health professions the present divergent trends are certain to continue. Perhaps I have not spent enough time on the question of regionalization and its methodologies. But I take these as necessary assumptions in any rational attack on the problems of health manpower and their relationships to health care needs. It is for this reason that I looked, instead, to the kinds of problems which are urgent and upon us which, perhaps, only the regionalized health care and education systems can confront. The very absence of any such comprehensive network of relationships is evident in the current trends and in the potentially deleterious effects already discernible in the coming of age of the allied health professions.
RECAPITULATION

My purpose has been not to describe in any detail the accomplishments or specific programs in the allied health professions as they exist in the United States. Instead, I have taken for granted that the allied health professions have demonstrated their value in contemporary health care and they have done so effectively enough to indicate that they are essential and integral to modern medical care.

My point has been, however, to show that the coming of age of the allied health professions has introduced into the whole fabric of medical care, education and professional practice a set of questions which have only been faced tangentially up to now. But, as we move into the second decade of existence of the allied health professions, we must ask ourselves a series of questions and provide a series of answers to some fundamental challenges to the way medicine is practiced and health care is provided. The phenomenal growth of the allied health professions is just beginning to have its profoundest impact. It is essential for all who are charged with the responsibility for delivery of health care to the people of any nation to take these issues into account.
Of course, I have emphasized the state of the situation in one country, the United States, and as seen by one observer. My approach has been to select some issues and to exclude others. I think I have, however, provided enough questions within the domain of issues emerging from the growth of the allied health movement to indicate its importance both as a contributor to human well being and as the precipitant for some of the most fundamental questions about the inter-relationship of all the health professions and, particularly, about the role and function of the physician in society.
REFERENCES

1. ALLIED MEDICAL EDUCATION DIRECTORY, 1974, AMERICAN MEDICAL ASSOCIATION, CHICAGO.

2. HIGHER EDUCATION AND THE NATION'S HEALTH POLICIES FOR MEDICAL AND DENTAL EDUCATION, A SPECIAL REPORT AND RECOMMENDATIONS BY THE CARNEGIE COMMISSION ON HIGHER EDUCATION, McGRAW-HILL, NEW YORK, 1970.

3. UPCHURCH, OUIDA (REF. TO FOLLOW)


7. ____________: THE UNIVERSITY OF THE HEALTH SCIENCES - ESSENTIAL ELEMENTS: TOGETHER WITH NOTES ON THE "TENNESSEE PLAN," PRESENTED AT THE INTERNATIONAL CONFERENCE ON THE REGIONAL HEALTH UNIVERSITY, OECD, IN PARIS, DECEMBER 1975, IN PRESS.


9. RUNYAN, JOHN W. JR.: PRIMARY CARE GUIDE, HAGERSTOWN, MARYLAND: HARPER & ROW, 1975, 162 PP.


