THE HOSPITAL LOOKS AHEAD

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Within recent years hospitals in this country have made tremendous progress, both as instruments in the cure of illness and as agents for its prevention. Today the United States is embarked upon the most extensive hospital construction program in its history. In view of this current interest in hospital care and hospital construction, it is important that we consider the future place of hospitals in the broader field of public health.

It is, therefore, appropriate that this congress of public health officials should be interested in hospital care as an aspect of public health. Both hospitals and public health agencies have materially contributed to the better and longer life that most of our population now enjoys. Both have worked toward this end, but, for the most part, they have worked independently of each other. However, the gap between curative and preventive medicine is constantly narrowing. Today the trend is toward closer cooperation between hospitals and health departments. The effectiveness with which this is accomplished will depend upon the vision and understanding of both hospital and public health officials. But it will depend also upon our conception of the hospital of tomorrow and its responsibilities to the community which it serves.

It is said that the past is but prologue to the future. Hospitals and public health both have their beginnings in antiquity. The Mosaic laws were probably the first public health code. A study of hospitals shows that they clearly reflect the course of civilization. The forces and influences that have shaped our modern civilization have also shaped our hospital structure. While these forces are many, a few stand out as particularly potent influences in the development of hospitals. In general, they are religion, war, medical science, economic conditions and public appreciation.

Religious doctrines of all peoples have been concerned with the physical body as well as the immortal spirit. Early temples were both places of worship and places for the care of the sick. With the advent of Christianity, this attitude became even more widespread and purposeful. It has culminated in the many highly efficient church hospitals now in operation throughout the country.

Wars have always exerted a profound influence, both directly and indirectly, on the growth and development of hospitals. The Crimean War in 1854 saw the introduction of scientific nursing techniques by

Florence Nightingale. Medical lessons learned at great expense in our own Civil War were the basis of the modern medical and hospital services of our armed forces today. In World War II, for the first time in our history, deaths from disease were less than those from battle casualties. The medical discoveries and techniques which made this possible are now being transferred to civilian hospitals.

Progress in medical science, more than any other factor, is responsible for the modern hospital of today. Major scientific advancements began to revolutionize hospitals about the middle of the last century. Since then the progressive evolution of medical knowledge has rapidly extended and expanded the function of the hospital. What the ultimate effect will be on our future hospitals, no one can entirely foresee.

Economic conditions constitute another powerful factor in hospital history. All hospitals, and particularly the voluntary hospitals, are extremely sensitive to economic conditions. During periods of high national income, hospital facilities have expanded rapidly and hospital usage increased accordingly. At the peak of the prosperous decade following World War I, hospital construction reached an all-time high. In 1928 there were more hospitals in operation than ever before—or since.

Until comparatively recent times, voluntary hospitals have relied heavily on the philanthropy of wealthy individuals. Hospitals can no longer rely on this source of economic support. Today the social and economic fabric of the nation is changing. This change first became apparent in the economic depression of the 1930's. During that period most hospitals found it necessary to restrict services and to economize in every possible way. Many were forced out of existence. The use of publically supported hospitals increased and that of voluntary hospitals declined. To cope with this emergency, hospital prepayment plans were inaugurated, and in the beginning were largely underwritten by the hospitals.

The public popularity of prepaid hospital care is manifest in the rapid growth of these voluntary plans to a membership of nearly 26 million. Moreover, their value as a means of stabilizing hospital finances has been enormous. Whether they will prove to be sufficient in this respect as presently constituted seems doubtful. Even now with hospital occupancy at an all-time high and with more money in circulation than ever before, many hospitals are finding it increasingly difficult to meet their payrolls. In view of these conditions, the fact must be faced squarely that the economic stability of the voluntary hospital is not only a problem for the future, but an immediate and serious problem of today.

This brings us to the last of the five influential factors which have shaped our hospitals—public appreciation. Lack of public interest, resulting from ignorance and often prejudice, contributed to the slow

growth of hospitals and the poor quality of service in the early days of hospital development. This is still a very real factor in many rural communities. A great deal of good public health education is still needed to demonstrate the public health value of adequate hospital care.

When we consider these widely diverse influences behind the growth of our hospitals it is not surprising that they should have produced highly individualistic institutions. We like to assume that we have the best hospitals in the world, as indeed we have. But within this framework of general excellence we have some that are good, some that are indifferent, and too many that are bad. They are owned and operated by a wide variety of interests and for a wide variety of purposes. As a result, we do not have a *system* of hospitals, but a *number* of hospitals, each operating independently according to its vision, inclination, and resources.

When we try to contemplate the course which hospitals must chart over the next ten or twenty years, we should have several facts clearly in mind. First and foremost is the fact that hospitals of tomorrow will face a broader responsibility to society than those of today and yesterday. The concept of the hospital's function, its obligation to and its place in the community, is continually broadening. It is no longer true that the hospital is merely a place for the care of the sick, or the doctor's workshop as we so frequently hear it expressed. It is that, but much more. The hospital should become the nerve center for all community health efforts.

If the hospital of tomorrow is to meet its obligations to the public, indeed if it is to survive under voluntary auspices, it must cease to operate as an isolated, self-contained institution. In most instances heretofore, hospitals have been organized, built and operated with little regard to each other or to the over-all needs of the community or area they were meant to serve. Today we have hundreds, perhaps thousands of communities in which hospital service is completely lacking, or is inadequate in many essentials. Where this is true with hospital service, it is more likely than not to be true as regards medical service. On the other hand, in our metropolitan and urban centers, there are frequently both a surplus and a duplication of essential services.

One answer to this problem of too little or too much lies in what the Commission on Hospital Care has described as an integration of hospital service. This involves two basic principles which are vital to the provision of good hospital and medical care on a broad scale. These are, first, the orderly flow of professional personnel, special services and educational opportunities from the larger hospitals to the smaller institutions, and second, the orderly flow of patients, specimens and records from the smaller to the larger hospitals. Actually there is a third prin-

ciple involved. A fully integrated system also calls for closer cooperation of preventive and curative medicine. In all communities, whether large or small, public health services should be associated with hospital services.

Just as the hospital of tomorrow will assume broader responsibilities reaching beyond its immediate community, so will it assume broader responsibilities within its community. The general hospital, by literal interpretation of the term, is a hospital caring for all types of illness. The average so-called general hospital fails to live up to this definition. The approximately 690,000 general hospital beds in operation today are to be found in no less than 10 different types of institutions. Instead of being general hospitals, many of these institutions place sharp limitations on the types of cases admitted. This practice has resulted in the large number of special hospitals—sometimes referred to as "allied special" hospitals.

While the reasons for special hospitals in the past have no doubt seemed good and sufficient, nevertheless these reasons are largely of the past. In the beginning there was little functional differentiation among hospitals. As the contagious nature of certain diseases became known, these were segregated in special hospitals. This was done as a protective measure for the non-contagious cases, and not as a means of providing better care for contagious illness. Mental diseases were likewise segregated for similar reasons. Unfortunately, this segregation has generally resulted in less efficient, rather than more efficient, care.

As the practice of medicine became more specialized, the specialties tended to split off and establish their own hospitals. What was gained from this is at best questionable and will become even more so as time goes on. With the progress of medical science there is a growing realization that patients are individuals. They do not fall neatly into mutually exclusive categories of disease. We have also learned that the most effective patient care requires the cooperation and coordination of all the medical skills.

Teamwork of this nature can be achieved readily only in the general hospital. There is every reason to believe that the dominant hospital of tomorrow will be the general hospital and that it will be so in practice as well as in name. Undoubtedly, some specialized hospitals will always be needed since certain types of nervous and mental illness, tuberculosis and incurable chronic conditions can be handled to best advantage in special institutions. But there seems to be no question that all illnesses in the early or acute stages can be treated most advantageously in the general hospital. Furthermore, it is now recognized that where specialized hospitals are justified, they should have the services of the general hospital staff readily at hand. If these generalizations are sound, we

should see an end to the practice of locating tuberculosis hospitals far off in the woods; of adhering to the out-of-sight, out-of-mind policy in locating nervous and mental hospitals. Both types of institutions should be located closer to centers of population and other medical activities.

In hospitals both past and present, the primary aim, generally speaking, has been the restoration of health. To prevent disease through the enforcement of laws and regulations was the function of the health department. These concepts arose from the historical development of the practice of medicine through the centuries and the more recent development of the field of public health. The time has now come for a change. The hospital of the future will be called upon to broaden the scope of its outside activities as well as those within its own walls. It must, if it is to achieve its highest goal, become a public service agency reaching out into the community, contributing to and assisting in all matters pertaining to the health of the community.

There are many ways in which the general hospital can participate in this broadened concept of public service. But the hospital cannot do it alone. The hospital needs the help and assistance of the public health department, just as the health department requires the help and the facilities of the hospital. Both benefit when there is a close working and physical relationship.

Let us now examine those avenues of service. First, let us consider the out-patient department. This particular department offers many opportunities for integration of effort with the clinical activities of the health department. The latter is usually limited in the scope of its out-patient activities. Though not limited in scope, a hospital may be restricted in the number of patients it reaches. Through joint operation, out-patient service could be improved in quality and extended in quantity. In fact, the out-patient department provides the common ground upon which the activities of the medical profession, the hospital and public and private health agencies can be integrated and developed in the interest of a more effective health service for the community.

Next we come to medical social service. The solution of a patient's social and economic problems is just as essential for the maintenance of his good health as the solution of his medical problems. Since both hospital and health department are ultimately concerned with the individual's health, social service is as important to one as to the other. When there is cooperation between them, the social worker's time is used more efficiently and effectively.

Health education should also be given more prominence in our new hospitals. While this is one of the avowed functions of the hospital today, its practice is limited largely to selected patients and selected conditions. Rarely do we see health educational programs planned for

the community at large. Yet health education is an integral part of a community health program. As such, it requires the joint action of the hospital staff and the health department.

Then there are the various special fields which call for a close working relationship. Tuberculosis, venereal diseases, maternal and child welfare, and contagious diseases are those most commonly spoken of. Medical science in recent years has given us new techniques with which to attack these problems. But these techniques are rapidly merging the fields of action. No longer can the hospital and health department work alone.

While these diseases have long been the concern of official agencies, other diseases are rapidly moving into this category. Cancer, heart disease, arthritis and other degenerative diseases, now more common because of an aging population, are assuming major importance as causes of death and disability. These diseases will require increased study and care by official health agencies. Moreover, their study and treatment will call for a greater use of hospitals and likewise a greater degree of cooperation between hospitals and health authorities.

This brings us to the actual working arrangement. Both hospitals and health departments need laboratories; both need x-ray equipment, both operate out-patient services. In many instances, the activities of the public health department overlap those of hospitals. Unnecessary duplication of effort and equipment would certainly be avoided through joint use of facilities. The closest integration of work and facilities results when the health department is actually housed in or adjacent to the hospital.

In our hospitals of the future, there are certain avenues of service which belong to the hospital and are not directly related to public health agencies. Hospital diagnostic facilities constitute one of these. The Commission on Hospital Care recommends that "hospitals should make their laboratory and other diagnostic facilities readily available to the members of the local medical profession as well as to the members of their medical staffs." This recommendation is based on a number of premises. Probably the most important is the fact that while one person out of ten may receive hospital care during the year, a majority may need the services of a physician. By providing both, the hospital contributes directly to the welfare of the majority of the public rather than to the welfare of only a small percentage. At the same time, the hospital with its laboratories, its research and its many educational advantages is indispensable to high-grade individual medical practice.

Group medical practice promises to assume greater importance for the general hospital. The advantages of group practice in this day of specialization have been demonstrated repeatedly in many famous clinics throughout the country. Such groups require all the facilities of the

modern hospital, yet many of them have found it necessary to provide their own facilities. Since the expense involved is a serious handicap to the wider development of this effective method of medical practice, general hospitals are now exploring the possibilities of cooperating with these groups on a much broader scale.

As pointed out, the hospital of tomorrow will be vastly more important in the life of the community and the health of the nation than the hospital of yesterday or even today. The Federal government has recognized this importance in authorizing 375 million dollars in Federal funds to assist in the construction of hospitals over the next five years. Even this huge sum seems paltry in relation to the known needs. We now face the accumulated neglect of a decade of depression followed by five years of war and reconversion. What we must do to correct this situation adds up to a tremendous sum in terms of dollars and cents.

The nationwide hospital program, authorized by the Hospital Survey and Construction Act, is an important step in the right direction. As its name implies, this legislation has two main purposes: First, it provides assistance to the States in surveying over-all State needs and in making master plans for needed hospitals and health facilities. Second, it provides assistance for the next five years in the construction necessary to carry out these plans.

To accomplish this two-fold aim, the Act authorizes a Federal appropriation of $3,000,000 to assist with the surveys and $75,000,000 annually for the five-year period starting July 1, 1946, to assist with construction. When this sum is met by the States on the required basis of one-third Federal funds to two-thirds non-Federal funds the amount available for construction will approximate $1,125,000,000.

To date, $2,350,000 has been made available for the survey and planning phase of the program. The appropriations act, now under consideration by Congress, provides for the approval of projects by the Surgeon General up to $40,000,000 for the fiscal year beginning July 1, 1947.

Under the program authorized by the Act, hospital, public health centers and related facilities may be constructed. The term "hospital" includes general, tuberculosis, mental, chronic disease and other type hospitals, except those furnishing primarily domiciliary care. Funds for construction may be granted only to public and non-profit hospitals. A "public health center" is defined as a publicly-owned facility for providing public health services, the scope of which is a matter of State and local determination.

Federal administration of the program is the responsibility of the Surgeon General of the U. S. Public Health Service, assisted by the Federal Hospital Council and its advisory committee. Within the Service, the task of assisting the Surgeon General in the administration of the Act falls to the Division of Hospital Facilities. Consultation

service to States, communities and organizations is also provided by this Division in the many phases of planning, design and administration of hospitals and health facilities. To secure a decentralized approach to the program, this Division will work largely through the District offices of the U. S. Public Health Service to which specialized personnel have been assigned for this program.

It would be interesting to go into the details of how this program will be carried out. Unfortunately, there is only time enough to tell of some of its limitations as well as its significant and forward looking features. Probably the greatest limitation is the amount of money. Even when Federal funds are met by non-Federal funds, it will be possible to provide only about one quarter of the nation's needs for new and replaced facilities. Another limitation is the formula for the distribution of funds. All States, regardless of ability to pay must meet Federal construction funds on a two to one ratio. Clearly, the need is greater in some States than others; and in States where the need is most pressing, the per capita income is generally the lowest.

These limitations, however, serve to highlight the many desirable features of the program. First, among these is the requirement that each State survey its existing hospitals and health facilities and develop a construction program based on the survey. This means that for the first time we are building our hospitals according to a long-range plan. Another desirable feature is the requirement for minimum standards for hospital maintenance for those hospitals built with Federal aid. A third feature is the decentralization of administration. This is not a Federal hospital program. It is a State and community program. The Federal role is largely consultative. To the State and the communities, to the hospital leaders and the public health officials within the States goes the task of actually administering its provisions.

In most States the State department of health has been charged with the responsibility of carrying out this program. For many of them, the program, together with its licensing function, will be a new departure. It will present new problems, require new types of personnel and new outlooks. If properly handled, however, it will certainly enhance the importance of these agencies within their States. Public health administration is changing; hospital care will constitute an important part of this change.

EL HOSPITAL DEL MAÑANA (*Sumario*)

En la actualidad los Estados Unidos han iniciado el programa más extenso de construcción de hospitales que registra su historia.

La historia muestra que las religiones, las guerras, los servicios médicos, las

condiciones económicas y el sentimiento público, han ejercido marcada influencia en el desarrollo de los hospitales.

Los hospitales no pueden ya depender de la filantropía para su sostenimiento. Aunque la atención hospitalaria pagada anticipadamente ha probado ser muy popular, es dudoso que este método sea adecuado para estabilizar las finanzas de nuestros hospitales. Esto trae de inmediato, a consideración, el problema del hospital voluntario. En el pasado nuestros hospitales fueron medianos o malos y operaron para satisfacer diversos intereses o por diversos propósitos. No tenemos un sistema de hospitales sino que contamos con hospitales. El hospital del mañana debe convertirse en el centro nervioso de los esfuerzos de toda la comunidad en materia de salud. El hospital debe dejar de operar como unidad aislada. Una organización de servicios de hospital que se refieran a: (I) el contingente común de profesionales, servicios especiales y oportunidades de enseñanza de los hospitales grandes hacia los pequeños y (II) el contingente común de pacientes, especímenes y "records" de los hospitales pequeños a los grandes, debe estimularse.

El hospital dominante del mañana será el hospital general. Aún donde se necesiten hospitales especializados (tales como los de tuberculosos, dementes), deben contar con los servicios requeridos por un hospital general. El hospital del futuro debe convertirse en una institución de servicio público.

El hospital y la salubridad pública deben trabajar juntos. El departamento de consulta externa debe ser un lugar de reunión de la profesión médica, el hospital y las organizaciones sanitarias. Hospitales y servicios sanitarios deben cooperar en el uso de laboratorios, equipos de rayos X y servicios de consulta externa. Las facilidades de diagnóstico del hospital, deben estar al alcance del cuerpo médico.

Autorizado el "Hospital Survey and Construction Act," se han aprobado $3,000,000 de dólares para ser empleados en los estudios preliminares para planeamiento de hospitales en las entidades federativas y $75,000,000 de dólares anuales, por un período de cinco años, para cooperar económicamente en la construcción de los mismos. De estas cantidades están listos, de momento, 2,350,000 dólares.

Cuando los Estados puedan aportar las dos terceras partes de la suma total, de la que el Gobierno de los Estados Unidos proporcionará la restante tercera parte, se contará, en definitiva, con 1,125,000,000 de dólares para la construcción de hospitales. Los fondos serán destinados para construcción de hospitales de servicio gratuito.

La "Division of Hospital Facilities" eximirá al Jefe de Salubridad Pública de los Estados Unidos, de administrar este programa. Esta División contará con un servicio consultivo para los Estados y municipios en todo lo relativo a proyectos de edificación y administración de hospitales. La "Division of Hospital Facilities," trabajará principalmente por conducto de la Oficina Distrital de Salubridad Pública Federal.

Este no es un programa Federal, sino un programa Estatal y Municipal. El Gobierno Federal conserva principalmente funciones consultivas. En los Estados, el Departamento de Salubridad Pública del Estado, tendrá la responsabilidad de poner en práctica el programa.

Infecciones dentarias.—Maynard K. Elburn (Nav. Med. Bull., 120, eno.-fbro. 1948) empleó con éxito penicilina en varios casos de infecciones dentarias, obteniéndose resultados más rápidos y satisfactorios cuando la inyección se hizo directamente en el sitio de la infección.