the Hospital *the* Medical Center *the* Community

By CHESTER S. KEEFER, M.D.

THE HOSPITAL, the medical center, and the community form a major segment of the health component. The hospital is today, as it always has been, the physical symbol of medical science and technology. Its value to humanity can be no greater than the collective brains and skills of the men and women who work within its walls.

Prior to the turn of the century hospitals were primarily for protection of society, rather than for the welfare of the patient. Those with contagious illness, mental disease, and the poor and homeless were the major "beneficiaries" of the hospital care of that day. Childbirth was immeasurably safer in the home than in the hospital. The same was true in large measure of most types of illness.

Modern medicine, and with it modern hospital care, is a product of the 20th century. With each advance in medical science, the public demand for hospital care increased. Gradually the hospital came to be looked upon as a place for recovery—for restoration of health rather than a point of no return. With the ever-increasing demand for hospital services, the construction of new hospitals spread rapidly during the first 30 years of the present century. The first census of hospitals, taken by the United States Bureau of Education in 1873, reported only 178 hospitals of all types with some 34,000 beds. The next reliable census of hospitals, that of the American Medical Association published 36 years later (1909) in its American Medical Directory of Hospitals, listed 4,359 hospitals with 421,000 beds—a phenomenal increase for the period.

World War I caused only a temporary slackening in the rate of hospital expansion. The decade following saw a greater expansion in hospital building than in any previous 10-year period, and by 1918 we had reached a high water mark of 6,852 hospitals with nearly 900,000 beds.

Although the number of hospitals declined by 686 during the depression years, it is significant that the number of hospital beds in operation increased steadily from year to year. This was indicative of a trend toward centralization and urbanization of hospital facilities and medical

---

Dr. Keefer is Special Assistant for Health and Medical Affairs to the Secretary of Health, Education, and Welfare. This presentation is based on his address to the Academy of Medicine of New Jersey, in Newark, N. J., March 18, 1954, on the occasion of its 43d anniversary.

personnel. In 1938, more than one-third of the 3,070 counties in the country had no hospital. Even then the absence of a hospital was almost synonymous with the lack of a resident physician. Rural communities had few doctors. Graduates of the modern medical school could and would practice their profession only where the modern tools afforded by the hospital were at their disposal.

At the outbreak of World War II the leaders in both the medical and hospital fields were beginning to realize that medical science was progressing at a far greater pace than was its means of distribution. New discoveries in medicine were taking too long to reach the people. Changing medical and social patterns required not only new tools but especially new methods.

Commission on Hospital Care

Early in 1942, the American Hospital Association Council on Administrative Practice called a postwar planning conference and suggested to it a hospital survey. In October 1942, the conference recommended that a commission on hospital care make a comprehensive study of hospitals, particularly of the part hospitals should play in the future life of our people. Private foundations provided financial support for a 2-year study, and by 1944, 22 nationally prominent members had been selected.

The report of the Commission on Hospital Care, published in 1946, revealed points of special significance. First, there was a very large need for general, mental, tuberculosis, and chronic disease hospital beds because of increasing population and obsolescence of existing hospitals. The lack of facilities in general was further compounded by inequitable distribution.

The second significant finding of the commission was that general hospitals in particular had developed in an atmosphere of intellectual isolationism. Too much emphasis was being placed on the treatment of acute illness, and not enough attention was being given to the broader responsibilities of preventive medicine, mental health, and chronic illness. Many of the problems pointed out by the Commission on Hospital Care in 1946 are still with us today in even greater proportions. These problems can and must be solved if we, as physicians, are to meet our obligations to the people of the country.

The Hospital in the Community

Most of the medical care problems are related to the large one: how to get the best modern medical care to all the people of the Nation at a cost they can afford to pay. This includes modern facilities tailored to the needs of each community, proper distribution of well-trained people in the health professions, and a way of bringing the cost within the means of every family. Progress is being made in seeking solutions to these problems of which we are all aware.

In discussing the part the hospital must play in bringing modern medical care to the community, I shall use the term "hospital" in its broadest sense: a place for the restoration of health, for the prevention of illness, and for the training of health workers. In order to fulfill this mission the hospital must be planned, equipped, staffed, and located with an eye to what tomorrow will bring in the way of new medical problems and constantly increasing demands of medical science. The hospital must be prepared to provide the physician and the community with facilities which were not even dreamed of a few years ago—such as radioactive isotopes, blood vessel banks for vascular surgery, blood banks, cornea banks for the restoration of sight, bone banks, the artificial kidney, and the mechanical heart, to mention but a few.

The hospital must be prepared to deal with the increasing problem of chronic illness and the degenerative diseases of an aging population. The acute diseases of yesterday are rapidly being replaced by the chronic diseases, the number one medical problem today. Now fewer people are dying in childhood and early adult life, and more people live to reach their sixties and seventies. Aging brings with it different medical, hospital, and social problems.

Only the large medical center can hope to meet all these needs. Many of the skills required are so rare and the equipment so expensive that they are to be found only in the large medical centers. The ability to supply com-

plete services lies in an integrated system of community hospitals, specialized hospitals, nursing homes, rehabilitation centers, and home-care programs operating as one team around the medical center.

Regional Hospital System

The concept of an integrated network of hospitals built around the medical center is not new, but progress towards this goal has been discouragingly slow. As early as 1931 a Boston physician, noting the isolation of the doctors in rural Maine, evolved the idea of a regional hospital system, which a private foundation, the Bingham Associates, financed and administered. The physical plant contained three elements: a diagnostic hospital, which is a part of the New England Medical Center; two so-called intermediate hospitals of approximately 200 beds each, strategically located in Maine; and a large number of rural hospitals of from 20 to 100 beds.

The program involved a four-part plan: (*a*) to upgrade the rural hospitals by providing laboratory facilities and personnel; (*b*) diagnostic aid and consultation on treatment furnished by the medical center or the intermediate hospitals as necessary; (*c*) hospital extension service in which clinical lecturers from the medical center make regular visits to the intermediate hospitals and hold clinics and demonstrations to which the staffs of the rural hospitals are invited; (*d*) postgraduate educational opportunities for rural physicians, nurses, and technicians at the medical center.

In these rural areas, this program has contributed immeasurably to the quality of medical and hospital care and has helped to make rural medical practice a more rewarding experience.

A similar experiment is now going on in New York State, with the University of Rochester serving as the medical center. About 30 rural hospitals have banded together to form the Rochester Regional Hospital Council. In addition to programs similar to those of the Bingham Associates, this organization provides joint buying services and other administrative assistance.

The Medical College of Virginia, New York University Medical School, University of Michigan, and several others are trying similar plans on a small scale.

Distribution of Doctors

High quality medical and hospital care can be made available to everyone through adequate facilities and competent physicians who are contented in their environment. Essential to satisfactory working conditions for the young physician are these four conditions: modern hospital facilities, an adequate income, a satisfactory social environment, and a ready source of intellectual refreshment. A few years ago almost none of these conditions was to be found in rural areas, but now they are to be found with increasing frequency.

The migration of young physicians to the cities is gradually being reversed. Almost every rural hospital built in recent years has attracted new physicians to its community. In these rural communities where new hospitals have been built all the elements of a satisfactory practice are at hand save one—ready access to the help and inspiration that can come only from the medical center. I believe the establishment of those channels is one of the big challenges that face the medical profession in the immediate future.

The Hill-Burton Act

The Hill-Burton Hospital Survey and Construction Act in 1946 envisaged the creation of an integrated regional hospital system. The act provided that the States were to make a careful survey of their hospital needs and prepare a planned construction program. State plans were prepared to provide for hospitals in "base (medical centers), intermediate, and rural areas." The type of area was determined by the population density, existing facilities, and other factors, and the needs of each area determined individually. In the intervening 8 years the States have faithfully built around the framework of an integrated hospital system. The more than 2,200 hospital and health center projects approved will provide 426 health centers and more than 106,000 hospital beds. On the average, 2 dollars of State and

local money have been used for every Federal dollar contributed.

The heavy emphasis in this program has been on the general hospital in rural areas where the need was the greatest. But substantial additions have been made to teaching hospitals in intermediate and medical center areas, and a smaller number of beds have been added in the tuberculosis, mental, and chronic disease categories.

The Hospital Survey and Construction Program has made an invaluable contribution to the hospital assets of the Nation and will continue to do so. Considerable progress has been made in meeting the great need for rural hospitals which had accumulated during the past 20 years. As the rural needs become more nearly satisfied, increasing emphasis may be placed on teaching hospitals and medical centers. It is realized that the flow of trained personnel must be maintained and increased if the diversified demands of adequate health care are to be met.

Special Facility Needs

Problems of an aging population are becoming more and more apparent. While only 3 percent of the population in 1900 were over 65 years of age, the percentage rose to 12 percent by 1950, and the population forecasters predict that by 1975 it will rise to 16 percent—or a total of nearly 29 million people in that age bracket.

With increasing age there comes an increasing need for institutional care. People over 65 years of age are now using twice the number of hospital days per capita as those under 65 because of the rapidly increasing incidence of chronic diseases which occur with advancing years. A spot check of almost any general hospital on any given day will reveal that a considerable proportion of the patient load will consist of patients with chronic illness that could be cared for as well or better in chronic disease facilities, which cost less to build and much less to operate.

Numerous surveys have shown that the percentage of such cases in general hospitals runs from 20 percent upward. With general hospital beds costing on the average $16,000 to build and $18 per day to operate, the care of chronic illness in general hospitals is becoming an intolerable burden which must and can be corrected.

The situation in mental hospitals is very much the same. Nearly one-half of all the hospital beds in the country are in mental hospitals, which are notoriously overcrowded. Here again a substantial part of the patient load is made up of persons with senile psychoses. Many of them need not be there except for the fact that there is nowhere else for them to go.

The answer to these problems seems fairly obvious—more chronic disease facilities and nursing homes which can be built and operated for a fraction of what it costs to build and operate acute general and mental hospitals. We need these facilities readily available to every community and under the medical supervision of the staffs of our community general hospitals.

But mere health maintenance for the aged and chronically ill and the physically handicapped is not enough. They are still people as well as patients, and they need physical and mental readjustment and vocational training. Rehabilitation is a natural concomitant to any plan of treatment of the aged and chronically ill, and communities will need rehabilitation facilities.

Diagnostic and Treatment Centers

As the President has observed, many illnesses can be cared for outside of any institution: "For such illnesses a far less costly approach to good medical care than hospitalization would be to provide diagnostic and treatment facilities for the ambulatory patient. The provision of such facilities, particularly in rural areas and small isolated communities, will attract physicians to the sparsely settled sections where they are urgently needed."

Traditionally, the care of the ambulatory patient in this country has been for the most part the responsibility of the private physician in his private office. Other facilities for the care of this type of patient have been generally confined to the outpatient departments of our large general hospitals. The use of outpatient departments has been largely limited to the indigent and the medically indigent. Fees have generally been nominal.

The rapid growth of specialization has made the traditional methods of handling ambulatory patients increasingly inefficient and time-consuming for both physician and patient. To obtain a comprehensive physical examination and diagnosis, a patient may need to visit a number of different specialists in different places. This has resulted in an increasing number of patients being hospitalized for diagnostic purposes alone. Since hospital insurance plans do not, as a rule, cover hospitalization for diagnostic purposes, this type of practice has been far from satisfactory. One remedy may be group practice—or the voluntary organization of groups of family doctors and specialists who are prepared to provide comprehensive medical care outside of hospitals just as they have been doing inside hospitals for some years.

The concept of group practice has grown steadily, if slowly, over the years. In this country there are about 500 such groups of one type or another. Some do diagnosis only; some do both diagnosis and treatment; some operate their own prepaid insurance plans; and some serve local insurance plans exclusively. Their objective is to practice the best medicine and to provide general and special services in the most effective manner.

The family doctor is the central figure in medical practice, but the need for the specialist is also recognized. Working together as a group or team with accessible facilities is the key to improving medical service for the people. Communities will need diagnostic and treatment centers to give the people better medical care on an ambulatory basis and to ease the demand for institutional care.

Community Hospital Responsibilities

As I have tried to point out, the health care of the American people is very complex. Within our memory, we have seen many man-killing diseases almost fade from the picture only to be replaced by other medical problems even more difficult of solution.

Although the community hospital was once self-contained and self-sufficient, it is no longer so, but it is firmly fixed in the American pattern of life and will remain so.

More and more the community hospital must look to the medical center for its personnel, for its diagnostic and treatment aids, and for the advance training in professional skills of its staff. Its services must be extended through special facilities to the care of the aged and the chronically ill. Facilities for the diagnosis and care of the ambulatory sick must be utilized to ease the demands on its highly technical and expensive inpatient services.

Health Insurance

The teamwork approach in medical care is expensive. Everyone is asking the question: How can adequate—and the necessary modern—medical care be provided at a cost that people can afford to pay? One of the ways the American people are attempting to answer this question is by developing voluntary prepaid health insurance plans. These voluntary plans have grown enormously in the past 15 or 20 years. Today about 92 million persons are covered by some kind of hospitalization insurance.

The families of this country have embraced the principle of voluntary health insurance because many realize that the costs of medical care in any one year are unpredictable and are nonbudgetable items of expense.

Recent surveys indicate that the median cost of medical care for our 50 million families is 4.1 percent of family income. But the range varies from no expenditure for medical care in a year to more than 100 percent of family income. These wide variations and unpredictable costs are among the reasons for the growth of voluntary health insurance—families want to protect themselves against such risks by spreading the costs on a prepaid insurance basis. Such plans are successful and reasonable in price only when large groups are enrolled. It is important, therefore, that the largest number of eligible people be enrolled and that the benefits be liberalized so that the maximum amount of protection may be available.

Large segments of our population find it difficult to enroll in any type of voluntary plan, for instance, the aged, the self-employed, farmers, and rural dwellers. We need to increase the opportunities for coverage of these people and to extend the scope of insurance benefits.

The many current problems in the field of medical care must be attacked vigorously and with courage. Plans for their solution must be soundly conceived. Joint thinking and joint action are required of the health professions, the lay public, the insurance carriers, and health service organizations if the goals are to be reached.

The problems of medical care are the concern of every citizen. President Eisenhower has stated this well: "No nation and no administration can ever afford to be complacent about the health of its citizens. While continuing to reject government regimentation of medicine, we shall with vigor and imagination continuously search out by appropriate means, recommend, and put into effect new methods of achieving better health for all of our people. We shall not relax in the struggle against disease. The health of our people is the very essence of our vitality, our strength, and our progress as a Nation."

Visual Aids on Infant Feeding

A series of color filmstrips and silent color movies on infant feeding has been developed by the nutrition and visual education sections of the Michigan Department of Health. Intended to supplement group teaching of mothers attending well-child conferences, these aids show a mother demonstrating in her own kitchen how she prepares and feeds new foods to her child. They also illustrate information contained in a similar series of pamphlets.

There are five different filmstrips and movies in the series. Each strip and movie is devoted to a different type of food: citrus juices, cereals, fruits and vegetables, meats, and eggs. Simple directions and suggestions for introducing new foods into the infant's diet are included.

A wide variety of uses for the film series has already been found in the Michigan well-child conferences. Nurses and nutritionists are using these visual aids in their interviews with mothers. The strips or movies are also being used to entertain mothers and restless children during the waiting period. Selected volunteers are permitted to show the films and lead the discussions which follow.