The Institution Needs of the Health Industry

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INITIATION of nearly every important health measure sets off a long chain of events which focuses awareness on pre-existing, ever-expanding needs. For example, when the Hill-Burton program was initiated in 1946, the nation's primary concern about health was hospital shortages, particularly in rural areas. As the program got underway, many societal changes which affected our health care system—or nonsystem—began occurring.

Some of the emerging needs which the Hill-Burton program helped spotlight were the kind of planning which would bring about coordinated interrelationships between community health facilities and services, a licensure program which, hopefully, would elevate the quality of institutional care, better design centered on function of the facilities, and advancement of community-based facilities for the mentally retarded and mentally ill (*1*). Before the enactment of Medicare, the Hill-Burton program helped to delineate the growing need for long term care facilities and nursing homes.

Closely linked to the construction of health facilities is their staffing. Thus a big push was necessary to fill the growing manpower shortages in medicine, nursing, and the allied health professions. Overcoming the manpower shortage required a program directed to constructing additional educational facilities while recruiting students to enter the health professions. Although many others remain, only eight of the major needs of the health industry as they relate to institutions are discussed in this paper.

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Coordination of Health Facility Planning

We need to find better ways to transform into reality the concept of better coordination and interrelationship of health facilities of all types. This need, which has been emerging gradually for at least 40 years, did not get widespread attention until it was rediscovered following the implementation of the Hill-Burton program.

I might interject that probably the most spectacular and worthwhile Pandora's box opened by Hill-Burton is a four-letter word—plan—which has gained a high degree of respectability in recent years. The virtues of planning finally have been accepted, and the concept has begun snowballing to the extent that the Public Health Service now has the Comprehensive Health Services program to coordinate the many facets of health planning. Moreover, almost every element of our society has one or more planning groups hard at work. The problem now is the need for a plan to coordinate the planners.

The original Hill-Burton legislation in 1946 gave impetus to the first national effort directed to coordinated planning of hospitals and other health facilities. When the Hill-Burton pro-

gram introduced planning, the hospital shortage was so great that there was almost no chance for error in determining where additional facilities were needed.

A simple formula was developed: X number of beds per 1,000 population with a ceiling of 4.5 beds per 1,000 per State. This formula worked relatively successfully until other factors became apparent. These factors included over or under utilization of beds, the need to remodel or replace older facilities, and the changing patterns of care which engendered different needs in terms of health facilities.

Gradually, the program's administrators began to find more sophisticated mechanisms for measuring need. After numerous discussions and national conferences, it was concluded that the problem of planning could be resolved best by local or areawide health facility planning agencies cooperating closely with State Hill-Burton agencies. For almost a decade, the program has been encouraging this type of approach. Grants were awarded to help establish local areawide planning agencies, and there now are more than 70 such bodies compared with less than a half dozen in 1960.

But the need for even greater sophistication in planning continues to haunt us. Despite all that's been done, administrators still do not know how to enforce decisions made by voluntary planning bodies—unless Federal funds for construction are involved.

During 1967 an Advisory Committee on Hospital Effectiveness was appointed by former Secretary Gardner, and the committee's report was published in 1968 (*2*). The committee strongly supported the planning concept. However, it criticized the licensing system which was structured mainly on the safety of physical facilities, without regard for the way they were used. One of the committee's 11 recommendations was to establish State licensing or franchisement systems to encourage improvements in planning, management, and financing by controlling the flow of public funds to institutions (*2a*).

Planning was also discussed at the National Conference on Medical Costs held in Washington in June 1967. The conference report has the following summary statement concerning hospitals (*3*).

Every hospital is responsible for viewing its services to the community, not as an isolated and competitive entity, but as an integral part of a system designed to meet the total health needs of the people effectively and economically.

Modernization and Replacement of Facilities

The second big area of need is modernization or replacement of older facilities. Some $10 billion is expected to be needed for modernization during the next decade. This problem, in part, stems from the fact that many hospitals built in the early 1900's are deteriorating. In addition, medical care techniques are progressing so rapidly that many relatively new hospitals are functionally obsolete. While the need for modernization exists in cities of all sizes, it is felt most keenly where the facilities serve as research and teaching centers—a factor which adds to the gravity of the problem.

How to go about the modernizing of facilities will soon be debated in the halls of Congress and elsewhere. In view of the magnitude of the problem and competing demands on the Federal budget, many leaders in the hospital field believe it is pragmatically impossible to expand the Federal grant program to a level necessary to meet the nation's growing modernization needs.

Although expanded grant assistance for modernization is imperative, a number of other mechanisms have been recommended in addition to expanded Federal grant support. These include a new low-interest Federal loan program, loan guarantees at around 3 percent interest cost to sponsors for up to 90 percent of the cost of construction, or a combination of grant and guaranteed loan up to 90 percent.

Until now funds authorized for modernization have been far too limited to make a sizable impact on the overall problem. Under the 1964 amendments to the Hill-Burton program a modernization category was established which provided only $160 million for modernizing over a 4-year period.

Need for Diversified Facilities

More diversified facilities need to be built for patients who are not acutely ill. Outpatient service, extended care, and home care have been sorely neglected primarily because they were not covered by health insurance. Once this problem

is rectified, it can be anticipated that States will report a substantial need for a wide variety of facilities to provide health services outside hospitals.

Long term care facilities, which include nursing homes, are less expensive to construct, operate, and maintain, and yet offer adequate economical skilled nursing care for persons who are ill but do not require specialized services of the short term general hospital. Also, there should be greater demand for outpatient facilities providing diagnostic, treatment, rehabilitation, and preventive services.

As pointed out in the report of the Advisory Committee on Hospital Effectiveness, one of the most severe problems pertaining to health facilities has stemmed from prepayment and insurance practices and other financing methods which have encouraged the use of high-cost inpatient services when low-cost ambulatory services would have been sufficient (*2b*). These financing practices have become embedded in hospital tradition and have remained unchanged long after they have been widely recognized as barriers to hospitals' effectiveness.

The committee made several recommendations attempting to get to the heart of the problem. The recommendation having greatest pertinence to this discussion states (*2c*):

> The Secretary of Health, Education, and Welfare shall establish a Commission or Committee to work out and recommend a procedure and time table for requiring by either State or Federal law a minimum range of benefits for health prepayment plans and insurance policies including hospital inpatient services, outpatient ambulatory services, extended care services, home care programs, and physicians' services in and out of hospitals. The Committee recommends a plan which moves in the direction of requiring that all health insurance shall provide the full range of benefits enumerated above.

Substantial Funding

A combination of the first three needs—planning, modernization, and diversification—culminates into the fourth big need: substantial funding at an early point in time.

Reports from the States show that health facility needs have reached the highest point in history. The States are prepared to proceed in 1969 with 1,992 projects costing $4 billion if the Hill-Burton program were able to provide $1.6 billion. There, of course, is no likelihood that this amount will be made available during the coming fiscal year in light of the nation's overall budgetary needs.

It is interesting to note that since the inception of the program, Hill-Burton grants have totaled $3 billion. Thus, the $1.6 billion that States would be able to use next year represents 53 percent of the total funds provided them during the past 20 years. This, of course, does not mean that the volume of construction would begin to be comparable to 53 percent of that carried out during that period since construction and labor costs have been rising steadily.

Capital financing has become a major stumbling block for many communities. The problem becomes compounded because if modernization is postponed for 1, 2, or maybe 5 years, many additional cost factors will need to be considered. The cost of construction materials and labor will have risen. Moreover, the structure will have deteriorated further, thus making more extensive remodeling necessary.

New Patterns of Operation

The fifth major need is the development of new patterns of operation for greater efficiency and economy. This problem is still in the exploratory stage, although for several years attempts have been made to find more efficient ways to operate hospitals.

New patterns of operating hospitals were a major topic at the National Conference on Medical Costs (*3a*), and the subject also received tangential attention at the National Academy of Engineering Conference held in Washington in December 1967 (*4a*). The major issue at the December conference was how to cut the cost of hospital construction (*4b*).

However, speakers pointed out that while excessive construction costs should be discouraged, particular emphasis should be placed on functional design for greater operating efficiency and, wherever possible, to cut down on requirements for manpower—the biggest item on any hospital's operating budget (*4c*). The findings of this conference support the principal thrust of the architectural guide materials developed and distributed under the Hill-Burton program since its inception.

Sharing is a newly emerging pattern of opera-

tion which appears to hold great promise. A concept with unlimited possibilities, sharing can include services, equipment, facilities, and manpower. The Public Health Service has received reports that sharing has resulted in cutting costs and improving services.

At the same time, sharing strengthens the communication, cooperation, and coordination among all participating hospitals. Continuing sharing arrangements can be expected in dietary services, laboratories, pharmacies, laundries, and computer services which include statistical and clinical information for medical records, centralized admission of patients, and central billing. Even in sparsely populated States, adaptation of the sharing concept should present many interesting challenges.

The sharing concept need not be limited to community hospitals. Public Health Service and other Federal hospitals would also benefit by employing the sharing principle along with community hospitals.

It is self-evident that the Federal Government should not establish a facility or maintain a service if, through contractual arrangements, it is possible to achieve equally good patient care at reasonable cost. The Government's commitment to excellence is such that it is essential that a hospital offer highly specialized care only where there is sufficient caseload to assure professional personnel that they will be able to retain their proficiency. Providing high-quality care for patients requires a multidisciplinary team. It appears unwarranted to support a free-standing independent service if, by sharing resources and physical facilities, accessible and comparable or higher quality patient care can be achieved.

A case in point is open heart surgery. Some 776 hospitals provided facilities for such surgery during 1967. No cases were reported in 31 percent of these hospitals, and 40 percent had only one case during the year.

It is obvious that the surgeon and staff cannot maintain a high level of competence with such infrequent use of special skills. It is also obvious that the patient and his family would not knowingly choose to have open heart surgery performed in a hospital that afforded its staff such limited opportunity to maintain their competence. Undoubtedly the patients and the community would be served better if, instead of permitting two or three hospitals in one community to build facilities and engage staff for open heart surgery, a decision were reached through community consensus as to which hospital would be best suited to offer this service. Then all such cases could be referred to that hospital.

Interest in greater efficiency and economy in hospital operation has been a prime concern to Hill-Burton program administrators for many years. Since 1956, the research and demonstration arm of the program has, through study sections and the Federal Hospital Council review mechanism, been funding scores of projects to find some of the answers. (With the reorganization of the Public Health Service in 1968, research and demonstration activities were transferred to the newly created National Center for Health Services Research and Development.)

In recent years several projects have been ascertaining ways in which the computer can be adapted for hospital use, and some of the findings have been exceedingly useful. However, funds allocated for this purpose have been limited. This, hopefully, should be changing with the additional authorizations concomitant with establishing the National Center for Health Services Research and Development. The Center's purpose is to stimulate and coordinate research projects and demonstrations to improve the delivery of comprehensive, quality health care at the lowest possible cost.

The Public Health Service in September 1967 announced the availability of funds for grants to establish a limited number of university- or hospital-based health services research centers. These centers study facets of the medical care system and will design and conduct operations research in health services.

Inadequacies of Outpatient Services

The sixth major need relates to the inadequacies of outpatient services. In recent years outpatient services have been steadily changing from serving the medically indigent to providing an essential component of health services to a wider segment of the community. It is expected that during the current year more than 150 million outpatient visits will be made to hospitals in the United States.

Outpatient departments are being confronted with an increasingly wider array of problems. Their services are frequently inferior, fragmented, disorganized, and lacking continuity. Too little thought is given to design and location of the department, and the waiting room usually is overcrowded. The hours are generally for the convenience of the staff rather than the patient, most physicians prefer to be located elsewhere, and there are numerous other problems.

For every problem, several solutions could be offered. Some of the suggested solutions include establishing a new medical specialty, the family physician (each patient would be assigned to a single primary clinic which would have total responsibility for his care); providing 24-hour clinics for walk-in nonemergency patients; unifying all outpatient services under one director; establishing neighborhood or satellite clinics; initiating an appointment system for patients and physicians at outpatient care centers; and providing preventive care, including multiphasic screening, home health, and waiting room education programs.

No reference to outpatient services would be complete without recognizing the growing influence of group practice arrangements on medical care. This was another of the many topics discussed at the National Conference on Medical Costs (*3b*), and last fall a National Conference on Group Practice was conducted in Chicago. It was generally agreed at the Chicago conference that group practice offers much hope for the future and that group practices should be developed in cooperation with existing health care facilities (*5*).

Geographic Distribution of Services

The seventh need is the development of map overlays that would reflect the geographic distribution of specific services available within each State. If, for example, geographic areas where vital capacity and other pulmonary function tests are provided were identified on a map, State health authorities could then make an analysis that would clearly indicate the locations where this service is available. Discussions could then be initiated with the State medical and hospital community and decisions reached for the initiation of such services where population concentrations warrant and their discontinuance where unwarranted.

The Public Health Service is encouraging State Hill-Burton agencies to promote the introduction of services commensurate with geographic need when analyses show that the human resources would be used efficiently if the services were available. To incorporate this concept, the Service proposes to permit the designation of a special priority for use of grants-in-aid funds to purchase equipment for existing hospitals when analysis indicates that no community hospital in the area is offering the service and the anticipated volume would make it worthwhile. Since the Service is initiating this program as an inducement to stimulate more comprehensive services on a geographic basis, grants-in-aid funds will not be used in any instance to replace equipment.

Adequate, Trained Personnel

The eighth great institutional need is for adequate professional and paramedical personnel. Although this need is last on the list, it is by no means of least importance.

In November 1967, the National Advisory Commission on Health Manpower, appointed by the President in 1966, issued its report with recommendations ranging widely over major considerations relevant to and inseparable from manpower needs and requirements. Well over half of the Commission's recommendations dealt with ways of improving the efficiency and organization of the health care system and the services which make up that system (*6a*). The report notes that there is a crisis in American health care; however, the crisis is not simply one of numbers (*6b*).

> It is true that substantially increased numbers of health manpower are and will be needed. But if additional personnel are employed in the present manner and within the present patterns and systems of care, they will not avert, or even perhaps alleviate, the crisis. Unless we improve the system through which health care is provided, care will continue to become less satisfactory, even though there are massive increases in cost and in numbers of health personnel.

The question before the health industry is what can and should be done—by using present health professionals and facilities more efficiently—so that (*a*) the availability and quality of health care will meet the needs of all citizens,

(*b*) the cost of care will be kept within reasonable bounds, and (*c*) plans for the future will be formulated wisely?

Many proposals are now in the exploratory stage and, hopefully, within the next decade, health services will be much better organized, thus permitting health professionals to make optimum use of their time. This improvement would mean that tasks requiring less formal training will be handled by semiprofessional members of the health team. Ancillary health manpower will be indispensable in meeting projected demands for health care, and every effort should be made to make these positions sufficiently challenging to attract competent personnel. Moreover, there needs to be a re-evaluation of our educational system, to minimize the many cul-de-sacs that now prevail.

Conclusion

Keeping abreast of the changing needs of health facilities is an exciting and challenging task. Society has learned much about what constitutes good health care, and people will most assuredly get high-quality health care by insisting on properly planned and efficiently administered health care facilities. Achieving this goal is a process in which consumers and health professionals must be partners. I hope that professionals will continue to improve their image with reference to recognizing the need for change.

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Survey on Dental Care

Americans are showing concern about the provision of dental care for children, particularly for children of low-income families. A random sample survey conducted earlier this year for the Public Health Service's Division of Dental Health by the National Opinion Research Center at the University of Chicago bears out this growing public interest in dental care.

Of the 1,482 adults questioned in the survey, 72 percent believe there are times when public funds should be provided for children's dental care. About one-half of the respondents also said that children from low-income families should be the priority group to receive financial assistance for dental care.

According to the NORC study, 48 percent of adults visited a dentist within the past year. It is estimated that before 1930, less than 25 percent of Americans visited a dentist in the course of a year.