THE HILL-BURTON PROGRAM *
A CRITICAL REVIEW
1947-1952

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Five years have elapsed since the National Hospital Survey and Construction Program, popularly known as the Hill-Burton Program, was authorized by Public Law 725, 79th Congress on August 16, 1946. The first appropriation was received in 1947. It is, therefore, timely to review as objectively as possible the effect of this program.

The Congress of the United States has appropriated 542.5 million dollars for allocation to the States. The States and local communities have matched to date more than 500 million dollars of these Federal funds with about 950 million dollars with State and local sponsors' funds. Thus, we have today a program of Federal, State and local cooperation directed at achieving more equitable distribution of hospital and health services. The total cost of the construction approved under the Hill-Burton Program now exceeds one billion 450 million dollars.

Some of the positive accomplishments of the Hill-Burton Program are:

1. The establishment of an orderly system of providing hospitals and related health services through the development of State-wide hospital plans.

For the first time as a result of the Hill-Burton Program an orderly survey and appraisal of the Nation's existing hospital and public health center resources is available. The plans developed by the States are in essence a blue print for furnishing hospital services to the people of the Nation.

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These plans delineate hospital service areas within a State and establish a priority structure for construction. Priorities are essentially based on relative need to permit the construction of hospital facilities where the greatest need for them is demonstrated.

2. The interest of local citizens have been stimulated to provide good hospital services for their community.

The Community of Lebanon, Oregon, represents the 1,000th completed Hill-Burton project to be opened and placed in operation.

As of August 31, 1952, 1,850 projects have been approved. These projects provide 89,000 hospital beds, 350 public health centers and 15 State health laboratories.

The States set the Federal share to be made available annually for each project within a State. The percentage varies from State to State between 33-1/3 percent to 66-2/3 percent for the Federal share. The exact percentage is a determination by each State within the limitations provided by the basic Act.

The hospital needs of communities differ from State to State. In many States conventional acute general hospitals are the rule while in others public health centers containing a small number of beds for emergency care purposes have been constructed. In Mississippi there has been constructed small health center and clinic combinations. The primary aim of these health center-clinic combinations is to provide to remote rural locations health department facilities and facilities for treatment of emergency and obstetrical cases. In addition, in quite a few States we find combination hospitals and health centers being regarded as the answer to local needs. These latter are a recognition that modern medical care requires a fusion of curative and preventive services into a program of health maintenance for the individual and the mass of individuals.

3. State-wide planning for hospital and health services has been stimulated.

The Hill-Burton Program has led the States to better planning on a state-wide basis; into better thinking concerning coordination and integration of hospital services between the smaller hospitals and the teaching centers in the university and the health center as a basic part of the program.

State plans as they have developed have incorporated the philosophies and techniques of regionalization. Programs of coordination such as are demonstrated by the Rochester Plan in New York, the Bingham Associates Plan in New England, the Kansas Plan, the Virginia Plan, and the Georgia Plan, among others, are vital demonstrations of ways to accord better patient care in smaller hospitals.

4. The Hill-Burton Program has stimulated the development of improved architectural design.

Modern hospital design is based on functional planning. This has led to a better integration of hospital services within the hospital. The inclusion of group thinking (on the needs of a hospital) by those working in hospitals has improved design.

It should be emphasized that hospital care is not static and therefore hospital architecture is constantly in a state of flux. This is good. Ponder a moment on the direct effects of the modern role of radio-active isotopes in the field of medical practice in regard to hospital design. Again, the role of television and other electronic devices in the educational field is changing our hospitals administrators' and hospital architects' ideas in planning the teaching centers. This is all good. It demands an awareness by all concerned in providing modern facilities for hospital services.

5. The Hill-Burton Program is accomplishing its basic legislative purposes by reducing areas of greatest unmet need in according hospital services in these areas.

The first State plans showed 594 areas with no existing acceptable hospital facilities. This included about 25 percent of the 2,300 general hospital service areas in existence. These 594 areas contained 10 million people or 7 percent of the total population.

A review of the current State plans shows 254 areas remaining with no existing acceptable hospital facilities. These 254 areas now constitute only 11 percent of the 2,300 hospital areas. These 254 areas include a population of 4.4 million people or only 3 percent of the total population.

The first State plans indicated a need for 34,000 beds in the 594 areas with no acceptable beds. In the 1952 State plans this has been reduced to a need for 14,000 beds.

These statistics are those of the States themselves and not Federal figures.

6. An indirect result stemming from the Hill-Burton Program has been the number of States with new licensure laws.

Forty three of the 53 States and Territories now have licensure laws covering general hospitals. Sixteen States and Territories had licensure laws when the Hill-Burton law became effective in 1946.

Fifty three States and Territories have regulations for operation and maintenance of general hospitals. The impetus of Hill-Burton on such regulations and standards is reflected by the fact that since the enactment of Public Law 725 (79th Congress) in 1946, 48 States have revised these regulations.

7. The Hill-Burton program has provided:

a. A wide scatter of new projects throughout the country.

Fifty-two (52) percent of the projects are located in the southern States, the area which still has one of the highest remaining total populations living in areas without any hospital facilities.

b. Construction of new projects in communities with no prior hospital facilities.

Of the nearly 700 completely new general hospital projects more than 400 or approximately three-fifths are located in areas which had no hospitals prior to Hill-Burton, about 140 or an additional one-fifth are located in areas which had only non-acceptable facilities.

c. Construction in regional centers to support the hospital and health facilities in outlying areas.

Two hundred and six projects adding more than 16,000 beds amounting to nearly 350 million dollars worth of construction, of which the Federal government contributed nearly 115 million, have been constructed in base areas. These projects include the construction of teaching facilities in nineteen University medical centers in Alabama, Arkansas, Florida, Georgia, Illinois, Indiana, Kansas, Maryland, Minnesota, Mississippi, Missouri, Nebraska, North Carolina, Oklahoma, Pennsylvania, South Carolina, Texas, Virginia, and Washington. Federal aid through Hill-Burton funds has also been granted to a teaching hospital, training interns and residents in nearly every area of the country.

8. Means of attracting and holding health personnel in communities.

Physicians have been retained in rural communities and medical and other health personnel have been attracted to areas where no physician or hospital was previously available. In the State of Georgia 43 physicians have located in 13 communities which have built hospitals under this program. In Mississippi there are 7 communities where 12 physicians are reported to have located in these areas because of these new hospitals.

Similar statements can be made in regard to Kansas, Nebraska, Iowa, Washington, Michigan, Maine, New Mexico, in fact nearly every area of this country.

No Hill-Burton project is closed because of lack of personnel necessary to its operation. Several of the 1,000 completed projects are not able to render all the services intended because of personnel lack, but anticipate that in time these personnel gaps will be eliminated and the full range of services as planned will be accorded.

9. The majority of Hill-Burton projects as was envisioned by the Congress are small hospitals in the non-urban areas. This turned out to be providential as these hospitals could be regarded as the evacuation destinations of the larger potential target areas for bombing should an international conflict occur.

Of the 1,850 projects 70 percent are general hospitals. Of these, nearly 1,300 general hospitals 58 percent or 750 projects are located in communities of less than 10,000 population.

There are other accomplishments which are of benefit to the individual citizen in acquiring better hospital care, but if we are to be objective we must list also the major criticisms encountered in such an extensive program.

Some of these are:

1. Too much concentration in the construction of general hospitals has occurred.

Seventy percent of the projects, 80 percent of the beds, 85 percent of Federal funds have gone into construction of new general hospitals and the addition, remodeling or replacement of existing general hospitals.

This is not difficult to understand as such projects as mental, tuberculosis, or chronic hospitals do not have the same appeal as that offered by the general hospital. There should be a better balance of all categories of hospitals and the general hospital should be more truly general than they now are.

The Hill-Burton program currently represents about one-third of all hospital construction in the country. At the current level of construction (including construction outside of Hill-Burton) the gap between beds needed and beds existing for general hospitals could be closed in about five years; for mental and tuberculosis hospitals in less than 25 years; and for chronic hospitals in less than 170 years. These estimates make no provision for expanding population or for uncorrected obsolescense over future years. It should also be stated that the basic bed formula stated in Public Law 725, 79th Congress, was used for computation of these rough estimates.

2. Concentration on the construction of small rural hospitals.

a. Three-fifths of the new general hospitals are located in communities with less than 5,000; only 7 percent are in cities with 50,000 or more.

b. What this criticism overlooks is that about one-fourth of the Federal funds for new hospital construction goes into the smaller facilities. Better than half of Federal monies provided for new

construction assists facilities with 100 or more beds, and that furthermore more than 80 percent of the Federal funds going into projects involving additions or alterations of existing facilities is going into hospitals with 100 beds or more. The Federal funds are roughly about equally divided between the construction of new projects and additions and alterations. When one realizes that only 20 percent of the new projects have 100 beds or more, and that two-thirds of the additions and alterations are hospitals with 100 beds or more it becomes evident that 3 out of every $10 expended for hospital construction goes into improvements needed to maintain but not to add beds. Hill-Burton has fairly creditably met its fundamental legislative purpose in constructing hospitals in areas where no facilities were available and in keeping existing plants in operation.

3. Not enough priority given to teaching hospitals

a. Federal aid has been granted to projects for the construction of teaching hospital facilities in university medical centers in 19 States amounting to about 24 million dollars.

b. Hill-Burton aid has gone to nearly 170 hospitals (91 million dollars) which can be considered teaching hospitals in the sense that they are approved for training interns and residents in various medical specialties.

4. Although the philosophies of regionalization and the techniques of regionalization are outlined in the State Plans they are still in effect merely paper plans.

a. The criticism seems valid because of the lack of truly good demonstrations of effective coordination.

b. Financial support for such demonstrations are lacking.

c. The result of application of the mechanism of regionalization would be to reduce overlapping patterns of care.

d. Attention needs to be given to the relative merits of small rural hospitals built as independent institutions as contrasted to a branch of a complete medical center. The Hunterdon Medical Center, Flemington, New Jersey, and its association with a great medical teaching center in New York City is an example. There are others in the country.

5. Not enough construction of psychiatric, chronic, and tuberculosis units in general hospitals - making the general hospital truly general.

68,000 general beds have been added, but only 7 percent are tuberculosis, mental or chronic beds.

If the essential function of the hospital is to serve the health needs of the community, not merely the sick, and we are to develop a truly preventive approach, more general hospitals, public health center combinations need to be developed.

6. Too much standardization of design of a hospital.

Lack of new approaches in recent years has been noted. Certain essential changes in hospital design await crystalization of health care practices. Will the future hospitals in order to be the true health center of its community have large out-patient diagnostic facilities?

7. Mechanism for arriving at the priority system are not always completely objective.

There have been some critical comments based on practices in some States of being "loose" in defining "areas", "referral beds", "Acceptable beds", "bed-death ratio", and also in "transferring beds for planning purposes

from rural to urban areas, without any objective information". The role of the Federal government in regard to the degree of responsibility which is appropriate for it to assume in "interfering" or "assisting" in the development of State Plans and the subsequent revisions occasionally is the subject of comment.

In order to eliminate as much as possible any unnecessary criticism it is believed that some solutions that can be offered are:

a. Mandatory public hearings on annual State Plans and revisions.

b. More careful definition of bed capacity in Public Health Service - Health Grants Manual.

c. Regulation changes with respect to the distribution of pool beds.

d. Regulation changes defining the maximum number of beds to be allowed for planning purposes.

8. Hospitals tend to be built in places where community interest is greatest rather than where need is greatest.

This difficulty springs from the fact that communities may be unable to raise the necessary sponsors' share.

A solution may be increased incentives for projects in poor areas, with high priority, by the use of the variable grant procedure within a State for allocation of Federal funds. This type of procedure is now in use in only four States.

A refinement of areas to eliminate poorly delineated areas might solve part of the problem. Not all areas as now designated can be regarded as valid areas. Some are clearly open to question and have already been discussed with the States in the annual plan review. On the other hand some genuine areas have been blanketed into larger areas. Some States have classified all the beds in an area as acceptable despite evidence to the contrary. These aspects too, have been discussed in annual plan reviews.

Substantial advance has been made in reducing areas of greatest need. Some of the factors affecting the apparent rate of progress in eliminating areas of greatest need are:

a. The total funds available through Hill-Burton assistance and also outside the program.

b. The degree to which high priority projects were sponsored and approved.

It should be noted that in a number of States there has been substantial non-Federally aided hospital construction.

In California only about one-sixth of the dollar value of hospital construction is Hill-Burton aided.

In Iowa, one-half of the hospital beds added by new construction or remodeling have been in larger communities without Hill-Burton assistance. The Iowa Agency points out that "without specific powers to prevent construction of hospital projects not receiving aid, there is nothing the (Iowa) Division can do to prevent overbuilding hospital facilities which comply with licensure requirements".

On the other hand North Carolina, with annual State appropriations as large as the Federal allotments, has markedly reduced its "zero areas" (from 40 to 19) because only limited local funds have been necessary to launch a project.

Today 14 States and Territories have legislation authorizing some State funds for hospital construction. These are mainly in the South, plus California and Illinois. Rates of participation vary from token payments to as much as 85 percent of the total cost of construction, including the combined State and Federal contribution.

In conclusion two topics seem pertinent. There has been considerable discussion as to the validity of the limitation regarding use of Federal funds for the general beds (4.5 beds per thousand population); mental beds (5 beds per thousand population); chronic beds (2 beds per thousand population); tuberculosis beds (2½ beds per average annual death over a sample 5 year period 1939-44). It is believed that a change just for change sake is not desirable. Any change, and one may be indicated, properly should come as the result of carefully made studies. Some of these are now being conducted especially in the tuberculosis area.

The final topic to be considered is that of an extension of the Hill-Burton program beyond the present statutory limit of June 30, 1955.

The bed need in 1946 was estimated at 900,000 for all categories. Today our present bed need is estimated by the States in their State Plans as 880,000 despite the 1 billion 450 million dollars of construction under the Hill-Burton program and the addition of 89,000 beds and 350 public health centers. It is readily seen that the existing 1,018,000 beds and 6,300 non-Federal hospitals represent only 54 percent of our Nation's need. The increasing annual population, the attrition rate from obsolescence and from fire, wind, and earthquake, the fact that in our existing hospital plant 40 percent of our hospitals are over forty years of age, and the changing trend of medical care all point to the fact that currently as a Nation we are just "treading water". The need for a continuation of the Hill-Burton program is great. Perhaps the extended program for Hospital Survey and Construction should be more flexible to permit greater emphasis on teaching facilities or replacement of obsolescent hospitals or parts of

hospitals, to allow emphasis on most needed types of hospitals, and to allow a partial emphasis of a greater degree for the more densely populated areas of the country.

Finally, the Hill-Burton Program has done part of a tremendous job of getting hospital facilities into needed areas. The improvement of the quality of hospital care rests not entirely on improved or better facilities but mostly and properly upon those who have the responsibility for guiding it - the medical profession and their associates. The hospital bed is but a symbol of service. Properly placed and properly utilized it will play an important role in maintaining the health of our people.