THE provision of better medical care for the country would seem to require a platform resting on four pillars: (1) A broader concept of community planning for the care of the whole patient in his entire environment. (2) A more comprehensive

Erratum

In the article "Provision of Better Medical Care" by Dr. Jean Alonzo Curran, published in the January 1945 issue of the Quarterly, on page 7, line 25, for "450,000 beds" please read "50,000 beds" and on page 15, line 17, for "60 cents per individual per month" please read "60 cents per individual per week."

In the two hundred years extending from Franklin to Goldwater, we seem to have been obsessed with the idea that if we can only build enough hospitals and put enough patients to bed in them, disease will be conquered and a healthy and a happier population will result.

Most of this hospital construction has been completed during the past fifty years. In 1870, with a population of approximately 50 million, there were about 450,000 beds while today, with a population of approximately 135 million, we have 1,200,000 beds, revealing the tremendous increase during that period.

Perhaps historians will agree that this period might be called the Johns Hopkins Era, for that group of young enthusiasts gathered

\[1\text{ Dean and President, Long Island College of Medicine.}\]
together by Gilman and Billings in the 1880's dramatized the idea that the application of scientific methods in a highly-organized hospital environment might be the final answer in the age-long search for the fountain of health.

The new discoveries in bacteriology and biochemistry made the hospital and the affiliated research laboratories seem the ideal focus for a new attack upon these problems created by disease. The wonderful advances in surgery during this half-century have been made possible only through hospitalization.

The concentration of patients in these great centers of healing brought about the evolution of the clinical clerkship, the specialized internship and residency, and the highly-developed services in our leading hospitals, of which we can be so justly proud.

Yet as early as 1897, Osler was conscious of a missing ingredient in the new health recipe. In spite of his best efforts, three-quarters of his clinic patients did not really get well but returned again and again with the same old complaints. His attempts to grapple with these additional complications in the patient's life outside of the hospital eventually resulted in Emerson's, Pratt's, and Cabot's interest in environmental medicine and the appearance on the scene of the medical social service worker.

Despite these leads, the energies of the medical profession have been increasingly absorbed by the rapidly-expanding demands of their hospital duties. Their contact with home conditions has been confined to private patients, who now comprise a minor portion of the population. The disappearance of preceptorships has closed the door to this possibility for the introduction of the student to the art of practice and acquaintance with the way of life of the average patient.

Curiously, the phenomenal growth of hospitalization seems to leave us at present as far behind as ever in meeting anticipated requirements. Approximately half of all hospital beds are occupied by psychopaths, most of them receiving—at least in the past—little
more than custodial care. Yet hospital construction for the insane lags several thousand beds behind the anticipated demand. There has been a shortage of beds also for tuberculars, even though there has been a marked drop in mortality from this cause.

Along with this lag of hospital construction, there are other serious defects in the hospital program. The naive concept on the part of the public that all that is required is to get the patient into a hospital bed has been responsible for woefully inadequate provision or at least financial provision, for laboratory space and personnel. A large laboratory building completed some ten years ago, to serve one of our largest hospitals, was converted because of public clamor into a tuberculosis unit, which it still is.

Laboratory personnel under Civil Service are so underpaid that adequate service is seldom possible except where supplemented by medical school assistance. While the present city administration is keenly alive to these deficiencies and anxious to correct them, it is doubtful if remedies can be applied until the end of the war.

The wave of standardization which has necessarily accompanied these vast developments for housing the sick has depersonalized much of the medical attention given. A fetish has been made of a pattern involving a sequence of a routine history, routine physical examination, routine urinalysis—often very carelessly done—routine blood count, routine blood-chemistry, and routine treatment, as though there were something magical in the process.

A review of the records of ward patients in fully half of our hospitals brings one to the depressing realization that much of the process is wasteful of time and of materials and that little thought and discrimination has been given to individualization of the patients' needs. Most of this routine work-load and the accompanying paper work has been delegated to the interns, who after a period of initial disillusionment, carry out these assignments because they must, with the hope of eventual reward in the shape of opportunities to perform major surgery. They realize that a great deal of this
effort is simply going through the motions to satisfy the inspections of the American Medical Association and the American College of Surgeons.

I should like to suggest that a fertile field for research would be a critical evaluation of all of these and other routine hospital procedures. While a great deal of wastage and misapplication of time and effort would be uncovered, a rare opportunity would be presented to discerning educators and hospital leaders to evolve better approaches to diagnosis and to understanding of patients’ needs.

This overemphasis on the value of standardized hospitalization has encouraged in medical faculties, students and interns, a myopic tendency to consider the hospitalization episodes as all-revealing and all-important.

Yet the average, hastily recorded history in a non-teaching hospital at least is practically valueless in giving a young doctor-in-the-making a picture of the patient’s background. His inability to visualize the patient in his natural setting inhibits the development of any genuine interest or understanding of him as a person, and the hospital stay is devoted largely to a sort of guessing game of differential diagnosis. Interest tends to be lost as soon as a label is applied to the disease, and the intern’s chief concern is then to clear the bed for another diagnostic exercise. Most medical students and interns, if they are frank, will admit that in their eyes, a good internship is one that presents as rapid a succession of such cases as possible. Little or no interest is evidenced in what happens after discharge to the out-patient department or to the home.

The seriousness of this lack of interest is revealed by the study just published by Jenson, Weiskotten, and Thomas. Their book, Medical Care of the Discharged Patient, it seems to me is really an epoch-making publication. It is frankly startling to learn that approximately 90 per cent of the patients cared for on the general medical services of a university hospital were suffering from acute episodes complicating chronic illness and that only one-third of them re-
ceived adequate medical attention on return to their homes, unless it was supplied by an extramural, salaried resident.

With this additional assistance, it was possible to give consideration to the patient as a person, to consider him in the light of both psychic and somatic factors, and to make a social study of his resources and home environment.

It should be pointed out that other experiments with extramural residency service have been in existence for some years in connection with, for example, Tufts Medical School and the Boston Dispensary and with Buffalo University and the Edward J. Meyer Memorial Hospital in Buffalo. In the former instance, medical students care for patients in the homes under a resident's guidance. That plan is still in operation, in spite of war shortages.

Some years ago I had the privilege of seeing at first hand the personal guidance given by Dr. Robinson to home environmental studies made by Johns Hopkins students, which culminated in his book, The Patient as a Person.

Mention should also be made of arrangements in Vermont and Wisconsin, where because of limited hospital facilities, medical students are assigned to preceptors in general practice.

Other medical schools have introduced teaching exercises in domiciliary medicine but not as a part of an organized plan of medical service. Unless such a formal plan can be put into effect, the impression made on the student cannot be very convincing and he is liable to look upon it merely as an interesting and perhaps baffling play exercise.

One cannot help but be deeply impressed with the possibilities revealed by the Boston, the Buffalo, and the Syracuse projects. Through the employment of residents who spend approximately half of their time following patients into their homes, two birds are not killed but cured with one stone. Patients who ordinarily would receive inadequate attention are properly cared for, and the young doctor receives an introduction to the world of medicine under
circumstances identical with those he will encounter when he enters practice.

As medical students, interns, and residents participate in this broadened concept of medical responsibility and plans for its implementation, the door is opened at last for escape from the confining walls of hospitalization which have hemmed in medical education for the past half-century. Instead of facing the danger of a period of depressing and deteriorating inactivity when the resident begins independent practice, for example, the newly-launched physician will be able to forge ahead under full steam.

The extramural resident has a sense of personal responsibility for following his patients and they look to him as their family doctor. He gives a continuity of service and enjoys the stimulus of a teaching program as he supervises medical clerks assigned to work under his direction.

To give you a contrast, the system formerly in vogue here in New York City of rendering service to the same type of people by interns riding ambulances was hurried, inadequate in quality and lacking in continuity, and there was no opportunity for acquiring a sense of personal responsibility and interest. While there was educational value of a sort—chiefly in making snap diagnoses—it was largely unorganized and unsupervised.

An interesting sidelight, I think, is the matter of financing.

The extramural residency plans, as I investigated them some years ago in Boston, cost approximately $1.50 a house call, compared to, if I remember correctly, approximately twice that much for each time an ambulance went out to make a call in New York City, although the interns were fond of pointing out that they worked for nothing or at most received fifteen dollars a month!

Although war scarcity has taken interns off our ambulances, an even greater scarcity of residents prevents consideration of the introduction of extramural residency systems at the present time. At the conclusion of hostilities, however, there will be an ideal opportunity
to introduce it and at the same time give returning Army and Navy medical officers very valuable graduate training.

Even in our leading teaching hospitals with highly-organized auxiliary nursing and social services where attention to patients on the wards and private pavilions is of a high order of excellence, studies have revealed faulty coordination in follow-up and loss of contact with general-service patients following their discharge. Even at Johns Hopkins Hospital, where Osler pioneered in the study of home conditions of his clinic patients and where recently Dr. Robinson furthered such studies with the assistance of a skilled social service worker, it is my impression that interest in these projects was greatly diminished after these leaders left Baltimore.

Hence it would seem obvious that a more fundamental hook-up must be achieved between our great hospitals and associated teaching centers and the communities they aim to serve.

Curiously, the current wartime prosperity with the shift of large numbers of ward and dispensary patients to private and semi-private status, would seem to be a step in this direction, although it bears no relationship to educational needs. Actually, the depletion of our wards and out-patient departments has detracted seriously from the teaching value to both students and interns.

Even if we assume that the condition is temporary and will revert at the conclusion of the war boom, other trends having ominous implications for medical education are on the horizon. Pre-payment plans, government subsidies, and insistence on the part of organized medicine on the free choice of physician, have already made serious inroads into our general hospital services which have been our main reliance as a base for organized teaching.

The profession and the public alike must be made to realize that superior medical care in the home, as well as in the hospital, can only be attained through cooperative group arrangements. It behooves medical schools to study carefully these possibilities, so education may continue its role of active leadership and participation.
During a recent tour of the country, I explored a series of such developments as an effort at my own self-education as to what we might expect in the Brooklyn area and the relationship our teaching hospitals will have thereto. Among centers visited was the great Pittsburgh-like industries in Birmingham, Alabama, where successful, comprehensive prepaid medical plans for workers and their families have been in operation for a number of years by the Tennessee Coal, Iron and Railroad Company and by the American Cast Iron Pipe Company. Also, the Roos-Loos Medical Group and the Douglas Aircraft health service in Los Angeles; the Permanente Hospitals in Richmond, California, and in Vancouver, Washington; and the plan at Van Port City, near Portland, Oregon; the health service system for city employees of San Francisco; the Southern Pacific Railroad Hospital; California Physicians Service; National Hospital Association; and the Michigan Physicians Service were inspected and a great deal of valuable data collected.

I was impressed that each situation was different from the rest. No one plan can be put forward as the final answer—even Kaiser's highly-publicized challenge to the doctors. His popular slogan that half the price of a package of cigarettes a day, seven cents, or a movie a week, fifty cents, will cover all the health needs of the employee, including 111 days of hospitalization, must be evaluated in the light of the peculiar conditions encountered. Many of the workmen are living in emergency housing, isolated from established hospitals and physicians. The workers are earning war boom wages and the voluntary deductions, to which 90 per cent subscribe, are supplemented by compensation insurance. By an arrangement with the carrier, Dr. Garfield receives 17.5 per cent of all premiums for compensation insurance. At Permanente, roughly one million of a two-and-a-half-million-dollar budget comes from this source.

The Permanente hospitals are models of ingenuity, and I was satisfied that at Richmond, especially, basic medical work was well done.
Much of the program is still in the course of development and a great deal of needed new construction is under way.

While home visits are included in the plan, one gained the impression that a large share of the full-time staff's attention was devoted to the in and out-patient case load. They work on regular eight-hour shifts, like all other employees. The ratio of doctors to patients is approximately one to 1,000 for total employees and dependents, but it is one to 3,000 if the eight-hour shifts are considered.

Dr. Garfield was keenly aware of the need of educational affiliations and was seeking these with the West Coast schools.

In general, one was impressed that a comprehensive medical coverage with a closed panel system can be worked out at a cost of somewhere between $25 and $35 a year per individual. Family coverage is much more difficult to estimate. At North Permanente, it adds up to a little more than $62 for the average family unit of four persons. Up there, because of the Portland situation, the average is 60 cents per individual per month for the workers, 30 cents for the wife, 15 cents for each child under sixteen years of age.

The open-panel plans on a fee-for-service basis are more difficult to administer to prevent abuses and usually end up by deducting such items as obstetrics and tonsillectomies in addition to such other usual exceptions, as mental disease and alcoholism.

Wherever I went I was impressed with how much excitement has been stirred up by the Murray-Wagner-Dingell Social Security Bill, and I could not help but conclude that it has provoked such tremendous discussion and controversy that even if it never comes out of committee, it will have the effect of setting in motion many constructive changes in our planning, from which a great deal of good will come.

Here in New York City we may expect a series of plans to be tried, including a merger of the Associated Hospital Service, Group Health Cooperative, the Elliott Plan, and a variety of other possibilities.
The Consolidated Edison Plan has been in successful operation for over a decade. Some of the other big industries are giving thought to the possibility of following Kaiser's example.

The great need is for a grouping of the large number of factories with fifty employees or less, where medical attention is poorest.

The need of educational leadership in these movements and the great stake medical education has in all of these eventualities at the undergraduate, the intern, the graduate, and the postgraduate levels, make it imperative that we work closely with each step of the process.

In rural areas the problem does not seem so complicated. Doubtless, all of you are familiar with experiments in rural hospitalization being carried out by The Commonwealth Fund in fourteen areas throughout the United States. Those of us who heard Dr. Lester Evans recently describe, before the Committee on Medicine and the Changing Social Order of the Academy of Medicine, the evolution of a sample hospital over a sixteen-year period were impressed with the positive influence there is for cooperation among the doctors replacing the intensive competition previously existing and encouragement for educational advancement through the development of special skills and associated use of laboratory facilities.

At present I am fortunate to have the opportunity to act as consultant to the Bingham Associates in studying two centers in Maine. One, comprised of fourteen hospitals, is grouped around the Central Maine General Hospital at Lewiston and the other, with a dozen satellites, is centered around the Eastern Maine General Hospital at Bangor.

Through Bingham subsidies, these hospital groups have been stimulated to work together in the utilization of such services as x-ray, pathology, electrocardiography, preparation of blood plasma, and in conducting clinical, pathological, radiological, and consultation conferences. Postgraduate courses, also subsidized by the BAF, for practicing physicians and for technicians have been provided at
the New England Medical Center in Boston, under Tufts Medical School auspices. Difficult cases may be sent to Boston for special diagnostic studies at a fixed minimum fee and then returned to the family doctor for treatment. The announced objective is to provide all the resources of modern medicine to the small rural community.

Other group practice developments worth watching are those at St. Johnsbury in Vermont and at Hanover in New Hampshire. In these areas the doctors work together as a group and fees collected are pooled and paid out pro rata on a salary basis—on the basis, I believe, of 90 per cent of their previous earnings. A reserve is maintained to pay for postgraduate courses and attendance at medical conventions to encourage investigation and presentation of papers. A member of the group may obtain these advantages without loss of income or fear that his patients will be weaned away from him during his absence. Also, consultations are freely available and an adequate corps of specialists is developed.

Although the emphasis so far among these rural plans has been on postgraduate teaching, there is a great deal of possibility for the education of both students and interns awaiting exploration. Cooperative internships and residencies might be worked out between the smaller hospitals and students might be brought into direct contact with community medicine, especially during peacetime summer vacations.

The need for a wide application of such patterns to rural areas may be illustrated by the contrast between New York City and the rest of the country. With only about 5 per cent of the population living in the metropolitan area, we have nearly 20 per cent of all the interns in the United States. Before the war about 90 per cent of them tried to set up practices in this region, favoring the overconcentration of physicians hereabouts. An obvious approach to a better distribution of doctors would be the education of students, interns, and residents through the introduction of hospital groups among whom they will find their life work.
If this trend should eventuate, the task of the federal, state, and city public health services would be made much easier and the opportunities for young physicians to work more closely together in both public and private health practice would be immensely enhanced.

The demands upon American medical education are steadily growing, in spite of wartime shortages, accelerated schedules, and now even threats to curtail the number of students. Besides our task of preparing doctors to care for our civilian population and our armed forces, there will undoubtedly be a growing and a tremendous demand for medical personnel and service among the countries devastated by the war. As chairman of the Committee on Education of the American Bureau for Medical Aid to China, I have been shocked to learn that all of the medical schools in that country produce less than one-tenth as many graduates as the annual crop in the United States—for a population over three times as large. And figures for India would be very nearly comparable.

In the mail this week, an appeal has gone out for older American physicians to go to China under the auspices of the War Department and the Chinese Government to meet this desperate need in Free China.

Hence, planning for better care in the United States must take into consideration the immense implications of the international situation.

Finally, a word or two should be said for the better support of schools of dentistry, nursing, social service, and physical and occupational therapy, which occupy positions akin to step-children in the medical family. Although medical schools have manifold deficiencies in financing and equipment, they are far in advance of these associated projects. The surface of preventive dentistry seems as yet barely scratched. Nursing and social service need much closer coordination and understanding in their educational strivings for professional standing. Unwillingness of physicians to give serious
study to physical therapy has borne fruit in the rapid, recent increase in the inroads of cults all over the country. The Baruch survey now in progress is an encouraging evidence of belated realism in facing this neglected field.

In conclusion, one must remember that all of this planning for better-educated doctors and for better distribution, organization, and support of their efforts will not reach its final objective if we do not go beyond the cure, palliation, or prevention of disease. In a world with vigorous, hardy peoples with high birth rates, such as the Russians, Germans, and Japanese, who may in the long run even challenge the survival of our race, we must strive for maximum health and physical efficiency. Toward this goal we must mobilize every resource we possess and think less in terms of bedside care of the sick and more in terms of fireside attention to the person in his home and in his surroundings, to keep his store and reserve of good health at its maximum.