

The CMP and the Public's Health

By W. E. GILBERTSON, B. S. E. E., M. P. H.

How will the Controlled Materials Plan affect health and medical care facilities?

What's ahead in 1952?

What is the expected level of hospital and health facility construction?

Will there be a sufficiency of health and medical equipment and supplies?

Can we maintain our standards of medical care?

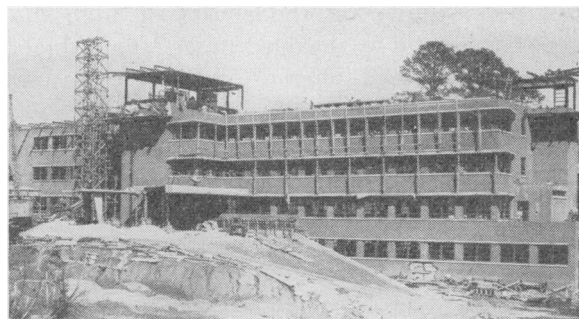
Defense Mobilization

Immediately following Korea, our Nation decided to step military defenses up to the brink of constant preparedness—a policy designed to protect the United States from the imminence of aggression. The Congress passed the Defense Production Act on September 8, 1950, giving the President emergency powers to allocate materials and facilities “in such manner, upon such conditions, and to such extent” as he deemed “necessary and appropriate to promote the national defense.” The language of the act was simple but the decisions to follow were to be the difficult ones of gearing for war—and ones of far-reaching significance to public health.

Public Health and the Defense Program

Late in 1950, the Federal Security Agency was designated a “claimant agency” with jurisdiction over health, education, welfare, recreation, and sanitation programs (with the exception of water supply and sewage disposal). The Federal Security Agency then delegated to

Mr. Gilbertson, who is chief of the Division of Civilian Health Requirements, Office of the Surgeon General, was formerly executive officer for the Public Health Service's Communicable Disease Center in Atlanta.



New hospital construction means large quantities of controlled materials—Steel, Copper, Aluminum.

the Public Health Service responsibility for the claimant program of estimating and presenting to appropriate authorities the requirements of the health and medical segment of the national economy. This is the first time the Public Health Service has been called on to perform such a function. During World War II all claimant responsibilities were confined to the War Production Board.

Control of production for defense is divided between the over-all planning organization of the Defense Production Administration and its sister operating agency, the National Production Authority. Twenty government agencies, in addition to the Federal Security Agency, and 35 industry divisions in the National Production Authority represent particular segments of the national economy as claimants.

The claimant agency program for health combines a double responsibility: first, the authorization for construction of all civilian hospitals and health facilities applying under the Controlled Materials Plan with corollary allotments of controlled materials by calendar quarters for each project approved; and second, analysis of the domestic distribution of health and medical supplies and equipment to the

civilian population. The Public Health Service health facility program does not include construction of military or Veterans Administration hospitals.

What Is The Controlled Materials Plan?

The Controlled Materials Plan—CMP—is based on World War II experience, and CMP can best be described as the theory of balancing supply and demand within the available resources of steel, copper, and aluminum.

CMP places production responsibility on a prime contractor in terms of end products to be produced at a given time, in a given quantity. In health facility construction, for example, the prime contractor would be the principal contractor for a hospital, or in the manufacture of health and medical equipment and supplies, he might be the manufacturer of X-ray machines. The prime contractor passes on authorized construction (or production) schedules to the subcontractors supporting him. Allotment of controlled materials is by weight, in such forms as they are produced at the mills—sheets, plates, tubes, bars, angles, and others. There are certain civilian-type end products not lending themselves to a vertical type of handling which are allotted by dollar value through the issuance of priority ratings for their purchase. In hospital and health facility construction, examples of these products would be lighting fixtures, metal sash and doors, and mechanical equipment.

Civilian Health Requirements

To discharge public health claimant responsibilities, the Division of Civilian Health Requirements was created in the Public Health Service and staffed with public health personnel experienced in World War II procurement and hospital construction.

One of the initial steps taken by the new Public Health Service division before CMP was to prepare long-range estimates of expected consumption or use for more than 1,100 products and for the quantities of materials urgently needed for new and under-way construction. Expansion of productive capacity was urged wherever study revealed that critical shortages

of health and medical supplies and equipment might be encountered.

Under the Controlled Materials Plan, the Division of Civilian Health Requirements receives from the Defense Production Administration quarterly allocations of controlled materials for the construction of health facilities, including hospitals, health research activities, health centers, group practice clinics, convalescent homes providing medical care, nurses' residences, and refuse disposal systems for public use. The division allots metals from its quarterly CMP bank of materials by issuing authorizations permitting eligible projects to draw on approved amounts of materials. Issuance of allotments to individual projects follows careful screening for essentiality.

Today, all uses of critical materials demand careful examination. Why is construction of this hospital required? Can it be deferred for 6 months? For a year? Have financing arrangements been completed? Can the project be staffed upon its completion? Are there enough doctors available? Nurses? Where is it located? What is its relationship to the defense effort?

The answers to these and similar questions provide a basis for examination of proposals for health-type construction, and simply mean that new hospitals not urgently needed may have to be deferred. All health facility projects are ranked according to essentiality. Under the Public Health Service plan for screening projects, proposals for hospital construction receive first consideration if the new facility will maintain or add beds in critical defense areas or in defense-impacted communities where the need is urgent. Second priority is given to localities having no hospitals within reasonable traveling distance. Then there are areas with descending degrees of hospital bed shortages. Similar criteria of essentiality are used for classifying proposals for other types of health facilities.

CMP and Health Facilities

To consider how the operation of CMP will affect our standards of medical care and how it will affect hospitals and other health facilities, varying factors must be weighed carefully:

1. A comparison of the current rate of new construction with the recent past. 2. A comparison of estimated metals requirements for public health construction with the metals allocations received under CMP. 3. The relationship of the current rate of construction to unsatisfied needs. 4. Future trends, using the limited experience of the first two quarters of operation under the Controlled Materials Plan as the basis for prognostication.

Accurate figures on the completion rate of new hospital beds in the decade from 1930 through 1939 have been difficult to obtain (see chart). The best estimates available show that the yearly average provided an additional capacity of approximately 11,700 beds. Construction dropped almost to a standstill during the depression years. And hospital construction especially, during the mid-1930's, was at a low ebb. Early war years saw some emergency building but not enough to dent the long-accumulated deficit.

Following World War II, materials again began to flow into construction. With the enactment of Public Law 725 (79th Cong., 2d sess.), providing Federal aid for hospital survey and construction on a matching-funds basis (the Hill-Burton program), impetus was given to hospital and health center construction. During the period 1947 through 1950, hospital bed capacity jumped to an average increase of 32,800 beds per year.

By January 1951, the total acceptable hospital bed capacity throughout the States and Territories exceeded a million beds. The rate of construction for the year 1950 was about 57,000 new beds, of which an estimated 12,000 are considered to be for attrition due to fire, obsolescence, and other causes, leaving a remainder or net gain of 45,000. But the bed deficiency still was 873,000 and only 54 percent of the Nation's needs were being met.

For public health centers and such auxiliary health facilities as laboratories and clinics, present program plans of the States call for an increase to two and one-half times the number of existing facilities. Ultimately, needs will require an increase of 8 to 10 times the number we now have.

Because full CMP has been in operation for such a short time, data available within the Di-

vision of Civilian Health Requirements covers only 6 months of actual experience in estimating and allocating controlled materials for health facility construction. Current construction of health facilities under CMP can be analyzed, therefore, only in terms of materials requested, materials received, and projects processed by the division since the commencement of CMP—that is, the third and fourth quarters of 1951 and the first quarter of 1952.

The table shows the record of materials requirements submitted by the Public Health Service, allocations received, and percentages of the relationship between allocations and estimated requirements for each quarter.

PHS requirements and CMP allocations for health facility construction by calendar quarter

	Carbon and stainless steel (tons)	Copper wire and brass mill products (000 lb.)	Aluminum (000 lb.)
Third quarter 1951:			
Requested.....	102, 852	7, 256	1, 059
Received.....	75, 475	4, 514	550
Percent of require- ments received....	73	62	52
Fourth quarter 1951:			
Requested.....	101, 206	4, 375	1, 049
Received.....	81, 529	2, 640	500
Percent of require- ments received....	81	60	48
First quarter 1952:			
Requested.....	99, 305	3, 699	619
Received.....	71, 285	2, 733	400
Percent of require- ments received....	72	74	65

More than 2,000 construction project proposals have been processed within the Division of Civilian Health Requirements since the beginning of CMP. Of this number, approximately 60 percent represents hospital and health facility construction under way as of July 7, 1951, and 40 percent represents proposed new construction "starts."

To date, all under-way projects have been approved with the exception of a few large construction jobs in which the metals requirements exceeded the allotment capacity of the division. A few—87—fourth-quarter 1951 applications for new starts were deferred and most of the new starts—145—for the first quarter of 1952 were deferred. In the first quarter of 1952, approximately 90 percent of the metals allotments were made for projects under way.

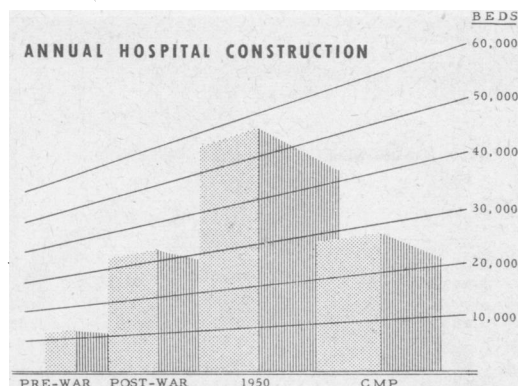
These figures may perhaps be better expressed in the tabulation below showing the number of new hospital construction projects processed in the division and the number of beds to be added to the Nation's total upon completion of the proposed projects. Excluded are projects for rewiring, boiler repair, reroofing, or any similar construction jobs not adding to the bed capacity of a facility. The figures given for the first 3 months of 1952 are by their nature estimates, and as such represent proposed hospital projects approved on the basis of the controlled materials available for allotment as of November 30, 1951.

Construction of hospital beds authorized under the Controlled Materials Plan

<i>Period of authorization issuance</i>	<i>Number of new projects approved</i>	<i>Estimated additional beds</i>
1951 (July-Aug.-Sept.)-----	190	14, 250
1951 (Oct.-Nov.-Dec.)-----	150	8, 600
1952 (Jan.-Feb.-Mar.)-----	100	4, 000

Assuming that in the second quarter of 1952, the commencement of new hospitals will be on a par with 1952's first quarter, we can estimate the expected total of additional hospital beds to be provided by new construction projects starting during the 12-month period beginning July 1951 and ending June 1952, as approximately 30,850. If this expected total is compared with the calendar year 1950, it represents 54 percent of the total bed capacity attained during 1950. For the same 12-month period, it is estimated that 60 new health center projects will be started, representing 4 percent of the existing programed need.

It is apparent that the rate of hospital construction is not in keeping with needs. It is evident that although we face a shortage of health facilities, the situation cannot be corrected at the present rate of programing hospital and health facility construction within the quarterly metals quotas assigned under CMP. But it should be stressed that without CMP, hospital contractors and builders would be forced to compete on the open market, thus opening the way to prohibitive costs and unfair and discriminatory practices and without any assurance of seeing a construction project through to its final completion and operation.



The Health Program and the NPA

The Public Health Service believes that production of sufficient health and medical supplies and equipment must be maintained at a consistently rising level to stock new hospitals and other health-connected buildings when their construction phase is complete, and to provide for military, civil defense, and normal civilian health requirements. Production must be maintained also, insofar as possible, to provide for repair, maintenance, and operating supplies and equipment in health facilities.

There are three industry divisions within the National Production Authority whose allocation programs of controlled materials are of major importance to public health needs. Two of these three divisions are closely allied to the Public Health Service claimant program because they request and allocate the metals necessary to manufacture hospital supplies and equipment. The Consumers Durable Goods Division and the Scientific and Technical Equipment Division share responsibility for the allocations to the manufacturers of medical equipment and supply items.

Municipal water supply and sewer construction programs are not included in the Public Health Service area of claimant activities but come within the jurisdiction of the Water Resources Division, the third health-allied NPA industry division. It is responsible for allocating controlled materials to both domestic and industrial water and sewage projects, except operations for navigation, flood control, reclamation and irrigation, hydroelectric generation of power, recreation, and fish and wildlife.



Courtesy S. Blickman, Inc., Weehawken, N. J.
New equipment—such as this—is needed for hospitals under construction and to replace obsolescent equipment.

G. E. Arnold, director of the Water Resources Division, has stated the public health aspect of this construction: "Water and sewage facilities are essential to maintenance of the public health. Every effort will be made to maintain essential public health facilities, but because of the critical shortage of materials many desirable, if not essential, water and sewage construction jobs will have to be deferred. It is urged that only those jobs that can be classed as strictly essential to public health be constructed at this time."

Most medical equipment and supply items are manufactured from metals allotments approved by the Scientific and Technical Equipment Division of NPA. Among other categories of products, the division receives allocations for the distribution of controlled materials required for the manufacture of optical instruments and ophthalmic goods, laboratory, dental, surgical, medical and scientific instruments, and surgical and orthopedic appliances and supplies. Like the Public Health Service, it operates under a policy of priority consideration in distributing quarterly allotments. Essentiality is divided into three preference groups:

1. The direct requirements for armament and defense purposes—precision devices and instru-

ments for military or atomic energy programs are examples.

2. Other essential (and immediately necessary) requirements—such as any of the medical and surgical types of equipment required for civilian health use.

3. Requirements which can, if necessary, be substantially reduced as facilities are converted to the production of materials for defense—for instance, clocks or watches.

In keeping with the policy of the NPA, the Scientific and Technical Equipment Division, according to Howard A. Pringle, its director, "is exerting every effort to provide sufficient medical equipment and instruments for both military and essential civilian needs. Some substitution of less critical for more critical materials may be necessary whenever the functional qualities of the product will not be impaired by such substitution. There is every indication that there will be adequate supplies in all essential categories for all needs in this field."

Analysis shows that the estimated metals requirements made by the Scientific and Technical Equipment Division for the first quarter of 1952 were granted at the level of between 75 to 95 percent of need. Actual weight allotments of metals for this quarter compare favorably with the first two operating quarters under CMP. Few problems have developed in programming medical supplies, and when this has happened, the division has responded by reducing some of the metals allotments in the lowest priority group.

In line with NPA policy, the Consumers Durable Goods Division classifies as "preferred products" items possessing military, public health, medical, or civil defense application. "We consider health and medical supplies as 'preferred products' and give them top priority along with many military items," the division's director, Harry J. Holbrook, has stated, adding, "hospital kitchen equipment, for example, is vitally important to the successful operation of our medical care institutions. We will do our best to see that sufficient materials are channeled into these essential products to care for real needs." First-quarter 1952 allocations for preferred products averaged about 65 percent of

the consumption of the base period, January to June 1950.

The next priority grouping covers the bulk of consumer items used in homes and businesses—refrigerators, domestic stoves, and office desks and supplies. Naturally, normal consumer requirements comprise a significant proportion of the national metal supply. First-quarter 1952 allocations were made at levels of 50, 35, and 35 percent of the base-period consumption of steel, copper, and aluminum, respectively.

The lowest priority class contains a variety of least essential items for which known substitutions can be made for metals, or which can be entirely eliminated. Jewelry, advertising signs, venetian blinds, fireplace equipment are types of products found in this category in which allotments made for copper and aluminum were at 10 and 20 percent of the base period and 50 percent (or more, under some conditions) for steel.

Production Policy for Defense

Growing civilian needs and increasing military and civil defense purchases are the most important factors behind the increase in consumption of medical supplies. Population growth, our improved economic status generally, and the resultant demand for medical care have, in recent years, increased civilian consumption. It is expected that for the military procurement program there will have been expended 425 millions of dollars on medical supplies alone during the 12-month period ending June 1952. Compare this with the fiscal year ending June 1950, just preceding Korea, when 35 millions of dollars was the extent of the same procurement. Civil defense purchasing entered the medical supply field in the year just past, and this year it is expected that civil defense purchases will range between 75 and 85 millions of Federal and State funds.

In a sense, part of the problem of allocating metals is impossible to solve at this stage. The amount of controlled materials available is not sufficient "to keep everybody happy." Total

stated requirements of estimated national needs for the first quarter of 1952 amount to 65, 61, and 51 percent more than the available supply of steel, copper, and aluminum.

Industrial, institutional, and farm scrap drives to recover usable metals are being promoted through the press, trade associations, chambers of commerce, and government agencies. A long-range program to aid industry in expanding its production of critical metals is now in process. Since it takes steel to produce steel, it can be expected that a significant portion of the controlled materials now available will be devoted to increasing industry's production capacity.

The general policy under which CMP now operates requires that all uses of critical materials must receive some consideration whatever the level of essentiality may be. Defense Mobilizer Charles E. Wilson clarified the policy in his report surveying the first 3 months of CMP progress: "Keeping in mind that defense mobilization is a long-range program, our aim is to build our military productive capacity while maintaining at least a minimum operation of civilian industry—rather than undertake wholesale conversion of civilian plants as we would be forced to do under conditions of full mobilization."

The current pattern of allotting controlled materials permits allotments for "least essential" products at a lower percentage, it is true, of their stated requirements than approved for the more preferred product classes, but manufacturers of these products may hope to continue "in business" until a normal product conversion to essential categories can be accomplished. The first 6 months of controlling materials and production was a period of transition. We can expect that the early months of 1952 will be a lengthening of the transitional period. At the same time, we may expect that, with no change in the international atmosphere, construction of hospitals and health facilities and the manufacture of medical supplies and equipment for civilian use will continue because they are indispensable health programs—but they will continue at a lower rate.