

Further, no system or method of periodic updating of the original survey data assembled by State personnel in 1965 had been prescribed by PHS. As a result, the benefits to be obtained from complete, updated evaluations of the physical plants of all existing general hospitals were not fully realized in some of the States. Revised instructions issued in 1968 for updating physical plant evaluations should, if properly implemented, rectify the situation.

The Public Health Service Act permits any State to use a designated portion of its Hill-Burton allotment of Federal grant funds each year to meet the costs of proper and efficient administration of the State plan. We noted overpayments of Federal funds totaling about \$61,600 toward the administrative expenses of Hill-Burton agencies of two States for fiscal years 1965 and 1966. We brought our findings to the attention of HEW regional officials who arranged for audits to be made by the HEW Audit Agency. As a result of such audits, a refund of \$24,400 was recently obtained by HEW from one State, while reported overpayments of \$45,000 remain to be resolved with another State.

We are recommending that appropriate action be taken to resolve the amount of overpayments and to collect such overpayments in a timely manner.

Our review also showed, with regard to a grant for the Cafritz Memorial Hospital construction project in Washington, D. C., that the final determination of the Federal Government's share in the construction costs appeared questionable because an expansion of the hospital's capacity beyond that originally proposed had not been properly recognized in the allocation of costs between Federal and non-Federal shares. We estimate that the Federal share of the construction costs would have been reduced by about \$83,600 if the cost had been properly allocated.

While we believe that the determination of the grant amount was not in accordance with sound cost allocation procedures and the provisions of the PHS Health Grants Manual, we are not further questioning the matter in view of the reasons advanced by and the authority vested in the cognizant regional office.

The matters presented in this report have been discussed with the Director, Health Facilities Planning and Construction Service.

We acknowledge the cooperation given to our representatives during the review. We shall appreciate being advised of the action taken or contemplated on the matters discussed in this report.

Copies of this report are being sent to the Assistant Secretary, Comptroller, and the Director of the Audit Agency, Department of Health, Education, and Welfare.

Sincerely yours,

A handwritten signature in black ink that reads "Frederick K. Rabel". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

Frederick K. Rabel
Assistant Director

Enclosure

Dr Joseph T. English, Administrator
Health Services and Mental Health
Administration
Department of Health, Education,
and Welfare

GENERAL ACCOUNTING OFFICE
FINDINGS AND RECOMMENDATIONS
REGARDING SELECTED ASPECTS OF
HOSPITAL AND MEDICAL FACILITIES
CONSTRUCTION GRANT PROGRAM

REFINEMENT OF EXISTING PLANT RATING CRITERIA
AND GUIDANCE IN THEIR APPLICATION

We believe that some refinements are desirable in the plant rating criteria prescribed by PHS and there is a need for additional PHS guidance of State agency personnel conducting physical plant surveys. Our comments pertain particularly to the criteria for rating safety features of buildings, acceptability of patient-care units, and adequacy of hospital service departments.

Rating of safety features

PHS criteria for rating various structural, mechanical, electrical, and fire safety features of a hospital provide a 125-point rating system to be separately applied to each building, wing, or other physical unit in the hospital complex. These criteria, covered in part B of the survey forms, assign point values ranging from 5 to 30 for each of 9 rating elements. Each element lists two or more features for the surveyor to consider, and specific point-value deductions prescribed by PHS are to be made if a unit fails to meet the standards indicated. If the remaining score for a hospital unit is less than 75, the unit and all bed spaces in the unit are rated nonconforming.

We noted that the features grouped together in a single rating element, although requiring the same deficiency point assignment, do not appear to be of equal significance in all cases. As a result, the prescribed deficiency point assignments which may be appropriate for some features within a group seem disproportionate for other features when the actions required to correct the deficiencies are considered.

For example, the third rating element--which concerns exit facilities--requires an assignment of 10 deficiency points if stairways are not of proper size or arrangement, if there is lack of exit signs, or for improper windows in patient rooms. The task of correcting either the stairway or window deficiencies would seem to be more serious than furnishing exit signs. Although we recognize that these three features are related to patient safety, we question whether the equal point assignment is warranted, and whether the 10 point assignment is adequate if more than one feature is deficient.

In many of the plant rating forms reviewed by us, the existence of a deficiency described in a given rating element was indicated without disclosing which, or how many, of the listed features were involved. In discussing this matter with headquarters officials we were informed that the surveyors were expected to mark the survey elements by either encircling or underscoring the language which described the particular deficiency noted, or inserting their comments in the blank spaces provided on the forms. However, the instructions on this procedure which are designated as "preliminary" and dated December 1964 are general in nature, stating only that the surveyor should use the blank spaces to indicate the type of deficiencies found on the project.

In some of the cases noted by us, it would not have been possible for PHS or State agency personnel to determine the nature and extent of the deficiency without an on-site review of the rated plan because of the multiple features covered in each rating element. We believe that the specific deficiency noted should be clearly identified to facilitate subsequent reviews and updating of plant evaluations by the State agency.

Rating of patient care units

Patient rooms and directly related facilities are referred to as nursing units and are rated under part C of the plant evaluation. Bed spaces are evaluated individually under part C and rated either conforming or nonconforming depending on square foot area of the patient room, the appurtenances in the room, its proximity to nursing stations and utility rooms, and the width of access corridors.

Our review of this section of the PHS plant rating criteria showed that, in some cases, the established standards may have been applied too rigidly. Bed spaces have been classified as nonconforming for seemingly minor deficiencies. For example, we found that several beds in hospitals in Ohio and Illinois were rated nonconforming because the rooms were 95 to 99 square feet as compared to the PHS minimum standard of 100 square feet. We also noted that 312 beds in 6 Ohio hospitals were rated nonconforming because their access corridors were between 6 feet and 6 feet 11 inches wide whereas the PHS standard was 7 feet.

Effective January 29, 1968, PHS revised some parts of the survey guidelines and, among other things, did allow for judgment in evaluating the adequacy of patient room sizes. According to the new instruction, if a room contains less than 100 square feet, but is so designed (and has such built-in equipment) that good patient care may be provided, it may be listed as conforming. This decision is to be made after consultation with hospital officials including personnel responsible for patient care in the nursing unit. We believe this broadened guideline will solve the problem concerning marginally undersized rooms and that HSMHA could apply similar guidelines with respect to the narrow corridors and possibly some of the other standards.

Rating of service departments

Part D of the PHS plant evaluation criteria lists rating elements to be considered in evaluating seven service departments in operation at a hospital. The number of elements applicable to individual departments varies to the extent that their total values, per department, range between 3 and 34 points. Where a hospital has a service department located in a nonconforming structure or lacks a particular department, the total value assigned to the department is assessed as a deficiency.

Beginning with a grand total of 95 points for the seven departments, the prescribed value is deducted for each rating element in which a department is found deficient. The departments collectively must retain a value of 75 or more to be rated conforming. Otherwise, the service departments are considered nonconforming and PHS criteria require a 50-percent reduction in the number of conforming beds shown for the entire hospital after applying parts A through C of the criteria.

Our review indicated that the PHS criteria for rating service departments can produce determinations which seem unrealistic. The assignment of rating-point values to the seven service departments does not appear to have been based on a relationship between the services rendered and the number of beds served by a given department. As a result, the required 50-percent reduction in conforming beds may not always fairly represent the seriousness of deficiencies found in the service departments. We also noted that not all types of service departments normally found in a general hospital were included in the PHS plant rating criteria.

The departments which were covered in part D of the criteria and the total point values assigned to the rating elements for each department are shown in the following table.

<u>Department</u>	<u>Point value assigned</u>
Surgical suite	26
Maternity	
Delivery suite	26
Nursery	6
Formula room	<u>2</u>
Radiology	10
Laboratory	9
Central Sterilizing and supply	5
Dietary	8
Laundry and linen	<u>3</u>
Total	<u>95</u>

Based on the point-value distribution above, it seems that PHS considered the maternity department more important than any of the others. However, since maternity beds usually represent a small part of the total number of patient beds in a general hospital, the 34-point value seems out of proportion with the services rendered. In contrast, the last five departments in the list--radiology, laboratory, central sterilizing and supply, dietary, and laundry and linen--each of which serve virtually all patient beds in a hospital, have total rating values of only 3 to 10 points.

Any two, and as many as three of the five departments, could fail in every rating element without affecting the over-all service department rating or the number of conforming beds shown for the hospital. On the other hand, just one section of the maternity department--the delivery suite--could cause a nonconforming rating for all the service departments and require a bed reduction substantially greater than seems warranted.

We found such a situation involving an Ohio hospital which had 201 beds, including 28 in a maternity unit. After applying parts A through C of the plant evaluation criteria, 186 of the beds--including 27 in the maternity unit--were rated conforming. By applying part D of the criteria, the surveyor found only one deficiency in the service departments, the maternity delivery suite was improperly located. The prescribed deduction for that particular deficiency was 26 points, and since the remaining point value for the service departments was only 69, the facilities were rated nonconforming, and the number of conforming beds shown for this hospital was reduced from 186 to 93. It seems to us that a 93-bed reduction is not fairly representative of a deficiency which applies solely to a department serving only 28 beds.

We believe there is need for HSMHA to reconsider the point values assigned to individual service departments, giving proper weight to the relative importance of each department. We also believe that reductions in the number of conforming beds should bear a reasonable relationship to the number of beds being served by the departments in which significant deficiencies are found.

During our interviews with State officials and hospital administrators we learned that the plant evaluations did not cover some departments which they believe are important parts of a general hospital. Among those mentioned were physical and occupational therapy units, intensive care units, rehabilitation departments, and pharmacies. They also believe that the evaluations should disclose hospital capability to provide certain types of specialized services such as a cardiology unit, facilities for cobalt and/or radium therapy or therapeutic x-ray treatments, and a premature nursery. In September 1964, an Ad Hoc Committee to review Hill-Burton regulations, policies, and procedures pointed out that as many service departments as possible should be included in the evaluation program to make the plant survey more meaningful and complete.

Headquarters officials advised us that the physical plant evaluation criteria were developed only after extensive deliberation and pilot studies which were conducted by a committee of nationally known experts in their respective health facility fields. However, in view of the changing patterns in hospital designs and missions, we believe HSMHA may wish to consider revising its plant rating criteria for service departments.

Recommendation

We recommend that the Administrator consider the feasibility of improving the physical plant evaluation rating techniques so that all rating elements are given proper weight in proportion to their relative importance, with particular attention to establishing reasonable point values for rating safety standards, allowing flexibility in rating patient care units, and assigning realistic criteria for rating all service departments considered essential for the operation of a hospital.

SYSTEMATIC UPDATING OF PLANT EVALUATION SURVEYS

Ratings of existing hospitals made in accordance with the revised PHS criteria, were first included in the physical plant evaluation surveys carried out by the States in 1965 and were incorporated in the 1966 State plans. PHS instructions require that State plans be revised annually and that such annual revisions reflect the changes in service area priorities from factors affecting the number of beds or facilities in an area. Accordingly, for State agencies to comply with this updating instruction, they must update the original plant evaluation data, each year starting in 1966, for changes in capacity or condition of facilities, including those caused by modernization or construction in the intervening period.

We noted that the five States covered by our review had made some effort to update their plant evaluations in 1966 and 1967 when information on changes in hospital facilities became available to the State agencies. However, these efforts were not always uniformly applied to all plant evaluations nor was the new information considered in some cases even though significant physical plant changes were indicated. We found that PHS had not prescribed guidelines for State agencies to follow in performing this updating function and at least two of the States, Illinois and Ohio, had no positive programs to provide for systematic updating of plant evaluations for all facilities included in their State plans.

State agency officials in both Ohio and Illinois informed us that they had no established programs for updating physical plant surveys, but agreed there was need for a realistic and uniform updating system. PHS headquarters officials told us that it was expected the State agencies would update plant evaluation surveys when necessary, but the time and manner of updating surveys was left to the State agencies' discretion.

In January 1968, PHS issued revised instructions providing that the State agency should establish a routine procedure by which a facility

would report correction of deficiencies. The instructions further state that a resurvey should then be made to determine if the facility should be reclassified--in whole or in part--in the annual revision of the State plan.

We believe these instructions, if properly implemented by HEW regional and State personnel, should result in obtaining updated physical plant evaluations so that annual State plans present an accurate inventory of existing hospital facilities.

FEDERAL ASSISTANCE TOWARD COST OF
ADMINISTRATION OF STATE PLANS

Our review of Federal grant assistance toward the cost of administering State plans under the Hill-Burton program indicated a need for closer cooperation by HEW regional program personnel with cognizant State agency officials to insure a better understanding of the applicable legal and administrative requirements which a State's claim must meet.

Section 606(c) of the Public Health Service Act permits any State to apply for and use up to 2 percent of its Hill-Burton allotments--but not more than \$50,000--each year for proper and efficient administration of the State plan, provided that the administrative expenditures for the year claimed are not less than the total amount spent for such purpose during fiscal year 1964, the base year.

We reviewed the claims for administrative expense reimbursements made by two States, California and Washington, and while we did not verify the States' base year expenditures and make a detailed review of all cost categories claimed by the States, we noted that the claims were not properly stated and needed adjustment. Our review showed that the claims were not fully supported by expenditures recorded in the fiscal records of the State agencies, and conversely, in some instances, actual expenses incurred by the State agencies were understated. Overall we noted overpayments totaling in excess of \$60,000 to the two States for fiscal years 1965 and 1966.

We found that prior to our review there had been no verification made by the HEW regional offices of the claims presented by the State agencies, although they had been advised that both Federal and State funds would be audited. Accordingly, in November 1967, we advised HEW Region IX officials of the nature of our findings relating to the overpayments to the States of California and Washington. In response we were informed that the Region would request an audit by the HEW Audit Agency and, if warranted, take action to recover any overpayments.

The HEW Audit Agency, as a result of its review of the claims by the two States for fiscal years 1965 through 1967, issued audit reports in November 1968 and April 1969, respectively, which contained recommendations that the State of California repay approximately \$45,000 and the State of Washington repay approximately \$24,400 of grant funds received. In August 1969, the State of Washington refunded the sum of \$24,400 to HEW but the State of California disagreed with the overpayments cited by the HEW Audit Agency and action remains to be taken to resolve this matter.

Headquarters officials advised us that certain problems existed in the HEW regional offices because of divided responsibility for administering this part of the grant program. They further informed us that the situation has since been corrected in that organizational responsibility has been clarified and that detailed instructions have been issued covering pertinent aspects of the management and utilization of these funds.

Recommendation

We recommend that the Administrator take appropriate action to resolve the amount of overpayments for administrative expenses to the State of California and to collect such overpayments in a timely manner.

DETERMINATION OF FEDERAL SHARE IN CONSTRUCTION COST OF MORRIS CAFRITZ MEMORIAL HOSPITAL, WASHINGTON, D C

By letter dated June 1, 1967, and in subsequent discussions, we called to the attention of the Regional Health Director of Region III, Charlottesville, Virginia, certain information developed during our review of the Morris Cafritz Memorial Hospital construction project, indicating that Federal grant funds of \$1,295,244 approved for the project were about \$113,000 in excess of the costs eligible under established Hill-Burton requirements. The Regional Program Director for Hospital and Medical Facilities acknowledged regional review of the data submitted by us and informed us that the situation had been discussed with the HEW Regional Auditor and audit of the project had been scheduled in the near future.

In May 1968, the HEW Audit Agency issued a report on this project in which it pointed out that, after recomputing the Federal Government's share of the hospital costs, it appeared that the hospital's claim was overstated by \$196,051.

We were subsequently advised by HEW regional officials in December 1968 that it was the decision of their office and their Washington, D. C. headquarters office that the total Federal share for the project should be \$1,220,858 or \$74,386 less than the amount previously allowed.

The differences in computing the Federal share of the cost of the hospital arise principally from the manner in which the cost of the common service areas--those portions of the hospital which benefit the entire hospital, such as stairwells, elevators, etc.--were allocated.

Regional officials were of the opinion that the cost of the common service areas should not be prorated to the 8th floor, as the initially approved project did not include a finished 8th floor but only a shell space which would not immediately benefit from the service areas. On the other hand, our review brought out that hospital construction plans were subsequently changed and the 8th floor was completed for immediate patient use the same as the other floors of the hospital.

Accordingly, it appears that the 8th floor receives the same benefit from the common service areas as the other floors, and as the HEW Audit Agency found in its review of the grant computation, the costs of the service areas should be allocated to all space used for patient care, including the 8th floor. The Audit Agency also cited applicable provisions of the PHS Health Grants Manual which govern such cost allocation.

We estimate that the Federal share of construction costs, as determined by the regional office, would have been reduced by about \$83,600, if the costs of the common service areas had been proportionately allocated to all patient areas.

In explaining the basis for their determination, regional officials informed us that they did not wish to dilute the extent of Federal participation as it had been agreed to before construction was started. They stated that assigning a portion of the costs of common service areas to the 8th floor would have in effect penalized the applicant hospital for the initiative taken in completing the 8th floor with the rest of the hospital.

While we believe that the final determination of the grant amount was not in accordance with sound cost allocation procedures and the provisions of the Health Grants Manual, we are not further questioning the matter in view of the reasons advanced by and the authority vested in the regional officials.