REPORT TO THE CONGRESS

Better Use Should Be Made Of Physicians And Dentists In Health Centers B-164031(2)

Office of Economic Opportunity
Department of Health, Education, and Welfare

BY THE COMPTROLLER GENERAL OF THE UNITED STATES

APRIL 9, 1974

COMPTROLLER GENERAL OF THE UNITED STATES
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4 To the President of the Senate and the
Speaker of the House of Representatives

We are reporting on the need for better use of physicians and dentists providing services in health centers funded by the Department of Health, Education, and Welfare.

We made our review pursuant to the Budget and Accounting Act, 1921 (31 U.S.C. 53), and the Accounting and Auditing Act of 1950 (31 U.S.C. 67).

We are sending copies of this report to the Director, Office of Management and Budget; the Secretary of Health, Education, and Welfare; and the Director, Office of Economic Opportunity.

Elmer B. Staats

Comptroller General
of the United States

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ABBREVIATIONS

FTE	full-time equivalent
GAO	General Accounting Office
HEW	Department of Health, Education, and Welfare
OEO	Office of Economic Opportunity
OHA	Office of Health Affairs

COMPTROLLER GENERAL'S
REPORT TO THE CONGRESS

BETTER USE SHOULD BE MADE OF PHYSICIANS AND DENTISTS IN HEALTH CENTERS

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D I G E S T

WHY THE REVIEW WAS MADE

During earlier work GAO found that professional staff--physicians and dentists--were being underused in comprehensive health centers funded by the Office of Economic Opportunity (OEO). The term "underused" describes a situation when a center's professional staff does not serve an optimum number of patients consistent with high-quality care.

Accordingly, GAO wanted to know: Was underuse a common weakness in federally funded health centers? if so, why? what improvements could be made?

For fiscal year 1973, OEO funded 43 health centers and the Department of Health, Education, and Welfare (HEW) funded 66. GAO reviewed 12 health centers--8 funded by HEW and 4 funded by OEO. GAO reviewed the services of 145 (70.3 full-time-equivalent) physicians and 41 (27.6 full-time-equivalent) dentists. In July 1973 the President approved the transfer--completed in August 1973--of OEO's Comprehensive Health Services Program to HEW.

FINDINGS AND CONCLUSIONS

Neither professional health care organizations nor the Federal Government have developed specific criteria or guidelines to measure the number of patients a physician or dentist should be able to treat over a period of time. (See p. 9.)

This lack of criteria is a shortcoming in evaluating health centers. Without such criteria it is difficult to measure the relative efficiency of a professional staff. Although efficiency is not the only consideration in evaluating health care services of physicians and dentists, it is an important one.

GAO found that:

--Health center physicians treated two patients an hour on the average. Most health care officials said they should be able to treat between three and four an hour. (See p. 12.)

--Dentists averaged one patient an hour. Most health care officials said they should be able to treat two an hour. (See p. 12.)

--Of the 12 health centers, 11 were overstaffed with physicians. The average overstaffing at the centers was 69 percent. A total of 70.3 full-time-equivalent physicians were on staff at the 12 centers when 41.5 were required. (See p. 20.)

--All 10 centers with dental staffs were overstaffed with dentists. The average overstaffing at the

centers was 86 percent. A total of 27.6 full-time-equivalent dentists were on staff at the 10 centers when 14.8 were required. (See p. 20.)

--On the basis of the average annual salaries of the full-time physicians and dentists at the 12 centers, annual costs of the overstaffing in these centers exceeded $1 million. (See p. 21.)

--Only 5 of the 12 centers reviewed had received site assessment visits by OEO or HEW within the 2-year period ended March 1973. Two centers had never received a site assessment visit. (See p. 30.)

--Data on professional staff use was generally inaccurate and/or inadequate for making internal management decisions or external evaluations. (See p. 32.)

The basic cause of the underuse of physicians and dentists was overstaffing resulting from initial staffing levels based on unrealistic expectations of demands for services and the failure to reduce staff after it became clear that the original estimates were wrong. (See p. 21.)

The most significant operational factors hindering physician and dentist productivity were the large number of appointments which patients missed and the unpredictability of patients visiting the centers without appointments.

RECOMMENDATIONS

The Secretary of HEW should:

--Establish criteria for using health center physicians and dentists. (See p. 11.)

--Require that centers maintain a level of professional staffing based on realistic demands for their services. (See p. 28.)

--Urge centers to emphasize to their patients the importance of making and keeping appointments. (See p. 28.)

--Increase the frequency of central office site assessment visits. (See p. 35.)

--Institute procedures to provide for timely followup on evaluation recommendations to insure that corrective action is taken. (See p. 35.)

--Direct the site assessment teams to periodically sample the accuracy of center registration information and data on staff use and insure that such data is being appropriately used as a basis for management decisions. (See p. 35.)

--Direct center officials to use adequate and appropriate source documents that are designed to systematically record required information. (See p. 35.)

AGENCY ACTIONS AND UNRESOLVED ISSUES

HEW generally agreed with these recommendations and advised GAO of actions taken or planned to implement them. HEW recognized both the complexities of delivering ambulatory health care and the interaction of various factors involved in providing this care.

HEW believes many factors, such as equipment, examination rooms, and

socioeconomic and attitudinal characteristics of the consumer, influence the use and productivity of center physicians and dentists.

HEW indicated that, in implementing the recommendations, use of physicians and dentists would be considered together with health center performance. (See app. II.)

Therefore HEW said the first corrective action is being directed toward strengthening center management information and reporting systems to provide detailed data to associate productivity levels with other aspects of center operations.

GAO believes that, for certain centers exhibiting very low averages for using physicians and dentists, an analysis of other aspects of center operations need not be accomplished before taking action to establish a more realistic level of staffing. (See pp. 28 and 29.)

MATTERS FOR CONSIDERATION BY THE CONGRESS

With the current shortage of physicians and dentists in the United States, there is need to improve the use of professional medical personnel as well as to develop sound Federal health care program management practices. Accordingly, this report should be useful to the Congress in considering legislation regarding comprehensive health care programs.

CHAPTER 1

INTRODUCTION

In President Nixon's February 18, 1971, message to the Congress, he expressed concern over the rising cost of health care and the limited access to adequate health care for many Americans. He stated:

> "* * * We are investing more of our nation's resources in the health of our people, but we are not getting a full return on our investment."
>
> * * * * *
>
> "Americans who live in remote rural areas or in urban poverty neighborhoods often have special difficulty obtaining adequate medical care. On the average there is now one doctor for every 630 persons in America. But in over one-third of our counties, the number of doctors per capita is less than one-third that high. In over 130 counties, comprising over eight percent of our land area, there are no private doctors at all and the number of such counties is growing.
>
> "A similar problem exists in our center cities. In some areas of New York, for example, there is one private doctor for every 200 persons but in other areas the ratio is one to 12,000. * * *"

In our October 1972 report to the Congress,[1] we pointed out that the current physician shortage was commonly estimated at 50,000 and that the estimated shortage of dentists was 20,000.

During 1971 we reviewed three Office of Economic Opportunity (OEO) comprehensive health centers to determine the extent to which Comprehensive Health Services Program objectives were being achieved and how efficiently these

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[1]"Program to Increase Graduates From Health Professions Schools and Improve the Quality of Their Education" (B-146031(2), Oct. 3, 1972).

centers were being administered. Because two[1] reviews disclosed that center physicians and dentists were being underused,[2] we initiated a review of the use of physicians and dentists to determine whether underuse was a common weakness of federally funded comprehensive health centers; if so, why it occurs; and what improvements can be implemented to change it.

Two federally funded programs, the OEO Comprehensive Health Services Program and the Department of Health, Education, and Welfare (HEW) Health Services Development Grant Program, provide grants for centers which are to provide comprehensive health care to residents of specific geographic areas. Because of OEO's legislative mandate to alleviate poverty, OEO centers must serve poverty populations. Although HEW centers are usually located in poverty areas, section 314(e) of the Public Health Service Act, as amended, 42 U.S.C. 246(e), requires that they serve a defined target population, which may include other than the poor.

STATUS OF COMPREHENSIVE HEALTH CENTER PROGRAMS

The Economic Opportunity amendments of 1966 first authorized the OEO Comprehensive Health Services Program through the addition of section 211-2 of the Economic Opportunity Act of 1964. Subsequently the Economic Opportunity Amendments of 1967 repealed section 211-2 and added section 222(a)(4), as amended 42 U.S.C. 2809(a)(4), of the act which states that the program is to aid in developing and carrying out centers dealing with the needs of urban and rural areas having high concentrations or proportions of poverty and inadequate health services. The centers are to be designed to provide, with maximum use of existing

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[1]"Opportunities for Improving the Neighborhood Health Services Program for the Poor Administered by St. Luke's Hospital Center, New York City" (B-130515, June 15, 1971); letter report to Deputy Director of OEO on the Neighborhood Health Services Program, Rochester, N.Y., Oct. 29, 1971.

[2]Describes a situation when a center's professional staff does not serve an optimum number of patients consistent with high-quality care.

agencies and resources, comprehensive health services and the necessary related facilities and services.

The OEO centers, funded through and administered by the Office of Health Affairs in Washington, were to provide comprehensive health services, such as preventive health services (physical checkups, screening, immunization, and health education), diagnostic services, treatment (by practitioners of general medicine and specialists), family planning, rehabilitation services, dental care, mental health services, and narcotic addiction and alcoholism prevention and rehabilitation.

OEO funded 55 comprehensive health centers for about $95 million during fiscal year 1972 and 41 centers for about $74.3 million during fiscal year 1973. In July 1973 the President approved the transfer of OEO's Comprehensive Health Services Program to HEW. The actual transfer of personnel was completed in August 1973. HEW's fiscal year 1974 budget provided funds for the continuation of the centers.

Because OEO's role was primarily that of a research and demonstration agency, OEO since December 1970, has transferred to HEW centers that had demonstrated their research features and were within the scope of HEW's 314(e) authority. A memorandum of understanding which established the transfers directed HEW to continue furthering the existing OEO goals in the centers until the end of the budget period in which they were transferred; subsequently, HEW 314(e) guidelines were to be followed. OEO had transferred 38 centers as of July 1972.

The Health Services Development Grant Program is authorized by section 314(e) of the Public Health Service Act as amended, 42 U.S.C. 246(e). The legislation authorizes appropriations of funds for grants:

> " * * * to any public or non-profit private agency, institution, or organization to cover part of the cost * * * of (1) providing services (including related training) to meet health needs of limited geographic scope or of specialized regional or national significance, or (2) developing and supporting for an initial period new programs of health services (including related training)."

HEW funded 55 health centers for about $79.9 million during fiscal year 1972 and 65 centers for about $92.6 million during fiscal year 1973. The 1974 budget request is for $198.1 million, including $97.9 million for centers formerly funded by OEO.

The 314(e) program is administered by the Bureau of Community Health Services of the Health Services Administration through its regional offices, but the Rockville, Maryland, headquarters has final approval authority of all grants.

Both the OEO and HEW centers may be supported through a number of funding sources, including State or local governments and public or private nonprofit agencies. Furthermore, centers are expected to seek reimbursement for medical services from all available sources--Titles XVIII (Medicare) and XIX (Medicaid) of the Social Security Act, private insurance, and State and local welfare programs.

SCOPE OF REVIEW

We made our review during 1972. We reviewed the use of physicians and dentists in 12 (see app. I) of the 110 health centers funded by OEO and HEW during fiscal year 1972. Because most centers were located on the east and west coasts, we reviewed centers in the Boston, Philadelphia, and San Francisco areas which had been operational at least 1 year and which we considered representative of the types of centers OEO and HEW were currently funding.

CHAPTER 2

PROFESSIONAL STAFF USE CRITERIA

Neither the professional medical and dental organizations nor OEO and HEW have established recognized standards or criteria for acceptable productivity that could be used in evaluating the number of patients a physician or dentist should be able to treat over a period of time. There has been a reluctance to establish such standards, especially among Federal agencies, apparently because physicians and dentists might regard such standards as an infringement on their practice of medicine or as an attempt by the Government to regulate the quality of health care. This lack of criteria is, in our opinion, a shortcoming in the evaluation aspects of comprehensive health centers.

REVIEW OF EXISTING CRITERIA

OEO's "Guidelines for the Development of Space Allocations For Neighborhood Health Centers" suggests that with adequate space and support personnel a physician can treat four patients an hour and a dentist two. The guidelines also suggest that each physician should have two examination rooms and one consultation room and each dentist two operatories (dental chairs and supportive equipment). The guidelines were not intended to be, nor have they been, used in evaluating the efficient use of center physicians and dentists.

Through discussions with professionals serving in the health care field and a review of health care literature, we found that, although a notable lack of standards for evaluating the use of physicians and dentists existed, there was a general consensus that a physician should be able to treat between three and four patients an hour and a dentist approximately two. For example:

--The American Medical Association's Center for Health Services Research and Development annually publishes a "Profile of Medical Practice." In the 1971 profile[1] the average number of patient visits an hour varied among specialists, but the average for all physician

[1] Based on 1969 data.

specialties was 3.1. The data extracted from the 1972 profile showed that the average number of patient visits an hour for all physician specialties was approximately 3.

--Health care administrators from the Kaiser Permanente Medical Group informed us that it was reasonable to assume that a physician could treat three to four patients an hour. The reasonableness of this estimate was reinforced by the opinions of health care administrators from several multidiscipline medical groups.

--A medical consultant who evaluated health centers for both OEO and HEW stated that she believed it was reasonable to expect a health center family physician to treat four patients an hour.

--Center officials generally agreed that their physicians should be able to treat three to four patients an hour.

--The American Dental Association's Bureau of Economic Research and Statistics conducts a survey of dental practices every 3 years. We determined from the survey data that dentists average 1.8 patient visits an hour.

--California Dental Association officials agreed that it was reasonable to expect health center dentists to be able to treat two patients an hour.

Recent publications written by OEO officials and our discussions with them show that a physician treating about three patients an hour is a realistic goal consistent with the objectives of comprehensive health care.

CONCLUSION

A commonly accepted evaluative standard for using professional staff does not exist. However, evaluative standards would assist HEW and health center managers to measure health center performance.

RECOMMENDATION

We recommend that the Secretary of HEW:

--Establish criteria to serve as realistic standards for using health center physicians and dentists.

AGENCY COMMENTS

HEW agreed with our recommendation and stated that it had begun gathering data necessary to develop standards. (See app. II.)

CHAPTER 3

USE OF PHYSICIANS AND DENTISTS IN OEO AND HEW HEALTH CENTERS

Because of the shortage and poor distribution of health care manpower, physicians and dentists participating in federally funded programs should be used in the most efficient manner possible. Professional opinion indicates that it is reasonable to expect a physician to treat between three and four patients an hour and a dentist approximately two; however, physicians in 11 of the 12 centers and dentists in all 10 centers providing dental care averaged fewer patients an hour.

UNDERUSE OF HEALTH CENTER PHYSICIANS AND DENTISTS

Our review of the use of primary care physicians[1] at the 12 centers included 145 full- and part-time physicians, (70.3 full-time equivalents (FTEs)), composed of 37 general practitioners, 40 internists, 39 pediatricians, and 29 obstetrician-gynecologists. At 10 of the centers[2] we reviewed the use of 41 full- and part-time dentists (27.6 FTEs). We determined hourly use rates by dividing the recorded number of patients treated during a 1- to 6-month period

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[1]General practitioners, internists, pediatricians, and obstetrician-gynecologists have been classified as primary care physicans. Although many centers use the services of other specialists, such as dermatologists and psychiatrists, these specialists usually work very short hours and basically provide consultation services; thus we have not included these specialities in our review.

[2]One center did not have a dental staff and another only had a dentist working 1 day a week.

(varied according to available documentation) by the number of hours worked by each physician and dentist.[1]

We found that physicians averaged slightly less than two patients an hour and dentists averaged slightly more than one. The following table shows the average number of patients treated an hour by the physicians and dentists in the 12 centers reviewed.

	Average number of patients treated per hour							
Specialty	Total	Less than 1.0	1.0 to 1.4	1.5 to 1.9	2.0 to 2.4	2.5 to 2.9	3.0 and over	Average per hour use
Physicians:								
General practitioners	37	5	6	10	9	4	3	2.03
Internists	40	3	7	6	7	5	12	1.75
Pediatricians	39	1	4	7	9	10	8	2.16
Obstetrician-Gynecologists	29	7	4	2	5	6	5	1.46
Total	145	16	21	25	30	25	28	1.97
Percent	100	11	15	17	21	17	19	
Cumulative percent	100	11	26	43	64	81	100	
		Less than 0.5	0.5 to 0.9	1.0 to 1.4	1.5 to 1.9	2.0 and over		Average per hour use
Dentists:								
All dentists	41	1	13	23	2	2		1.13
Percent	100	2	32	56	5	5		
Cumulative percent	100	2	34	90	95	100		

[1]We attempted to refine the number of hours worked by physicians and dentists to show only time spent treating patients. However, we found that centers were not maintaining records which could be used for this purpose. Center officials and employees indicated that administrative time generally represented a relatively insignificant portion of a physician's or dentist's normal workday. For example, at one center every staff physician was also on the staff of a university hospital. Under this arrangement each physician was required to instruct at the university for about 2 hours a week during one quarter of the school year. At another center dentists were required to attend departmental meetings for about 2 hours a week.

As shown above, only 28 of the 145 physicians (19 percent) had average use rates of 3 or more patients an hour. Similarly, only 2 of the 41 dentists averaged 2 or more patients an hour. Although there is relatively little difference in use rates between specialties, considerable differences were found between centers. As shown by the graphs on pages 15 and 16, physician use rates ranged from 1.06 patients treated an hour at center I to 3.05 an hour at center G and dentist use rates ranged from 0.44 patients treated an hour at center E to 1.46 an hour at center D.

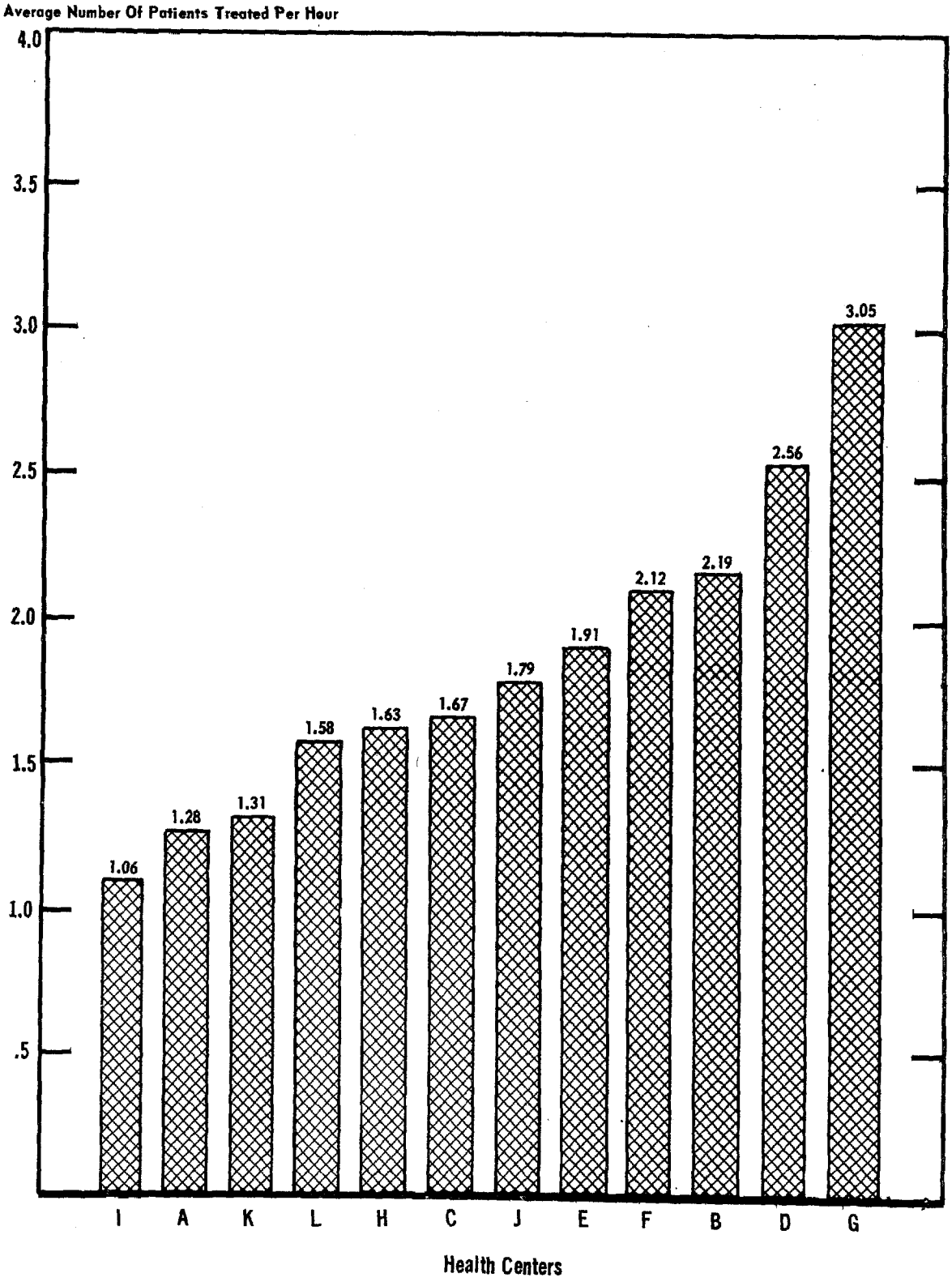
The graphs show that low use is common to the majority of physicians and dentists in the 12 centers. Some individual physicians and dentists were able to meet and exceed the use rates of three patients an hour for physicians and two for dentists. In 1 center the average use rates of all physicians exceeded 3 patients an hour, but in 8 of the 12 centers the physicians had an average use rate of less than 2 patients an hour. None of the health centers reviewed had an average use rate for dentists of two or more patients an hour. In five of the centers providing dental care, dentists had an average use rate of less than one patient an hour.

The most effectively used physicians were those who worked on a part-time basis. We found that, although the average use rates of part-time and full-time dentists were about the same, there was a difference in the use rates of part-time versus full-time physicians. The 82 part-time physicians had an average use rate of 2.40 patients an hour, while the 63 full-time physicians had an average use rate of 1.88.

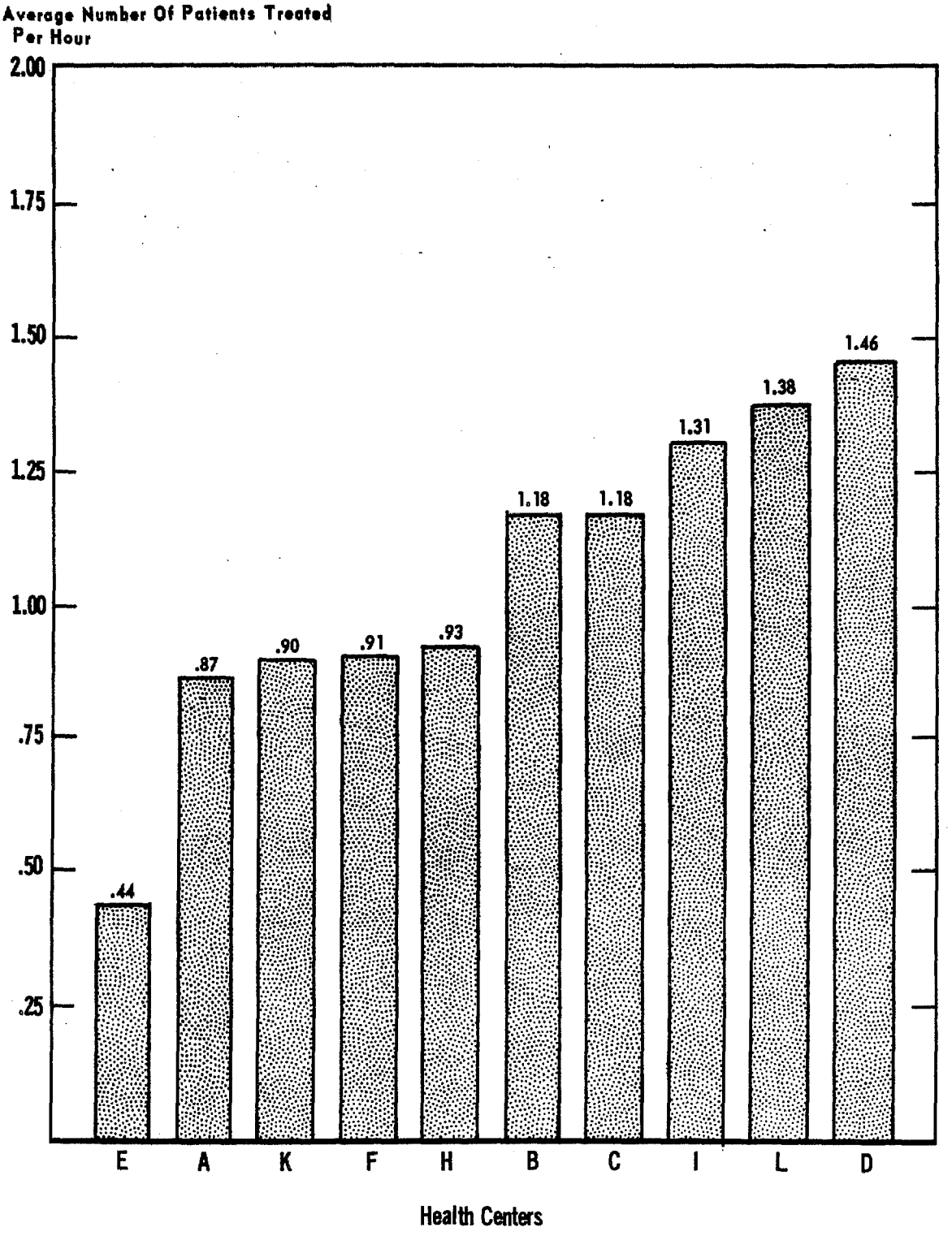
As the graph on page 15 shows, health center G had the highest average use rate per hour for physicians. This center did not employ any full-time physicians. Instead, this center used 37 part-time physicians who worked between 1 and 27 hours (averaging 6 hours) a week.

The number of patients treated by a physician or a dentist will vary according to his specialty, the medical or dental procedures required, and the type of care provided. For example, a general practitioner may average more than four patients treated an hour 1 day because they are predominantly followup or emergency-care patients who may only

AVERAGE NUMBER OF PATIENTS TREATED PER HOUR BY HEALTH CENTER PHYSICIANS



AVERAGE NUMBER OF PATIENTS TREATED PER HOUR BY HEALTH CENTER DENTISTS



NOTE: CENTER G HAD ONE DENTIST WHO WORKED 1 DAY A WEEK AND CENTER J HAD NO REGULAR DENTAL STAFF BEFORE APRIL 1972.

require about 10 minutes each. The next day he may treat several new patients who require an hour each for a complete physical examination and medical history.

Similarly, a dentist on 1 day may see mostly patients who require long appointments which involve tooth fillings with more than one surface, and another day he may see mostly patients who require tooth fillings with a single surface or have brief examination appointments. One dentist had as many as 15 examinations scheduled in a 4-hour period.

With regard to physician specialty and the type of medical care provided, most centers were providing predominantly episodic[1] or emergency-type treatment, which generally requires less of the physician's time than does comprehensive care. Of the dental staffs seven practiced four-handed sitdown dentistry,[2] which is generally recognized as the most efficient method of dental care delivery. However, eight of the dental staffs were practicing, to varying degrees, quadrant dentistry[3] which usually requires more time per appointment than the traditional one-filling-per-appointment method.

We believe that the above factors did not significantly influence the low use rate found at the centers because the type of care provided appeared to be reasonably comparable among the centers and the use data considered was based on at least a month of work which center officials agreed was representative of their normal patient-treatment pattern.

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[1]Episodic care: One or more medical services received by an individual during a period of relatively continuous contact with one or more physicians in relation to a particular medical problem.

[2]A modern dental technique whereby an assistant aids the dentist throughout the patient's treatment while the dentist remains seated.

[3]The dentist performs all required work on a quarter of the mouth at one sitting.

CAUSES FOR UNDERUSE OF NEIGHBORHOOD HEALTH CENTER PHYSICIANS AND DENTISTS

The underuse of most physicians and dentists reviewed was caused by various factors, such as the centers' overstaffing of physicians and dentists, the high percentage of broken appointments, and the significant number of walk-in patients. In a few centers underuse was also caused by having fewer examining rooms than suggested by OEO guidelines, outreach programs not fully effective, inefficient nonprofessional employees, and language barriers between patients and physicians and dentists. We believe the basic causes of underuse were staffing levels exceeding those required to treat patients and the centers' inability to adequately implement a systematic appointment-scheduling system.

Overstaffing of physicians and dentists

Each center reviewed had, on the average, over a third more primary physicians and dentists than needed. Although we recognize the number of patients using a center's services is not static, it is very unlikely that any of the centers reviewed will experience such a substantial increase in demand for services that the overstaffed conditions would be materially affected. All of the centers reviewed had been in operation for sufficient time for the vast majority of community residents to have been exposed. Although some of the residents who use other medical and dental resources may decide to use the health centers in the future, the opposite may occur in other cases.

On the average centers were overstaffed by 2.2 FTE physicians and 1.3 FTE dentists. The 12 centers averaged 5.8 FTE physicians per staff although an average of only 3.6 FTE physicians were needed to care for the actual patient load. The centers providing dental services averaged 2.8 FTE dentists per staff although only an average of 1.5 FTE dentists were needed.

To determine the number of physicians and dentists required to satisfy the patient load at each of the centers, we considered

--the hours the center was open,

--the actual number of patient treatments,

--a 40-hour week as the norm for a full-time professional staff member, and

--a criterion of three patient treatments an hour for physicians and two an hour for dentists.

An example of how these four factors were analyzed to arrive at the number of FTE physicians and dentists required at one of the centers included in our review follows.

> The Provident center in Baltimore, Maryland, was open 2,040 hours a year (40 hours a week times 51 workweeks a year) and physicians there annually treated approximately 19,000 patients (1,574 during the test month times 12 months). Thus, on the average the center treated 9.3 patients each hour of operation. Using a three-patient-an-hour criterion the center would require 3.1 FTE physicians for their present patient load. The center had 7 FTE physicians at the time of our review. The same formula was applied in determining the required number of dentists, except a two-patient-an-hour criterion was used. This computation resulted in a required 0.7 FTE dentists, but the center had 1.8 FTE dentists on the staff.

The following tables show the actual staffing levels at the time of our review and the computed number of required physicians and dentists at each of the 12 centers reviewed.

FTE Primary Physicians (note a)

Center	Actual staff level	Computed number required	Number overstaffed	Percent overstaffed
A	6.9	2.6	4.3	165
B	7.0	4.8	2.2	46
C	3.7	2.2	1.5	68
D	4.7	3.7	1.0	27
E	6.6	3.5	3.1	89
F	5.1	4.1	1.0	24
G	5.9	6.5	(.6)	-
H	5.4	2.7	2.7	100
I	6.3	2.3	4.0	174
J	7.0	3.6	3.4	94
K	7.0	3.1	3.9	126
L	4.7	2.4	2.3	96
Total	70.3	41.5	28.8	69

[a] General practitioners, internists, pediatricians, and obstetrician-gynecologists.

FTE Dentists

Center	Actual staff level	Computed number required	Number overstaffed	Percent overstaffed
A	4.2	2.0	2.2	110
B	7.0	4.4	2.6	59
C	3.3	1.8	1.5	83
D	1.7	1.2	.5	41
E	2.0	.4	1.6	400
F	2.4	1.5	.9	60
G (note a)	-	-	-	-
H	2.9	1.3	1.6	123
I	1.9	1.2	.7	58
J (note b)	-	-	-	-
K	1.8	.7	1.1	157
L	.4	.3	.1	33
Total	27.6	14.8	12.8	86

[a] One dentist worked 1 day a week.

[b] No regular dental staff before April 1972.

Current concern over the lack of accessibility to health care services, particularly for those individuals in socially and economically deprived communities, magnifies the importance of avoiding the overstaffed condition shown above. Many physicians and dentists are not willing to work in economically deprived communities, yet in the health centers reviewed the potential services of physicians and dentists willing to work in these areas are not being fully taken advantage of because staffing levels exceed those required to satisfy demand. Considering the limited Federal funds available for health care programs, the cost associated with this overstaffing is a further obstacle in providing adequate health care to all elements of our society. In the centers reviewed the average salary for a full-time physician was approximately $27,000 a year and for a full-time dentist $23,000 a year. On the basis of these averages, the annual cost of the overstaffing identified was over $1 million.

Basis for staffing levels

The overstaffing condition was primarily a result of the centers' having initially developed staffing levels based on anticipated demands of the entire target area population and not reducing these levels to show actual consumer demands for health services.

The importance of determining realistic consumer demand data was stressed in a report prepared in November 1969 by OEO's Director of Program Planning and Evaluation, Office of Health Affairs, entitled "Data Needs for Planning Neighborhood Health Centers" which states in part:

> "The first (staff) planning step is to estimate the number of persons to be reached in the service area. * * * In order for the center to budget for, and hire, the proper number and combination of medical and supporting personnel, an estimate must be made of the potential demand for services of different kinds of their population. * * * The baseline surveys show that, while gross estimates of the number of persons are often within reasonable limits, estimates of the number of eligible persons are sometimes far off."

In 8 of the 12 centers reviewed, center officials' only bases for initial professional staffing levels were their opinions of anticipated patient loads based on the gross populations of the target areas.

Although the majority of the gross target area populations stated in the initial grant proposals were fairly accurate, these figures were never adjusted to show the number of patients who might realistically be expected to use these centers. This resulted in the centers' establishing staffing levels which far exceeded those required to serve the actual users of the facilities. For example:

> Officials at 1 center stated that their initial staffing level was based on a general awareness of the major medical problems in a target area with a population of over 29,000. This center had been in operation for over 3 years at the time of our review and had slightly over 8,000 registrants. We determined that this center had about three times the number of primary physicians required to serve the actual patient load.

The problem of using only gross target area population figures as a basis for determining staff levels was further compounded in certain projects because of unrealistic target area boundaries. Target areas were generally established without considering the various demographic characteristics and the proximity of existing health care facilities.

- At one center approximately half the target area overlapped the primary service area of the county hospital and outpatient clinic that provided a full range of family health care services to all area residents. The overlap area included an isolated poverty pocket with a population of over 31,000. These people were included in the center's initial estimated patient load even though they lived closer to the county facility. We determined this center had 46 percent more physicians than required to satisfy the actual patient demand for services.

- At another center the population of the target area was approximately 20,000. According to census data, 1,750 individuals were patients in a State mental hospital. The data also revealed that over 17,000 individuals were members of households with estimated

incomes ranging from $8,000 to $15,000 and lived closer to existing private health care facilities than to the health center. The only occupants of the target area who appeared to be dependent on the center for services were the 1,100 individuals living close to the center and whose estimated family incomes were in the $4,000 to $6,000 range. We determined this center had 68 percent more physicians than required to satisfy the actual patient load.

In addition to the centers' initially overestimating the required number of physicians and dentists needed to serve their patients, the centers had not reduced their staffing levels to show actual demand. This condition, in part, can be attributed to the problems centers have in accurately determining patient loads. The centers had inaccuate use data for physicians and dentists (see ch. 4), and, as previously discussed on page 9, they were further hampered by the lack of commonly accepted evaluative standards for using professional staff. Project administrators were often unaware of how many registrants were actually using the centers' services.

In many cases registration figures were misleading because centers registered an entire family upon the first use of the center by a single family member. At the completion of our fieldwork, only three of the centers had attempted to update their original registration rolls. This is especially a problem for centers in communities with a large transient population, such as found in many of the low-income areas served by the centers. For example, 1970 Bureau of Census data for the target area served by one of the centers showed that almost 45 percent of the population had left the area within the preceding 5 years. Furthermore, certain center registrants eligible for health care benefits under the California Medicaid Program used the services of private physicians to the extent of their Medicaid entitlement (basically two physician visits a month) and then used the centers for additional service.

Factors affecting use

Several common operational factors further restricted the centers' ability to increase the use rate of their physicians and dentists.

Problems in maintaining appointment schedules

In five of the centers reviewed, the majority of medical patients did not have appointments (most patients were walk-ins). On the average, over 40 percent of the patients seen at the 12 centers were walk-ins. Several centers were scheduling appointments for their physicians at below normal rates (as low as one patient an hour) in order to be responsive to the unpredictable patient flow caused by walk-ins. The effect of underscheduling was compounded by the fact that approximately 40 percent of all patients who made appointments did not keep them. In most cases the walk-ins more than compensated for the broken appointments; however, this was not always the case. For example:

> Officials at one center stated that the scheduled appointment rate for physicians was set low (an average rate of 2.3 an hour) to allow for walk-ins on the assumption that there would be a sufficient number of walk-ins to compensate for missed appointments and for the low scheduled appointment rate. We found, however, that about 40 percent of the scheduled appointments were missed and walk-ins only compensated for about 55 percent of missed appointments. Thus, the actual use rate for this center's physicians was only 1.90 patients an hour.

We discussed the problem of broken appointments and walk-in patients with a medical consultant[1] for OEO and HEW. This consultant informed us that she had found the average broken appointment and walk-in rate for medical care to be nearly identical (about 40 percent) but pointed out that walk-ins did not necessarily come in at the appropriate time to take broken appointments. This consultant recommended double scheduling (scheduling two patients for the same time period) as a solution to this problem. However, she informed us that centers usually rejected this recommendation because patient backlogs could occur on days when broken appointments were minimal.

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[1] Through July 1972 this consultant had made 73 medical reviews of OEO and HEW funded centers.

Adequacy of facilities

Lack of sufficient examining rooms and/or operatories was another operational factor frequently cited by project officials as restricting the ability of their professional staff to serve more patients an hour. Health care administrators generally agree that each physician should have at least two examining rooms and each dentist should have at least two operatories available. This minimizes the loss of time between treating patients because the patients can be prepared by a medical assistant before seeing the physician or dentist. All of the centers reviewed would have had at least two examining rooms or operatories for each physician or dentist if their staffing levels were reduced to the level justified by their actual patient loads.

At the time of our review, 4 of the 12 medical clinics and 7 of the 10 clinics with dental staffs had less than 2 examining rooms or operatories available for each physician or dentist on duty during weekday hours. All the centers had ample space available for each physician and dentist during the evening and weekend hours when reduced staffing levels were maintained.

We believe that, because of the patient workload, the lack of assigned examining rooms or operatories did not significantly affect the number of patients seen by the physicians and dentists--almost half of the patients treated at these centers did not have appointments but were seen almost immediately.

Outreach programs

Outreach programs were designed to inform community residents of the services offered at the centers. Some of the information methods these programs used were: (1) brochures on a center's hours, services, and eligibility requirements, (2) newspaper articles or radio announcements, (3) center employees speaking at local community or church functions, (4) conducting tours of a center, (5) listing a center's services with health care referral agencies, (6) participation in school health programs, and (7) using family health outreach or other social workers to contact individuals and families.

Although we did not attempt to evaluate the effectiveness of outreach programs, officials at four of the centers commented that their outreach programs were somewhat deficient. At the time of our fieldwork, however, two of these centers were preparing brochures for distribution. A third center was in the planning stage of developing a marketing program for a prepaid Medicaid contract. The fourth center felt it was most important to have outreach workers concentrate on handling crisis situations and had no immediate plans to intensify outreach activities.

Although the centers' officials generally had some plans to expand their level of activity, we pointed out and they generally agreed that their programs had been in operation long enough (all four of these centers had been in operation at least 3 years) for the majority of community residents to be aware of the availability of service at their centers.

Efficiency of nonprofessional employees

Both the OEO and HEW programs encourage the training of community residents as nonprofessional center employees. An objective of these training programs is to improve the health of the trainees by effecting changes in their basic living conditions. Among the positions at the centers commonly filled by community residents were: billing clerks, family health outreach workers, eligibility workers, and dental assistants.

At five of the centers, officials felt that their training programs were turning out relatively inefficient employees. For example, officials at one center stated that their unskilled trainees were handicapped by their backgrounds and required more training than anticipated. Other center officials stated that the training programs were too superficial and that the new employees lacked proper on-the-job supervision.

Considering the types of positions filled by community residents, any inefficiency on the part of these employees would affect the centers' overall operations rather than directly hindering the productivity of physicians and dentists. However, in three of the centers physicians were performing administrative tasks which could easily have been

handled by other employees. One reason for this condition was that the physicians lacked confidence in the ability of community residents to deal with such tasks as preparing drug labels and making formal notations in patients' files. Also, because of their relatively low use rates, physicians were able to perform these tasks without interfering with their practice of medicine.

Language barriers

At two of the centers significant language barriers existed between the majority of the patients and the physicians and dentists. These two centers were in predominantly Spanish-speaking communities, but most of the physicians and dentists in these centers could not speak Spanish. This affected productivity because a physician or dentist required the services of a translator to insure that the patient understood the physician's or dentist's directions and, conversely, that the physician or dentist understood the particular problems being explained by the patient. This took considerably more time than a normal conversation.

CONCLUSION

In the 12 centers reviewed, the basic cause of the underuse of physicians and dentists was that the centers' staffing levels exceeded those required. Because of this condition the valuable services of physicians and dentists are not being effectively used. Furthermore, the salary costs--approximately $1 million a year--related to the overstaffing of physicians and dentists in the centers reviewed are an unnecessary drain on Federal funds available for health care programs.

The most significant of the operational factors which hindered physician and dentist productivity was the high number of both walk-in patients and broken appointments. Several other factors were commonly cited by center officials as having an adverse effect on physician and dentist productivity, but they were of lesser importance because they were not found to be a significant problem at the majority of the centers reviewed. Among these factors were those relating to the number of available examining rooms or operatories, the effectiveness of outreach programs, the efficiency of the nonprofessional staffs, the amount of time physicians and dentists spent on administrative tasks, and the language barrier existing between professional staff and patients.

RECOMMENDATIONS

We recommend that, to increase the use of physicians and dentists and more effectively use program funds, the Secretary of HEW:

--Require that centers maintain a level of professional staffing based on realistic demands for services.

--Urge centers to emphasize to their patients the importance of making and keeping appointments.

AGENCY COMMENTS AND OUR EVALUATIONS

HEW agreed with our recommendation that centers maintain a level of professional staffing based on realistic demands for services and stated that, when the standards are established, tested, and evaluated, the centers will be held accountable for their levels of physician and dentist staffing. (See app. II.) HEW believes, however, that, because

of the complex nature of the delivery of ambulatory health care, it would be premature to establish standards on only physician and dentist use. HEW believes various factors such as equipment, examination rooms, and socioeconomic and attitudinal characteristics of the consumer interrelate with and influence the use of professional staffs. HEW stated that the first corrective action is being directed toward strengthening and refining the management information and reporting systems which are installed at most centers. HEW stated that several evaluation contracts had been awarded to (1) improve the quality of center-generated data and (2) determine how staffing patterns affect staff use, cost, and the quality of care.

The proposed action by HEW to improve the monitoring of center operations by strengthening and refining its management information system should provide detailed data to associate productivity levels with other aspects of center operations. The use rates determined during our review as well as the management data currently reported by the centers, however, show that certain centers have very low averages for the use of physicians and dentists. We suggest that for the centers exhibiting low use rates, as in three of the centers where the physicians treated on the average 1.06, 1.28, and 1.31 patients an hour, an analysis of the other aspects of center operations need not be accomplished before taking action to establish a more realistic level of staffing.

HEW generally agreed with our recommendation that centers emphasize to their patients the importance of making and keeping appointments and plans to incorporate into the guidelines for health centers a statement in which the importance of appointment keeping and appointment scheduling would be stressed. HEW stated, however, that it believed the importance of making appointments was being appropriately stressed by the centers but that the patients served by the centers did not comply with an appointment system as readily as other population groups. HEW stated, however, that it planned to actively investigate methods for alleviating this problem and was presently collecting center data which would enable the development of criteria on patient scheduling.

CHAPTER 4

NEED TO INCREASE FREQUENCY OF SITE ASSESSMENT VISITS AND TO IMPROVE REPORTING REQUIREMENTS

SITE ASSESSMENT VISITS

Both OEO and HEW used site assessment visits, together with reported information on center operations, to monitor center activities. Only five of the centers, however, had received site assessment visits within the 2-year period ended March 1973. Two of the centers had never received site assessment visits.

OEO's Office of Health Affairs and HEW's Community Health Service were responsible for reviewing the activities of these centers. However, OEO basically used centralized administration, but HEW has been decentralized since March 1, 1970.

Both OEO and HEW used the team or task force approach in performing these reviews. The site assessment team approach consists of a group of specialists, often consultants, evaluating a center's performance for 1 to 4 days. Site assessment visits attempt to identify a center's major program strengths and weaknesses. The visits include (1) medical reviews, involving the quality of care provided, (2) reviews of data collection and evaluation, and (3) reviews of program operations. Both OEO and HEW contracted with the same medical consultant to supervise medical reviews.

OEO used site assessment teams for project evaluation since 1968. HEW developed its Community Health Service site assessment teams in 1971, to supplement the monitoring efforts of regional offices. HEW's headquarters, however, has not provided regional offices with any definite guidance concerning the frequency, method, or content of project evalutions to be performed.

Neither OEO nor HEW established definite timetables for site assessment visits. The following table shows when the last visits were made at each of the 12 centers as of March 1973.

Latest Site Assessment Visit

Center	Date	Performed by	Days at site
A	Mar. 1970	OEO	2
B	Mar. 1970	OEO	2
C	Jan. 1969	OEO	1
D	June 1972	HEW	2
E	Feb. 1972	OEO	2
F	May 1972	HEW	4
G	July 1970	OEO	2
H	- -	-	-
I	Sept. 1971	OEO	3
J	Mar. 1972	HEW	4
K	June 1970	OEO	2
L	- -	-	-

Site assessment reports issued before 1972 generally did not deal with underuse. However, three of the four site assessment reviews performed during 1972 identified underuse as a problem, as shown by the following statements taken from these reports.

--"The Center's staff does not have enough work--this results in frustration, stark idleness, anxiety, duplication and confusion * * * The patient population base is too small for the number of staff. Expansion has been too slow in coming * * * The size of the staff should be examined to determine the actual need for the present number of employees."

--"Physician productivity seems low * * * An average of between 3 and 4 patients per hour could be seen by primary physicians if patient flow and physician efficiency were increased * * * Walk-in patients make up approximately 30-40 percent of the total patient population. Of 'appointed' patients, approximately 30 percent break or miss their appointments and the majority of these missed appointments patients show up a few days later as walk-ins."

--"The [dental] program is overspecialized and is having little impact on the community * * * In order to make the community more aware of the dental program and increase its utilization rate, it is recommended that family health workers receive training in recognizing signs of oral pathology, know mechanisms for entry into the system and realize the advantages of the preventive dentistry program with its resultant maintenance levels as opposed to current episodic care."

Although at the time of our review it was too soon to evaluate the results of any corrective action taken, it appears OEO's and HEW's recent site assessment visits are satisfactorily identifying the major causes of physician and dentist underuse. In August 1973 an HEW official told us that a center is now required to submit to HEW a plan of corrective action within 60 days after receipt of a site assessment report. However, the overstaffing of both physicians and dentists found during our review indicates the need for more frequent visits as well as timely followup to insure that corrective action is taken.

In October 1972 HEW formed a Technical Assistance Branch under the Division of Health Care Services, Community Health Service, to aid regional offices when there are demonstrated project inadequacies. HEW officials stated that their initial emphasis would be on improving project management capabilities. This area has suffered to a large degree because of weaknesses in centers' reporting systems.

NEED FOR IMPROVING REPORTING SYSTEMS

At the centers reviewed professional staff use data was generally inaccurate and/or inadequate for making either external project evaluations or internal management decisions. Moreover, many of the centers were not promptly forwarding the required statistical reports to the funding agency.

At three of the centers which used automatic data processing contractors to compile their monthly statistical reports, we found understatements of as much as 30 percent in the number of physician encounters or treatments reported. Officials of these centers attributed the discrepancies to late, illegible, and missing encounter forms.

OEO and HEW site assessment teams found similar reporting deficiencies during their site visits. For example:

--An OEO site assessment report on a visit made during February 1972 stated that obvious errors were present in the center's data reporting system. One of the center's reports showed that 28 persons were examined in the dental clinic during the 21 days it was open in January. The dental director stated that the reported 1.3 daily patient load average was a gross undercount.

--An HEW site appraisal report on a visit made during March 1972 stated that statistical data was not being collected on the number of patients visiting the center or on the types of services being rendered.

At most of the centers reviewed, we found no formalized records designed for accumulating staff use data. As a result, a variety of records, primarily designed for other purposes, were being used as source documents for reporting use data. At several of the centers such information as the number of patients seen; the patient's appointment status (scheduled or walk-in); and whether scheduled appointments were kept, broken, or canceled was taken from medical and dental appointment logs. These appointment logs, however, were not designed to accumulate this information and, instead, contained a variety of informal markings (if any at all) to denote this information. The symbols and the thoroughness used in recording such data varied considerably.

At three centers we found no formal records of the professional staffs' time. Any measure of a physician's or dentist's output, such as number of patients treated or number of procedures performed, would have more value for decisionmaking purposes if the corresponding hours worked by the physician or dentist were related to output.

The use data contained in health center reports was not used as the basis for our review. We reconstructed use data from encounter forms, appointment logs, and patient sign-in sheets and through discussions with center officials.

OEO's reporting requirements

OEO initially established program progress reports in November 1967 and paid at least $900,000 to private contractors to develop and help implement a national reporting system. OEO's reporting system required the centers to submit quarterly and annual status reports and management and cost data to its headquarters. The quarterly status reports were required to contain 23 separate tables of data on centers' operations, including 5 tables which provide summary data on professional staff use. This data includes (1) staff composition and productivity, (2) encounters with center staff, (3) medical and dental encounters, (4) number of patient visits to center and resulting encounters, and (5) home encounters by center staff. Each center had the option of deciding whether to compile this data for the total staff or for each physician and dentist.

As of June 30, 1972, only 28 of the 55 operational OEO centers reported data on physician productivity and staffing ratios and similar information for dentists was reported by 26 centers.

It appears that OEO made little use of this information other than compiling and publishing it in summary form. For example, OEO officials were unable to cite a single example of when they acted to limit the number of professional staff in a center based on physician or dentist use data submitted in a quarterly or annual project report.

HEW's reporting requirements

HEW has basically delegated primary center responsibilities to its regional offices. In addition to funding and evaluation, these delegated responsibilities include the center's reporting requirements. Each HEW center is required to submit a copy of its output tables to the responsible region, which, in turn, forwards it to the central office for compilation into quarterly reports. The reports are then returned to the regions.

HEW's reporting system is very similar to OEO's and contains five sections, including one on use data. The reporting system went into effect during October 1971; however, the use section became operational in January 1973. This section

enables comparison of the number of encounters with the number of FTE physicians and dentists on a staff. HEW officials stated that, when sufficient use data was compiled, it would be used to detect and correct inappropriate staffing levels.

CONCLUSIONS

Both the lack of adequate statistical data on physician and dentist use and the notable lack of any established criteria for evaluating such data (as discussed in ch. 2) are shortcomings in the comprehensive health program. HEW and the center administrators have the obligation and responsibility to insure that the information being reported is appropriate, accurate, and timely enough to be used in making management decisions, such as determining appropriate staffing levels. More frequent site assessment visits should be used to determine when appropriate management decisions have not been made and the reasons why they have not.

RECOMMENDATIONS

We recommend that, to assist in improving centers' management decision processes and to insure the prompt identification and initiation of corrective actions for operational deficiencies, the Secretary of HEW:

--Increase the frequency of central office site assessment visits.

--Institute procedures to provide for prompt followup on evaluation recommendations.

--Direct the site assessment teams to periodically sample the accuracy of the centers' registration and staff use data and insure that such data is being appropriately used as a basis for management decisions.

--Direct center officials to use adequate and appropriate source documents that are designed to systematically record required information.

AGENCY COMMENTS

HEW agreed with the reasoning behind our recommendation to increase central office site assessment visits; however, rather than increase site assessments across-the-board, HEW planned to give more attention to those centers identified as having a particular problem or problems. HEW stated that it planned to increase the regional staffs' evaluation capabilities.

In addition, HEW has for several years used a contractor to perform medical audits of the centers. HEW stated that a similar contract had been entered into with another contractor and that under a third contract it had explored the feasibility of the centers conducting their own internal medical audits.

HEW agreed with our recommendation for prompt followup on evaluation recommendations and has initiated a new policy whereby a center now must develop an action plan for submission to the cognizant HEW regional office within 60 days after receipt of an evaluation report.

HEW concurred with our recommendations that (1) site assessment teams review the accuracy and use of center registration and use data and (2) centers use adequate source documents to record required information. HEW stated that several steps had been taken to initiate corrective action.

EXECUTIVE OFFICE OF THE PRESIDENT
WASHINGTON, D.C. 20506

OFFICE OF ECONOMIC
OPPORTUNITY

Oct 31 1973

Mr. John D. Heller
Associate Director
Manpower and Welfare Division
United States General Accounting
Office
Washington, D. C. 20548

Dear Mr. Heller:

This is in response to your letter requesting comments on GAO's draft report "Underutilization of Physicians and Dentists in Comprehensive Health Service Projects".

We are maintaining a liaison with OEO's former Office of Health Affairs and have been advised by that office through our liaison activities that a comprehensive response to the draft report has been prepared by the Bureau of Community Health Services, DHEW. A copy of the response may be obtained through that Agency.

Sincerely,

R. T. Rollis, Jr.

R. Thomas Rollis, Jr.
Deputy Controller

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20201

NOV 12 1973

Mr. John D. Heller
Associate Director
Manpower and Welfare Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Heller:

The Secretary asked that I respond to your letter of August 9, which asked for our comments on a draft of your report to the Congress entitled, "Underutilization of Physicians and Dentists in Comprehensive Health Service Projects." Our comments are enclosed.

We appreciate the opportunity afforded us to comment on this report before its publication in final form.

Sincerely yours,

John D. Young
Assistant Secretary, Comptroller

Enclosure

COMMENTS OF THE DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE ON A DRAFT OF GENERAL ACCOUNTING OFFICE REPORT TO THE CONGRESS ENTITLED, "UNDERUTILIZATION OF PHYSICIANS AND DENTISTS IN COMPREHENSIVE HEALTH SERVICES PROJECTS"

General

The Department concurs in GAO's recommendations. However, before discussing them point-by-point we would like to put this matter into what we believe is a more balanced perspective.

Very basically, the Department is concerned with health center performance as a whole. Utilization of physicians and dentists is certainly one facet of overall performance, but the complexity of delivering ambulatory health care and the largely unknown ways in which the various factors involved in providing this care interact, preclude considering just one factor in isolation. In fact, the present state of the art is such that it is not clear whether productivity within comprehensive health service projects can be compared to that in the fee-for-service sector or in private prepaid group practices in the manner suggested by the report. As an example of this lack of comparability, physicians in a health service project devote considerable amounts of time to the supervision of allied health professions and/or to administrative and indirect services such as consultation and education. Fee-for-service physicians do not devote similar amounts of time to similar activities. As discussed in more detail later on, we have several activities underway which will help us address these issues.

GAO Recommendations

Develop and establish a criteria to serve as a realistic standard for the utilization of health center physicians and dentists.

Require that centers maintain a level of professional staffing based on realistic demands for their services through periodic evaluations of center management information reports.

Department Comment

We concur in the need for such criteria and have taken steps towards gathering the data necessary for its development. Once these criteria are established, tested, and their effects evaluated, we will hold centers accountable for their levels of physician and dentist staffing. Before discussing the specifics of actions we have taken or plan to take, we would like to place the relative priority for developing these particular criteria -- and the complexities involved -- into better perspective.

APPENDIX II

Many factors influence the use and productivity of center physicians and dentists such as (i) the appropriateness of equipment, support staff, examination and consultation space; as well as (ii) less apparent factors as the socio-economic and attitudinal characteristics of the consumers. While these factors interrelate and influence each other, we are not as yet aware of which are the most important in determining any particular outcomes such as provider productivity. Several conditions we have noted underscore the complex nature of the delivery of ambulatory care. Our reading of available data suggests:

> .. as "productivity" increases, quality care decreases. This points out that a purely production line approach does not readily equate with a successful doctor-patient relationship.
>
> .. the longer a center has been in operation, the higher the quality of care and (GAO estimated) productivity becomes.

Without a fuller understanding of the relationship of the many factors involved, we believe it would be premature, if not limiting to the operation of the centers to set criteria on only one of them as recommended.

In view of the above, the first thrust of our corrective action was directed towards strengthening and refining the management information and reporting systems which are now installed at most centers. The utilization and cost reporting data derived from these systems will permit us to associate productivity levels with levels of other aspects of center operations. We believe it is through this type of association, and not by viewing physician and dentist productivity in isolation, that we will be able to develop a more realistic standard for utilization of health center physicians and dentists.

Several evaluation contracts have been let to assist in the above. One, let in June 1973 has as its specific goals the improvement of the reliability and validity of center generated data, and its analysis for important relationships. Another, initiated by OEO in August 1972, concerns staffing patterns in neighborhood health centers and other settings. This study is examining how different staffing patterns affect utilization, costs, and -- to some degree -- the quality of care. We expect the final report in November 1973.

Substantial preliminary and some advanced work has been completed by program staff in this area also. We are now developing "Performance Measure and Funding Criteria" for Family Health

Centers, Migrant Health Centers, and Ambulatory Health Centers (Neighborhood Health Centers) for use in fiscal year 1974. A broad set of prototype standards for ambulatory health care centers have been developed which cover the many aspects of a center's operations, including staffing. Once implemented, compliance with these standards will be part of the regional funding review.

As soon as the data from the reporting systems in the centers has been developed to a level considered adequate -- and checked out for validity -- it will be utilized in the development of performance criteria, which will include measures of productivity for health centers. Also, as stated, once these criteria are tested and appropriately evaluated, we will hold centers accountable for their levels of physician and dentist staffing. Regional offices will require that projects alter their staffing in an appropriate manner when utilization criteria are not met.

GAO Recommendation

Urge projects to emphasize to their patients the importance of making and keeping appointments in order to assure efficient center operations.

Department Comment

We concur with the thought expressed by this recommendation -- that patients at Neighborhood Health Centers (NHC) should make and keep appointments. Although we feel we can reasonably assume that the importance of this is being appropriately stressed by the centers, we will incorporate a statement into guidelines for comprehensive health service projects now in draft in which the importance of the individual and the center is stressed in appointment keeping and appointment scheduling.

There is quite a bit more involved, however. The establishment and keeping of an appointment is a two-way street between the provider and consumer. Appointments must be scheduled at appropriate and acceptable times for the patients and with some assurance that the patients will be able to find the transportation and to see that other "problems" are adequately taken care of while they are being seen in the center. Conversely, when an appointment is made it is the patient's responsibility to cancel it if necessary. It must also be emphasized that the patients served by NHC's are somewhat unique. They do not comply with an appointment system as readily as other population groups. The results of working on the problem of broken appointments may not be apparent for some time. The private sector dealing with poverty populations is no more

successful in dealing with no-show rates than Federally-supported health centers. We plan to actively investigate methods for tackling this very difficult problem.

In addition, it has been noted that the relationship of walk-in patient encounters to appointments reflects the operation of the appointment system and the user attitudes towards that system. Very high walk-in rates may indicate a need to improve the appointment system. Similarly, a very low walk-in ratio may indicate lack of access to users with an emergency problem.

We are presently collecting and validating project data from the center's information and reporting systems to enable us to develop realistic criteria and recommendations to centers about patient scheduling.

GAO Recommendation

Increase the frequency of central office site assessment visits.

Department Comment

While we agree with the reasoning behind this recommendation -- that site assessments are a necessary and valuable tool -- we are approaching this matter in a different manner than that called for by the recommendation. Rather than increase the number of site assessments across-the-board as suggested, we prefer instead to focus our greatest emphasis on those centers specifically identified through feedback reports or by our regional office staff as having a particular problem or problems.

We also plan to increase the regional staff's evaluation capabilities. We believe that this would increase follow-up more effectively than central assessments and would be more in line with the DHEW policy on decentralization.

In addition to in-house assessments such as these, a highly competent contractor (under contract with OEO and this Department) has been conducting external medical audits of the centers for several years. Another like contract has been entered into with a different contractor. The activity consists of an on-site, team audit of the quality of care delivered in the centers. Under a third contract, we have explored the feasibility of developing a capability for the centers to conduct their own, or "internal" medical audits. These actions we believe, fulfill the intent of the GAO recommendation.

GAO Recommendation

Institute procedures to provide for the timely follow-up on evaluation recommendations to assure corrective action is taken.

Department Comment

We concur. In July of this year, a new policy was initiated to insure that corrective action is taken. A center now has to develop an action plan for submission to the cognizant HEW regional office within 60 days after receipt of the evaluation report. The action plan must detail specific steps to be employed to assure corrective changes, specifying the means and time frame for accomplishment of each step. Regional offices will monitor the adequate follow-through of the action plan.

GAO Recommendations

Direct the site assessment teams to periodically sample the accuracy of the center's registration and utilization data and assure that such data is being appropriately used as a basis for management decisions.

Direct project officials to use adequate and appropriate source documents that are designed to systematically record required information.

Department Comment

We concur and have taken a number of steps, discussed following, to assure that accurate registration and utilization data is maintained by the centers, on appropriate source documents; and that this data is being appropriately used as a basis for management decisions:

.. Guidelines and procedures for validating such data by site assessment teams are being developed by a contractor. This "validation protocol" will be tested in two centers and carried out in eight additional centers beginning during the first quarter of calendar year 1974.

.. Quarterly reports from the centers are being carefully studied for inconsistencies, apparent inaccuracies and credibility questions by analysts; questions are resolved by direct contact with the center.

.. On-site technical assistance on the proper maintenance of this data will be provided to five centers each quarter under an ongoing contract.

.. Seminars on the management uses of nationally reported data will begin late this year to review with project evaluators and managers the use of internal national reported data and summary and individual project data analysis prepared by program officials as a basis for management decisions.

Work continues on improving the quality of source documents at the centers. Ambulatory Health Care Standards are being developed for use by all Comprehensive Health Centers which includes a definitive standard on the types needed.

COMPREHENSIVE HEALTH PROJECTS REVIEWED

Name and location of project	Funding agency (note a)	Years in operation (note b)	Annual budget in $ millions (note c)
A. Charles R. Drew Neighborhood Health Center, East Palo Alto, Calif.	[d]OEO	4	$2.0
B. Mission Neighborhood Health Center, San Francisco, Calif.	OEO	4	3.0
C. Alviso Family Health Center, Alviso, Calif.	[d]HEW	4	2.8
D. West Oakland Health Center, Oakland, Calif.	HEW	3	2.5
E. Roxbury Comprehensive Community Health Center, Roxbury, Mass.	[d]OEO	5	2.7
F. Columbia Point Health Center, Dorchester, Mass.	[d]OEO	7	2.1
G. Providence Health Centers, Inc., Providence, R.I.	OEO	5	.8
H. Hill Health Center, New Haven, Conn.	HEW	2	1.5
I. Southeast Philadelphia Neighborhood Health Center, Philadelphia, Pa.	OEO	3	2.6
J. Trenton Neighborhood Health Center, Trenton, N.J.	HEW	3	1.6
K. Provident Comprehensive Neighborhood Health Center, Baltimore, Md.	OEO	4	3,5
L. Rural Health Corporation of Luzerne County, Wilkes Barre, Pa.	[d]OEO	1	.8

[a]Agency administering project during period used for physician and dentist productivity analysis.

[b]Approximate number of years of operation under Federal funding.

[c]Approximate annual funding or requested budget (all sources) for projects' most recent funding period.

[d]Indicates centers transferred from OEO to HEW before January 1973.

APPENDIX IV

PRINCIPAL OFFICIALS

OF THE FEDERAL ORGANIZATIONS

RESPONSIBLE FOR THE ADMINISTRATION OF ACTIVITIES

DISCUSSED IN THIS REPORT

	Tenure of office	
	From	To
OFFICE OF ECONOMIC OPPORTUNITY		
DIRECTOR:		
Alvin J. Arnett	Sept. 1973	Present
Alvin J. Arnett (acting)	June 1973	Sept. 1973
Howard Phillips (acting)	Jan. 1973	June 1973
Phillip V. Sanchez	Sept. 1971	Jan. 1973
Frank C. Carlucci	Dec. 1970	Sept. 1971
Donald Rumsfeld	May 1969	Dec. 1970
Bertrand M. Harding (acting)	Mar. 1968	May 1969
R. Sargent Shriver	Oct. 1964	Mar. 1968
ASSOCIATE DIRECTOR, OFFICE OF HEALTH AFFAIRS:		
Jeffrey Binda (acting)	Feb. 1973	Aug. 1973
E. Leon Cooper, M.D.	Nov. 1971	Feb. 1973
Carl A. Smith, M.D. (acting)	May 1971	Nov. 1971
Thomas E. Bryant, M.D.	Sept. 1969	Apr. 1971
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE		
SECRETARY OF HEALTH, EDUCATION, AND WELFARE:		
Caspar W. Weinberger	Feb. 1973	Present
Frank C. Carlucci (acting)	Jan. 1973	Feb. 1973
Elliot L. Richardson	June 1970	Jan. 1973
Robert H. Finch	Jan. 1969	June 1970
Wilbur J. Cohen	Mar. 1968	Jan. 1969
John W. Gardner	Aug. 1965	Mar. 1968

	Tenure of office	
	From	To
DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (cont.)		
ASSISTANT SECRETARY FOR HEALTH:		
Charles C. Edwards	Apr. 1973	Present
Richard L. Seggel (acting)	Jan. 1973	Apr. 1973
Merlin K. DuVal	July 1971	Dec. 1972
ADMINISTRATOR, HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION (note a):		
Harold O. Buzzell	May 1973	June 1973
David J. Sencer (acting)	Jan. 1973	May 1973
Vernon E. Wilson	July 1970	Dec. 1972
Joseph T. English	Jan. 1969	July 1970
Irving J. Lewis (acting)	Sept. 1968	Jan. 1969
Robert Q. Marston	Apr. 1968	Sept. 1968
ADMINISTRATOR, HEALTH SERVICES ADMINISTRATION:		
Harold O. Buzzell	July 1973	Present
DIRECTOR, COMMUNITY HEALTH SERVICE:		
Paul B. Batalden, M.D.	Apr. 1972	Present
Jordan J. Popkin (acting)	Aug. 1970	April 1972
John W. Cashman	Aug. 1965	Aug. 1970

[a]Effective July 1, 1973, the Public Health Service was reorganized and the Health Services and Mental Health Administration was abolished. The Community Health Service is now a part of the newly created Health Services Administration.

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