

# Activities of Health Officers *in* Local Health Departments

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In his typical work week, the local health officer spends 2,538 minutes for 74 activity occurrences in 12 different health programs. Seventy-five percent of this average, or 1,896 minutes, involves medical judgment.

These figures are derived from information supplied by 186 physicians serving as health officers in local health departments throughout the United States, in a study undertaken to obtain information on the utilization of medical manpower in the public health field.

Critical shortages of manpower exist in public health—a field for which the preparation of professional workers requires a long time and in which the number of such workers is limited. The prospects are that the demands of civilian defense, the needs of the military services, and those of the Point IV technical assistance pro-

gram will further accentuate this shortage. Consideration of these factors made it worth while to ascertain, if possible, the programs and activities of physicians employed as local health officers and to learn something about the extent to which they felt they used medical judgment in performing those duties.

The techniques of activity analysis and time study have been used successfully in the field of public health for investigations into the work of various types of personnel, though only a few studies have been reported for health officers. In 1933, Charters (1) studied the duties of Ohio public health commissioners to provide the basis for the curriculum of a physician-training program. Dean (2), in 1935, analyzed the job of a rural health officer as one of the Brunswick-Greenville Health Administration Studies. Included was a distribution of the time of the health officer for a 10-month period.

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## Plan and Participation

The present study was planned to collect information concerning the range and frequency of activities of full-time health officers in local health departments serving jurisdictions of 50,000 to 500,000 populations within the continental United States.

Reports were received from 186 health officers, 51 percent of the 365 known to be employed on a full-time basis in all types of local health departments serving areas with such populations

(3). Health officers in 35 States participated in the study.

### Length of Work Week

One hundred and six health officers reported a 5½-day week, 66 reported a 5-day week, 9 reported a 6-day week, and 4 reported some time on the seventh day. One participant became ill and reported only 3 days.

The length of the work day, Monday through Friday, ranged from 4 to 16 hours, with a median of 8 hours. The median time on Saturday was 4 hours.

Eighty-five of the respondents reported a work week of 40 to 48 hours, while 46 reported between 36 and 40 hours, and 21 between 48 and 52 hours. Twenty-five reported less than 36 hours, 8 reported between 52 and 60 hours, and one, serving a large local district, reported 77 hours.

The average length of work week for actual time reported was 42 hours and 18 minutes. Very little variation occurred in the average when the length of the working time was computed by size of population served, or by type of department.

### Programs

A total time of 472,045 minutes was reported by the 186 local health officers for activities performed during the period of the study. This represented 13,749 occurrences of those activities, or a mean time of 34 minutes per occurrence.

The material reported was grouped into 20 types of programs. Nineteen of these were categorical and one, general, related to more than one program or to over-all administration. This group accounted for 39 percent of all time reported, and the first 10 programs accounted for 86 percent of the total time reported.

<i>Program</i>	<i>Number occurrences</i>	<i>Number minutes</i>	<i>Percent time</i>	<i>Rank</i>
All.....	13, 749	472, 045	100. 0	
General.....	4, 932	184, 650	39. 1	1
Sanitation.....	1, 895	54, 025	11. 4	2
Communicable disease.....	1, 233	34, 515	7. 3	3
Tuberculosis.....	870	30, 240	6. 4	4
School.....	656	24, 265	5. 1	5
Venereal disease.....	661	21, 280	4. 5	6
Medical care.....	540	17, 705	3. 8	7
Infant and preschool.....	342	14, 905	3. 2	8
Mental hygiene.....	373	13, 125	2. 8	9
Crippled children.....	300	10, 970	2. 3	10
Chronic disease.....	254	8, 590	1. 8	11
Hospital facilities.....	194	8, 140	1. 7	12
Dental.....	246	7, 800	1. 7	13
Maternity.....	188	6, 920	1. 5	14
Public health statistics.....	254	6, 475	1. 4	15
Cancer.....	156	5, 400	1. 2	16
Laboratory.....	219	4, 925	1. 0	17
Disaster and emergencies.....	102	4, 535	1. 0	18
Training.....	41	3, 945	. 8	19
Industrial hygiene.....	73	2, 270	. 5	20
Personal and unidentified <sup>1</sup> .....	242	7, 365	1. 5	-----

<sup>1</sup> Only 25 of the 13,749 entries, accounting for 1,025 minutes, could not be identified, an insignificant fraction of the time included in the study.

When the individual programs were arrayed in descending order according to the amount of time reported, there was a consistency in the relative rank of most of them, whether they were considered by size of population served, by type of department, by geographic

location, or by season. Over-all administrative problems, as reported under general, ranked first on all the distributions. Sanitation was second in all but local and State district health departments. Although the other programs were not as consistent, with but few

exceptions they tended to cluster within a comparatively narrow range. Medical care ranked from fourth to tenth place in the 20 possible distributions.

### Activities

Activities reported were grouped under 26 headings. The first five activities represented 45 percent of the total time. The inclusion of the next five activities raised this to 70 percent.

<i>Activity</i>	<i>Number of occurrences</i>	<i>Number of minutes</i>	<i>Percent of time</i>	<i>Rank</i>
All.....	13, 749	472, 045	100. 0	
Conferences, individual.....	1, 909	48, 505	10. 3	1
Clinic participation.....	716	48, 160	10. 2	2
Correspondence.....	1, 343	40, 505	8. 6	3
Conferences, group.....	655	40, 010	8. 5	4
Travel.....	1, 092	36, 150	7. 6	5
Program planning.....	754	30, 345	6. 4	6
Direction and supervision.....	943	28, 305	6. 0	7
Records and reports.....	651	20, 115	4. 3	8
Meetings attended.....	202	19, 715	4. 2	9
Telephone.....	1, 832	18, 200	3. 8	10
Field investigation.....	273	15, 255	3. 2	11
Board participation.....	173	15, 020	3. 2	12
Community activity.....	269	12, 455	2. 6	13
Self-improvement—reading, etc.....	319	11, 945	2. 5	14
Budget and fiscal.....	324	10, 175	2. 2	15
Preparation of educational material.....	216	9, 530	2. 0	16
Personnel.....	329	8, 605	1. 8	17
Enforcement of ordinances.....	251	8, 355	1. 8	18
Licensing and permits.....	313	7, 320	1. 6	19
Professional consultation services.....	261	6, 805	1. 4	20
Evaluations and surveys.....	166	6, 445	1. 4	21
Talks given.....	94	5, 800	1. 2	22
Teaching.....	69	5, 015	1. 1	23
Education-in-service.....	94	4, 980	1. 1	24
Housekeeping and errands.....	116	3, 565	. 8	25
Purchasing.....	144	3, 400	. 7	26
Personal and unidentified.....	242	7, 365	1. 5	

For both programs and activities, the greatest variations from the array of the total time were found in the health departments which served the largest population, in State district health departments, and in the Great Plains and Rocky Mountain regions.

### Relation of Activity to Program

No consistent pattern emerged in relating activities to programs. Only individual conferences and clinic participation represented as much as 10 percent of the total time. Direction and supervision required 6 percent of the total

When the activities were grouped by size of population, type of department, season, and geographic area and were arrayed in descending order according to the amount of time reported, none of them was consistently in first place. Clinic participation ranked first in 10 of 20 distributions, although it ranked second in total time. Individual conferences, first in total time, also ranked first in 6 distributions and ranged from second to fifth in the remaining 13.

time, varying from less than 1 percent in the cancer program to 19 percent in laboratory. About 2 percent of all time reported was listed for personnel, ranging from none in three programs—crippled children, industrial hygiene, disaster and emergency—to 6 percent in laboratory. Sixty-four percent of all time devoted to personnel was reported in the general program, but this activity represented only 3 percent of the general program time.

Program planning had an important place in the chronic disease and laboratory programs where it required 12 percent of the time for each, and in the dental program with 18 per-

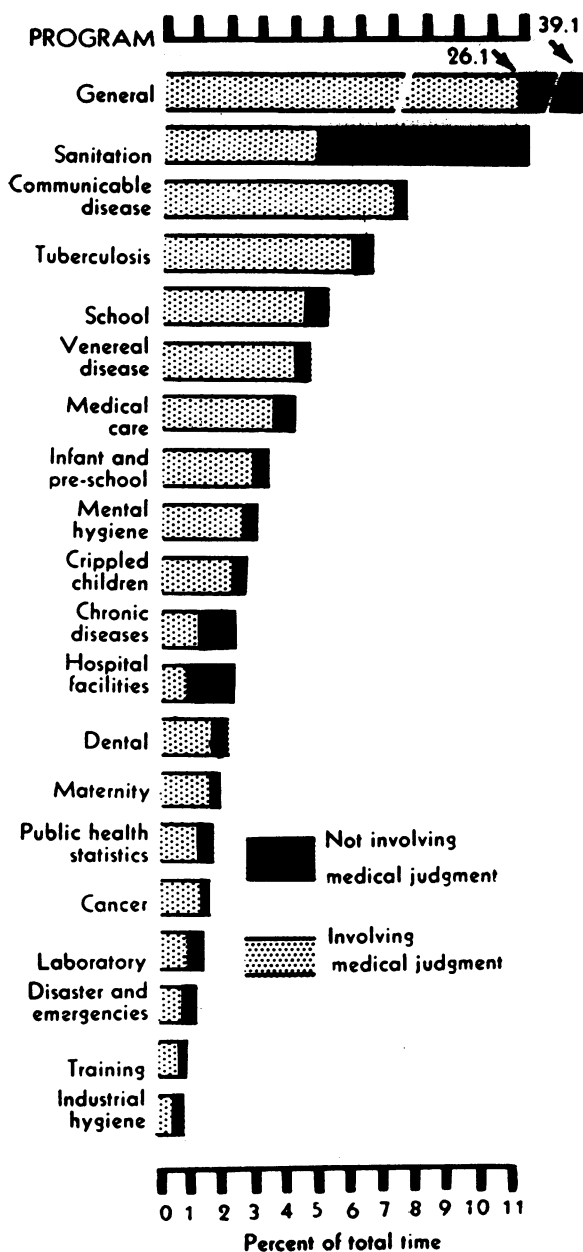


Figure 1. Percent distribution by program of total time and of total time involving medical judgment reported by 186 local health officers for one week in 1950.

cent. However, all programs except training reported some time in this activity. Eighty-three percent of all time spent on budget and fiscal matters was allocated to the general program, representing 5 percent of the time in that program. In most of the specialized programs, little or no time was reported for this activity. Licensing and permits, with which was included authorization or commitment for hospital or

other care, took 14 percent of the time reported in the mental hygiene program, 5 percent in medical care, 4 percent in tuberculosis, but was unimportant in all the other programs. The general program included 93 percent of all time for correspondence, which represented 20 percent of the total time in that program. The remainder of the time for correspondence was scattered through the categorical programs in very small units.

The only program including a considerable amount of time for records and reports was public health statistics, in which this activity represented 26 percent of the time. Meetings attended represented only 4 percent of the total time, but it was an important activity in the cancer program, requiring 29 percent of the time. It also accounted for 10 percent of the time in the industrial hygiene program, 11 percent each in medical care and in training, 13 percent in chronic diseases, and 16 percent in the disaster and emergencies program.

Individual conferences, which represented the greatest amount of time for a single activity, ranged from 1 percent in the training program to 21 percent in sanitation. It made up 12 percent of time reported for medical care. Group conferences also took a good deal of time, from 2 percent in the venereal disease program to 22 percent in the dental and training programs. Field investigations were important activities only in communicable disease and in sanitation, where they represented 11 percent of the time, and in industrial hygiene, 17 percent. Evaluations and surveys accounted for 19 percent of the time in the public health statistics program but elsewhere required little time.

In eight categorical programs, clinic participation represented the highest percent of time, with more than 40 percent reported in infant and preschool, venereal disease, and maternity. Little time was reported for this activity elsewhere. Professional consultation appeared in an appreciable amount only in the communicable disease program, where it represented 9 percent of the time.

#### Medical Judgment

Of the 472,045 minutes accounted for by local health officers in this study, 352,575, or 75 per-

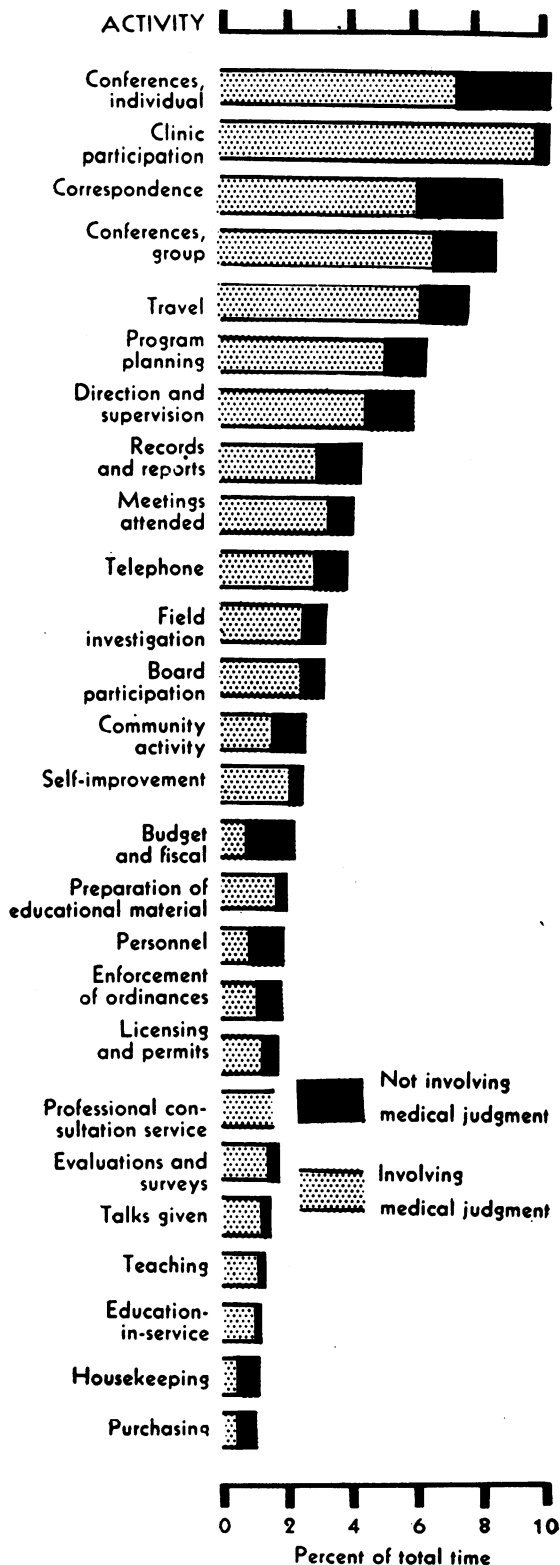


Figure 2. Percent distribution by activity of total time and of total time involving medical judgment reported by 186 local health officers for one week in 1950.

cent, were reported as spent in the performance of duties that in the opinion of the respondents involved medical judgment; 116,060, or 24 percent, were for duties that did not involve such judgment. No decision was indicated for the remaining 3,410 minutes, slightly less than 1 percent.

The mean time of 34 minutes per occurrence increased to 37 minutes when medical judgment was involved and decreased to 28 minutes when it was not involved.

No definition of medical judgment was attempted in preparing instructions for use in recording activities. It was believed that each health officer could best determine from his own professional background and his own evaluation of his activities which of his individual actions involved medical judgment.

The percent of time which involved medical judgment as reported by individual respondents ranged from 100 to 12 percent. Five of the 186 health officers reported that all their time involved medical judgment. One health officer indicated only 12 percent of the time he reported involved medical judgment. The median percent of time in which medical judgment was involved was 76. The middle 50 percent of the health officers reported that medical judgment was involved in their activities from 65 to 88 percent of the time.

Health officers in areas of 50,000 to 99,999 reported the highest percent (78) of time involving medical judgment. This decreased to 73 percent for the middle population group and to a low of 62 percent for the areas of 250,000 to 500,000. Apparently the volume of nonmedical administrative duties increased as the size of population in the area served increased.

The percent of time involving medical judgment (74 to 76) reported during each study period was quite consistent. The demands on the medical skills of the health officers seemed to be year-round demands rather than seasonal.

The amount of time reported as involving medical judgment varied with the type of department. The percent (68) of such time was somewhat lower for city-county units than for all types of departments as a whole, while it was slightly higher for local health districts (82 percent) and State districts (81 percent). The lower percent in the city-county units

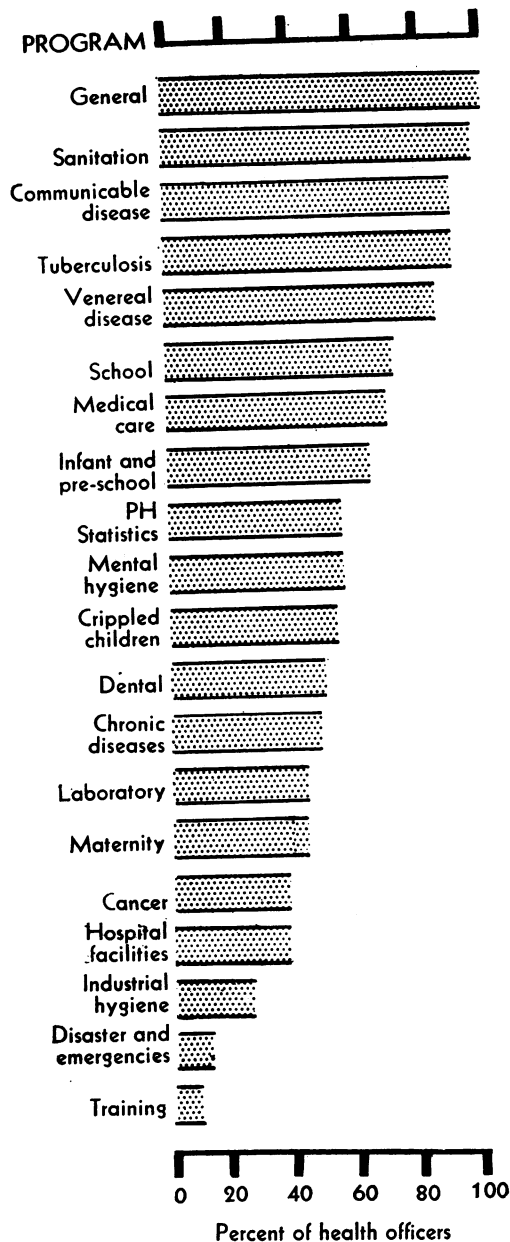


Figure 3. Percent of local health officers participating in each program.

might be explained by the more complex non-medical administrative duties, although the difference was not great enough to be significant.

When the geographic location of the health department was considered, the percent of time reported as involving medical judgment did not vary appreciably among Federal Security Agency regions except for Region VII. The 55 percent reported for this area was considerably below the range of from 69 to 78 percent re-

ported for the rest of the country. In this region, the health departments reporting were city, city-county, and county departments and were in areas of 100,000 to 249,999 population.

For the various programs, the time reported as involving medical judgment ranged from 94 to 48 percent (fig. 1). Those in which 94 to 90 percent of the time was so reported were venereal disease, communicable disease, maternity, infant and preschool, tuberculosis, cancer, mental hygiene, and medical care. The smallest percents of time (70 to 48) were reported for the dental, public health statistics, general, industrial hygiene, and sanitation programs.

The amount of time reported as involving medical judgment varied considerably for the different activities (fig. 2). Clinic participation had the most time, 99 percent, reported as involving medical judgment. In only two other activities, professional consultation and talks given, did the time exceed 90 percent. The low was 24 percent for purchasing. Five other activities (community activity, enforcement of ordinances, personnel, budget and fiscal, and housekeeping) had 56 percent or less of the time so reported. Eighty-three percent of travel time was tabulated as involving medical judgment. Since this amount of travel time was spent reaching activities reported as involving medical judgment, these trips could not be delegated to nonmedical personnel.

### Individual Respondents

Considerable variation occurred among the 186 health officers in the number of programs and the number of activities in which they reported participation during one work week.

One health officer reported time in only 4 programs while another reported time in all 20 used in the analysis. The median reported was 12, the interquartile range was from 9 to 15. Thirty health officers reported participation in 10 programs.

Every health officer reported participation in the general program. Next was the sanitation program, reported by 182 health officers. The two programs participated in by the fewest health officers were disaster and emergencies, and training (fig. 3).

The number of different activities in which

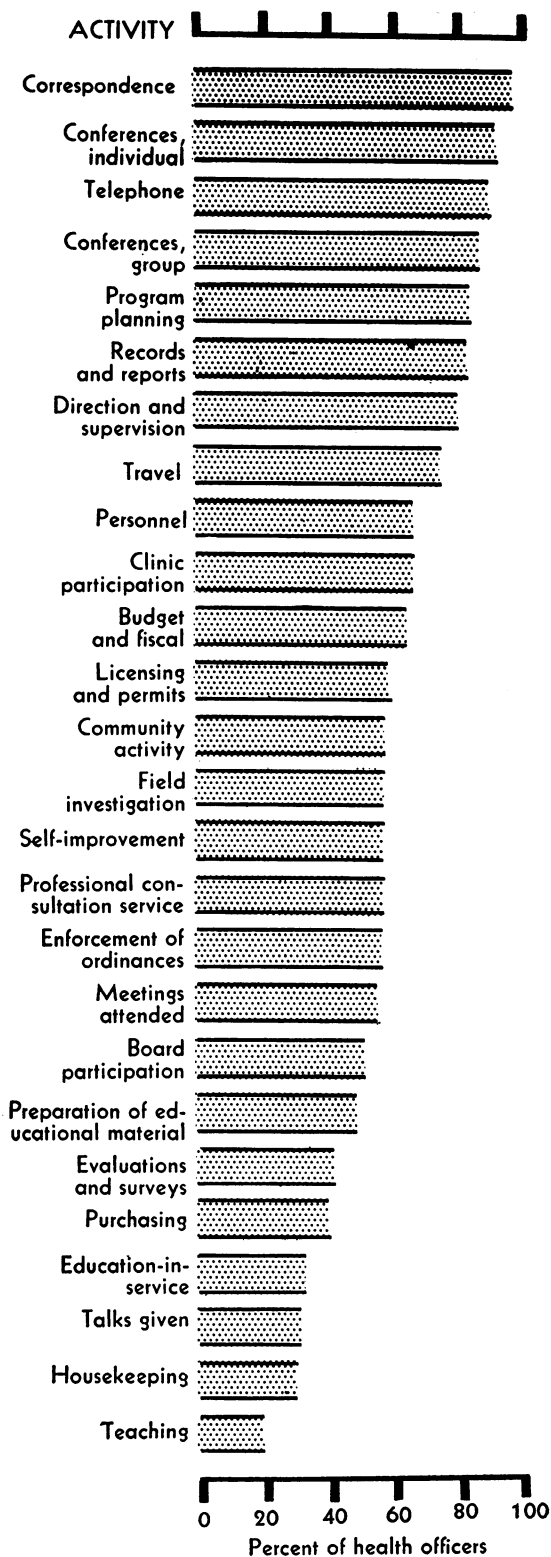


Figure 4. Percent of local health officers participating in each activity.

a health officer reported participation increased with the number of programs. One reported only 7 different types of activities in 7 programs while another reported 25 in 17 programs. Seventeen activities constituted the median, while the interquartile range was from 13 to 20. Each of 28 health officers reported participation in 18 different activities.

Correspondence as an activity was reported by 99 percent and individual conferences by 95 percent of the health officers, while teaching, housekeeping, and talks were reported by the fewest, 18, 30, 32 percent, respectively (fig. 4).

The patterns of participation of the individual respondents in both programs and activities were quite consistent with that of the total except for the largest population group and for State and local health districts.

### Conclusions

The day-by-day schedules of a week in the official life of local health officers provided the list of programs and activities used in this study.

Although no special programs or activities can be specifically isolated for delegation to nonmedical administrative personnel, several types of activities within certain program areas might well be examined from this standpoint. Among these are eight activities, representing 33 percent of all time reported, in which no medical judgment was involved: telephone, records and reports, community activity, enforcement of ordinances, personnel, budget and fiscal, housekeeping and errands, and purchasing.

Obviously, some of these activities, such as community activity and enforcement of ordinances, are essential parts of the health officer's official duties, and even though the percent of time in which medical judgment is not involved is relatively large, they could not be delegated. In such activities as budget and fiscal matters, personnel, records and reports, it is possible that the time of the medically trained administrator might be reduced to that required for supervision only.

While the time saved by the health officer through delegating activities not involving medical judgment may not seem significant in

the course of a single working day, it is this time which must provide the margin for extending those activities and services which only the medically trained administrator can provide. With the prevailing shortages of such personnel and the increasing demands for these services both during times of emergency and future program expansion, it is urgent that those activities be identified which, under suitable circumstances, may be delegated to administrative or other personnel who are not medically trained.

Although the median is 76 percent, the range in percent of time in which medical judgment is involved is very wide. This raises the possibility that if further explorations of the extremes in the range could be undertaken, a more adequate basis for evaluation of the time in which medical judgment is involved might be attained.

Delegation of selected activities to responsible persons already in the local health departments, or to persons employed to carry on such activities, will not be easily accomplished and will require an open mind on the part of those charged with planning and administering the public health program. When the local health department has neither the trained nonmedical administrative personnel nor the funds available to provide such special assistants for the health officer, it still may be possible, through careful planning, to reassign some of these duties. Even in small health units, much responsibility can be given to a good clerical worker under the health officer's supervision.

State health departments can provide extremely valuable assistance in the orientation of the local health officer to the need for re-examination of his official responsibilities, in light of present-day conditions, and in the in-service training of his staff members to assume some of the duties mentioned.

There must be an awareness on the part of the health officer of the urgency of getting things done which only he can do and a willingness to permit others to assume such parts of his activities as can be safely delegated. As may easily be seen, there are problems in recruitment, training, supervision, and evaluation areas to be met and solved in saving the time of the health officer for those things he alone can do.

This challenge to public health can be met only through mutual understanding and cooperative action by all concerned, but its successful solution should serve to extend existing medical manpower resources and to make careers in public health increasingly desirable for physicians.

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*The basic data for this article are available in limited quantity and may be requested from the senior author.*

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