Nonphysician Directors of Local Health Departments: Results of a National Survey

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DATA ON PERSONNEL IN LOCAL AND STATE HEALTH departments in the United States were published annually for many years by the Public Health Service. Since 1969, however, when the Public Health Service stopped publishing data on the numbers and characteristics of such personnel, no set of comparative statistics (except from some specialized data collection efforts) has been available to routinely detail the changes occurring in the staffing patterns of State and local health departments. We present here the results of a study to determine the utilization by local health departments, as of 1978, of one type of physician extender—the nonmedical health officer.

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Backgrounds of Past Health Directors

Although nonphysicians played key roles at the local level in the early development of public health in the United States, available records suggest that not until about 1873 did this practice become institutionalized in any State. In that year a nonphysician was formally appointed as a local director of public health in New Jersey (*1*).

A four-member local public health team, composed of a physician, public health nurse, sanitary inspector, and clerk, is mentioned in early textbooks of public health administration (*2,3*). Since many of the early public health physicians worked part time in public health and full time in the private clinical practice of

medicine, one can conclude that nonphysicians (nurses, sanitarians, and clerks) served as administrators of local public health departments whenever no physician was actually present in the department. The physician, however, has been traditionally viewed as the clinical and administrative leader of the public health team, and many States have supported this concept through laws, administrative procedures, and practices that have limited the appointment of local public health officers or public health directors to persons with a medical degree. Many jurisdictions also require that the physician hold a valid license to practice medicine in the State where he is being employed. These limitations on appointments apparently have been based on the conviction of many State officials that the local department of public health is largely medical in orientation and that support for public health activities among practicing physicians in the community can best be stimulated by having medical leadership in the health department.

In 1940 the American Public Health Association issued its historic policy statement that defined public health practice in terms of the "basic six functions"—vital statistics, sanitation, communicable disease control, laboratory services, maternal and child care, and health education. It is apparent that these functions were perceived as requiring medical leadership for their discharge, since no changes were suggested in the previously accepted standards for the medical preparation of local public health directors.

In the period 1940–60, a series of reports, studies, and presentations stressed the broad education and background that directors of local health departments should have and indicated that many of the major responsibilities of the office were outside the usual areas of competence of most physicians (*4–8*). However, the available evidence suggests that in the same period only a handful of States were employing nonmedical personnel as local health directors.

Table 1. Minimum educational and experience requirements for county and local health officers in the United States, by State, 1978

State	Medical health officers	Nonmedical health officers
Alabama	Valid license issued by State Board of Medical Examiners to practice as physician in State.	[1].
Alaska	No established educational or experience requirements.	No established educational or experience requirements.
Arizona	Licensed by State Board of Medical Examiners to practice medicine in State.	No requirements given. A local decision.
Arkansas	Valid license to practice medicine in State, plus 3 years' practical medical experience.	[1].
California	Valid license issued by State Board of Medical Examiners to practice as physician in State.	[1].
Connecticut	Licensed physician in State.	Graduate degree in public health as result of at least 1 year's training that has included at least 60 hours in local health administration.
Colorado	Valid license to practice medicine in State.	Master of public health degree.
Delaware	do.	[1].
Florida	Graduation from approved school of medicine or osteopathy and master's degree in public health or 1 year of responsible administrative experience in public health or Armed Forces and medical degree.	[1].
Georgia	License to practice medicine in State.	[1].
Hawaii	License to practice medicine in Hawaii, master of public health degree, and 2 years' experience in program management.	Master's degree in public health or equivalent degree with 2 years' experience or 3 years' experience (that is, general supervisory and administrative) with 4-year degree.
Idaho	Licensed physician in State, master of public health degree, experience in public health, and 2 years' experience in program management.	Master's degree in public health or closely related field and 4 years' experience in public health program management.
Illinois	License to practice medicine in State, certification in public health by American Board of Preventive Medicine, and master's degree in public health or equivalent experience in public health administration.	Master's degree in public health or administrative experience in public health or 4-year college degree with 4 years' administrative experience, 2 of them in public health.

[1] Nonmedical health officers not permitted.

In 1971 an ad hoc advisory group on health administration organized by the National Advisory Council on Public Health Training identified the role of the public health administrator as including planning, organizing, and evaluation; allocating resources, operating facilities, and managing personnel; consultation, communication, education, and public information; contributing to solutions involving public policy and legislation; developing standards, regulating and enforcing, and integrating health services into the social setting (*9*).

In 1973 studies by the faculty of schools of public health in Oklahoma and North Carolina addressed the status of nonmedical local public health directors in their respective States. In North Carolina, the majority of local public health directors were physicians; in Oklahoma, a trend was observed toward both actual and

Table 1. Minimum educational and experience requirements for county and local health officers in the United States, by State, 1978—Continued

State	Medical health officers	Nonmedical health officers
Indiana	License to practice medicine in State.	[1].
Iowa	No established educational or experience requirements.	No established educational or experience requirements.
Kansas	License to practice medicine in State.	No requirements given except be qualified to assume responsibilities of position.
Kentucky	Valid license to practice as physician in State.	[1].
Louisiana	do.	[1].
Maine	No educational or experience requirements.	No educational or experience requirements.
Maryland	Valid license to practice medicine in State.	[1].
Massachusetts	No existing educational or experience requirements.	No existing educational or experience requirements.
Michigan	License to practice medicine in State with master's degree in public health or administration and sufficient other training and experience as judged by State director of public health to qualify for appointment.	Nonphysician with master's degree in public health administration or public administration and experience as judged by State director of health to quality for appointment.
Minnesota	Valid license to practice medicine in State.	Academic preparation in administration, public health, or related field and 2 years' documented experience in administrative or supervisory capacity.
Mississippi	Licensed physician in State with master's degree in public health or equivalent degree.	[1].
Missouri	Graduation from accredited school of medicine, successful completion of approved internship, and license to practice medicine in State.	[1].
Montana	Valid license to practice medicine in State.	Master's degree in public health administration or equivalent degree with 4 years' administrative public health experience or bachelor's degree with 5 years' administrative experience in public health agency.

[1] Nonmedical health officers not permitted.

planned increases in the utilization of nonphysicians (*10*).

In 1975 Albers and Muller published an analysis suggesting that the academic preparation of physicians for many public health responsibilities was less than that of graduates of some master's degree programs in nursing. These authors concluded that physicians received little, if any, exposure to the health system or to the behavioral and managerial sciences, exposure that they needed to effectively perform the duties of local public health director (*11*).

In 1975, also, the Commission on Education for Health Administration (a national study group of educators, community health practitioners, and professional association representatives that was funded by W. K. Kellogg Foundation) published a final report, "Educa-

Table 1. Minimum educational and experience requirements for county and local health officers in the United States, by State, 1978—Continued

State	Medical health officers	Nonmedical health officers
Nebraska	License to practice medicine in State, master's degree in public health, and 5 years' experience in practice of medicine, 2 of them in supervisory capacity in field of public health.	Bachelor's degree and 2 years' administrative experience in health-related field.
Nevada	License to practice medicine in State.	[1].
New Hampshire	No academic or experience requirements.	No academic or experience requirements.
New Jersey	License to practice medicine in State and 2 years' full-time employment in administrative position in public health.	Master's degree in public health or equivalent degree with 2 years' experience in public health administration or bachelor's degree with 4 years' experience in public health administration.
New Mexico	Valid license to practice medicine in State.	Master of public health degree.
New York	do.	Master's degree in public health and 2 years' experience in general administration, with 2 of them in local or State health department, or master's degree in related field and 3 years' experience, 1 of them in local or State health department.
North Carolina	License to practice medicine in State.	Master's degree in public health with major in public health administration or equivalent degree with 2 years' experience in administrative management in a health program.
North Dakota	License to practice medicine in State.	[1].
Ohio	Licensed physician, licensed dentist, or licensed veterinarian.	Master's degree in public health.
Oklahoma	License to practice medicine in State.	Doctorate in public health or health-related field with 1 year's administrative experience or master's degree in public health or equivalent degree with 5 years' administrative experience in public health.
Oregon	License to practice medicine in State and experience or advanced training in public health.	Master's degree in public health with major in public health administration or equivalent degree with 2 years' experience in administrative work in health program.

[1] Nonmedical health officers not permitted.

tion for Health Administration," that attempted to define the field of health administration and the knowledge and skills needed for contemporary practice in it. The commission proposed a broader definition of the health administration field than the traditional one that divided it into public health administration and hospital administration: "Health administration is planning, organizing, directing, controlling, coordinating and evaluating the resources and procedures by which needs and demands for health and medical care and a healthful environment are fulfilled by the provision of specific services to individual clients, organizations and communities." The commission advocated that health administrators have knowledge and skill in areas dealing with health and disease, the organization of medical care, management processes and administrative skills, and the behavioral sciences. The study group also predicted an increased demand for qualified health administrators and offered a number of recommendations for the organization of educational efforts to meet this need (*12*).

In a 1976 report, the Milbank Memorial Fund Com-

Table 1. Minimum educational and experience requirements for county and local health officers in the United States, by State, 1978—Continued

State	Medical health officers	Nonmedical health officers
Pennsylvania	Physician with minimum of 2 years' supervisory or administrative experience in public health who is licensed to practice medicine or osteopathy in State.	At least 4 years' supervisory or administrative experience in public health with master's degree in public health or equivalent degree.
Rhode Island	[2].	[2].
South Carolina	License to practice medicine in State.	Master of public health degree and 2 years' experience in public health administration.
South Dakota	do.	[1].
Tennessee	do.	[1].
Texas	License to practice medicine in State with certification by American Board of Preventive Medicine or master's degree in public health.	[1].
Utah	License to practice medicine in State with 3 years' administrative experience or with 2 years' administrative experience and master of public health degree.	Master of public health degree and 3 years' administrative experience.
Vermont	[2].	[2].
Virginia	License to practice medicine in State and 2½ years' experience in general practice, public health, or public-health-related practice (that is, in industry, military).	[1].
Washington	License to practice medicine in State and master's degree in public health or in lieu of MPH, 3 years' service as provisionally qualified health officer, including in-service public health orientation program.	[1].
West Virginia	License to practice medicine in State.	[1].
Wisconsin	License to practice medicine in State, successful completion of at least 1 academic year of training in school of public health, and 1 year of practical experience in general public health practice approved by State health officer.	Bachelor of science degree in public health followed by at least 2 years of closely supervised experience in public health practice approved by State health officer.
Wyoming	License to practice medicine in State.	[1].

[1] Nonmedical health officers not permitted. [2] No local or county health departments reported.

mission for the Study of Higher Education for Public Health recommended that the educational preparation of public health personnel be determined by their function within the health agency. The commission advocated that the public health "leaders" who perform management functions in any field of practice should be able to "Identify health-related problems of the community; develop and set health priorities, formulate policy and make decisions; perform management and administrative functions; educate the community; advise, consult, and support community programs; and perform research and evaluative activities." In assessing trends at the time, the commission reported that physicians accounted for only about 20 percent of students admitted to schools of public health compared with about two-thirds of all admissions two decades earlier (*13*).

Miller and associates, who published results of a study of local public health departments in 1977 (*14*), included the following information about the depart-

Table 2. Salary levels for county and local medical and nonmedical health officers, by State, 1978

State	Average annual full-time income	
	Medical health officers	Nonmedical health officers
Alabama	$41,340	[1].
Alaska	45,000	[2].
Arizona	40,000	$17,500
Arkansas	33,000	[1].
California	42,000	[1].
Colorado	40,000	20,000
Connecticut	30,000	21,000
Delaware	32,867	[1].
District of Columbia	47,500	[1].
Florida	37,751	[1].
Georgia	42,942	[1].
Hawaii	36,336	[1].
Idaho	40,000	30,000
Illinois	[2].	[2].
Indiana	30,000	[1].
Iowa	[2].	[2].
Kansas	46,730	18,580
Kentucky	41,969	[1].
Louisiana	36,000	16,800
Maine	[1].	14,000
Maryland	40,184	[1].
Massachusetts	[2].	[2].
Michigan	45,404	30,432
Minnesota	[2].	[2].
Mississippi	35,014	[1].
Missouri	43,869	[1].
Montana	$40,000	$25,000
Nebraska	50,000	12,000
Nevada	46,500	[1].
New Hampshire	[3].	[3].
New Jersey	28,000	24,000
New Mexico	36,000	27,132
New York	36,036	23,500
North Carolina	39,707	20,004
North Dakota	27,500	[1].
Ohio	[2].	[2].
Oklahoma	36,000	18,000
Oregon	39,612	22,896
Pennsylvania	[2].	[2].
Rhode Island	[4].	[4].
South Carolina	39,833	30,212
South Dakota	[1].	[1].
Tennessee	36,000	[1].
Texas	38,300	[1].
Utah	40,000	16,500
Vermont	[4].	[4].
Virginia	35,350	[1].
Washington	40,728	[1].
West Virginia	31,000	[1].
Wisconsin	40,000	27,000
Wyoming	[2].	[2].
Mean	$39,699	$21,818

[1] Not applicable. Employment of nonmedical local health officers prohibited.
[2] Data not available.
[3] No salary.
[4] No local or county health officers reported.

ments' directors: "Nearly two-thirds of all health officers in the United States have an MD degree; nearly one-third have an MPH (or similar) degree; about 9 percent have a bachelor's degree or no college at all." These authors found that the highest proportions of health officers who were physicians were on the west coast (96.6 percent) and in the South Atlantic regions (88.2 percent); only about one of every four officers in the Middle Atlantic and New England regions was a physician (*14*).

In 1977, Shonick and Price reviewed the reorganization of health agencies by local governments in urban centers and proposed corrective measures to deal with the problems of providing public health and medical care services to the urban poor (*15*). By implication, their study raised the issue of whether the merging of public health functions with those of public medical care, as had happened in several cities, mandated that public health directors have a medical background.

These same investigators, in a study reported in 1978 (*16*), considered the recent changes that had taken place in the organizational structure of local public health units, namely, the mergers (and "demergers") with other governmental health units throughout the United States. Their data on the characteristics of the top leadership in public health agencies showed that 68 percent of all responding public health units were headed by persons with doctoral degrees (nearly all of them physicians); 16 percent were headed by persons whose highest degree was a master's; and 10 percent were headed by persons whose highest degree was a bachelor's.

Shonick and Price also found that the principal work backgrounds of the heads of the public health units were clinical physician, public health officer, and sanitarian. The greatest use of nonphysician, administratively trained heads was found to be in the separately organized units that were not part of an umbrella or integrated health and human services agency.

Jekel and associates reported in 1980 that 7 years

after Connecticut passed a law (1971) enabling persons without MD degrees, but trained in public health, to become local directors of health, the proportion of towns in the State covered by full-time directors rose from 14 percent to 39 percent, and the proportion of the popultaion so covered rose from 46 percent to 63 percent. These authors reported that the directors of health without MD degrees were satisfied with their positions and believed they had established good relationships with physicians, the community, and government (*17*).

In an editorial comment on the study of Jekel and associates, Atwater stated that he saw "a growing need for a careful assessment of the specific functions in the planning and delivery of community health services which require the special skills of a public health trained physician as opposed to skills requiring medical competence or those obtainable through other than medical training." He recommended that a careful evaluation of various models of providing medical and administrative leadership to local public health agencies be done (*18*).

Study Methods

A survey instrument was used in our study to collect information on the progress nonphysicians were making in becoming identified as people having the requisite knowledge and skills to function as directors of local public health units. The instrument was pretested in a mail survey of a sample of State health departments randomly selected from among all the 50 States.

The questionnaire was then mailed with an explanatory letter and stamped return envelope to each person identified as a director of a State public health agency in July 1978. Followup letters were sent to nonrespondents, and final results were received from all States by December 1978. In many instances, there was evidence that administrative staff in various units of the State health agency actually completed the questionnaire.

Results

Rhode Island and Vermont reported having no local public health units, local health services being provided directly by the State health department. All other States

Table 3. Utilization of county and local nonmedical health officers, 1968–78, as reported by State health departments

State	Utilization	State	Utilization
Alabama	Remained same.	Montana	Increased.
Alaska	Increased.	Nebraska	Remained same.
Arizona	Decreased.	Nevada	Do.
Arkansas	Remained same.	New Hampshire	Do.
California	Do.	New Jersey	Increased.
Colorado	Do.	New Mexico	Do.
Connecticut	Increased.	New York	Do.
Delaware	Remained same.	North Carolina	Do.
Florida	Do.	North Dakota	Remained same.
Georgia	Do.	Ohio	Increased.
Hawaii	Do.	Oklahoma	Do.
Idaho	Do.	Oregon	Do.
Illinois	Increased.	Pennsylvania	Do.
Indiana	Remained same.	Rhode Island	[1].
Iowa	Increased.	South Carolina	Increased.
Kansas	Do.	South Dakota	Remained same.
Kentucky	Remained same.	Tennessee	Do.
Louisiana	Do.	Texas	Do.
Maine	Do.	Utah	Increased.
Maryland	Do.	Vermont	[1].
Massachusetts	Increased.	Virginia	Remained same.
Michigan	Do.	Washington	Do.
Minnesota	Do.	West Virginia	Do.
Mississippi	Remained same.	Wisconsin	Increased.
Missouri	Do.	Wyoming	Remained same.

[1] No county or local health units reported.

NOTE: In the period 1968–78, deployment of nonmedical local health officers increased in 20 States, decreased in 1 State, and remained the same in 27 States.

Table 4. Employment of county and local medical health officers, by State, 1978

State	Total positions		Filled positions		Vacant positions		
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Total
Alabama	18	2	15	2	3	0	3
Alaska	3	0	3	0	0	0	0
Arizona	5	1	4	1	1	0	1
Arkansas	8	0	5	0	3	0	3
California	43	16	43	16	0	0	0
Colorado	10	0	10	0	0	0	0
Connecticut	14	105	13	103	1	2	4
Delaware	3	0	2	0	1	0	1
District of Columbia	1	[1]	1	[1]	[1]	0	[1]
Florida	51	0	41	10	0	[1]	10
Georgia	19	0	18	0	1	0	1
Hawaii	3	0	3	0	0	0	0
Idaho	2	0	2	0	0	0	0
Illinois	7	0	7	0	0	0	0
Indiana	32	64	32	64	0	0	0
Iowa	1	3	1	3	0	0	0
Kansas	5	94	4	94	1	0	1
Kentucky	12	5	11	4	1	1	2
Louisiana	4	60	2	30	2	30	32
Maine	0	0	0	0	0	0	0
Maryland	24	2	20	2	4	0	4
Massachusetts	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Minnesota	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Michigan	35	0	30	0	5	0	5
Mississippi	41	0	31	0	9	0	9
Missouri	1	8	1	8	0	0	0
Montana	1	51	1	49	0	2	2
Nebraska	2	1	2	1	0	0	0
Nevada	3	0	3	0	0	0	0
New Hampshire	0	96	0	96	0	0	0
New Jersey	4	0	4	0	0	0	0
New Mexico	7	0	4	0	3	0	3
New York	22	2	21	2	1	0	1
North Carolina	20	13	20	7	0	6	6
North Dakota	1	10	1	10	0	0	0
Ohio	39	27	36	24	3	3	6
Oklahoma	8	37	8	37	1	0	1
Oregon	9	15	9	15	0	0	0
Pennsylvania	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Rhode Island	[2]	[2]	[2]	[2]	[2]	[2]	[2]
South Carolina	41	5	36	5	5	0	5
South Dakota	0	67	0	61	0	6	6
Tennessee	32	0	28	0	4	0	4
Texas	33	35	35	35	8	0	8
Utah	10	0	7	0	3	0	3
Vermont	[2]	[2]	[2]	[2]	[2]	[2]	[2]
Virginia	58	0	49	0	9	0	9
Washington	13	16	13	16	0	0	0
West Virginia	4	51	4	51	0	0	0
Wisconsin	2	[1]	2	[1]	[3]	[3]	[3]
Wyoming	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Total	650	787	515	699	79	50	129

[1] Data not available. [2] No local county or health departments reported. [3] Not reported.

Table 5. Employment of county and local nonmedical health officers, by State, 1978

State	Total positions		Filled positions		Vacant positions		
	Full-time	Part-time	Full-time	Part-time	Full-time	Part-time	Total
Alabama	0	0	0	0	0	0	0
Alaska	1	0	1	0	0	0	0
Arizona	6	2	6	2	0	0	0
Arkansas	0	0	0	0	0	0	0
California	0	0	0	0	0	0	0
Colorado	3	0	3	0	0	0	0
Connecticut	19	0	18	0	1	0	0
Delaware	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
Idaho	6	0	6	0	0	0	0
Illinois	61	0	57	0	4	0	4
Indiana	0	0	0	0	0	0	0
Iowa	10	0	10	0	0	0	0
Kansas	8	0	0	0	0	0	0
Kentucky	0	0	0	0	0	0	0
Louisiana	0	0	0	0	0	0	0
Maine	4	0	4	0	0	0	0
Maryland	0	0	0	0	0	0	0
Massachusetts	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Michigan	12	0	12	0	0	0	0
Minnesota	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Missouri	0	0	0	0	0	0	0
Mississippi	0	0	0	0	0	0	0
Montana	3	1	2	1	1	0	1
Nebraska	8	0	8	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Hampshire	0	144	0	144	0	0	0
New Jersey	114	5	105	5	9	0	9
New Mexico	0	0	0	0	0	0	0
New York	9	0	9	0	0	0	0
North Carolina	43	2	43	2	0	0	0
North Dakota	0	0	0	0	0	0	0
Ohio	39	27	36	24	3	3	6
Oklahoma	9	0	9	0	0	0	0
Oregon	9	0	9	0	0	0	0
Pennsylvania	[1]	[1]	[1]	[1]	[1]	[1]	[1]
Rhode Island	[2]	[2]	[2]	[2]	[2]	[2]	[2]
South Carolina	15	27	36	24	3	3	6
South Dakota	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
Texas	0	0	0	0	0	0	0
Utah	3	0	2	0	1	0	1
Vermont	[2]	[2]	[2]	[2]	[2]	[2]	[2]
Virginia	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
West Virginia	18	[2]	[2]	0	0	0	0
Wisconsin	0	0	0	0	0	0	0
Wyoming	[3]	[3]	[3]	[3]	[3]	[3]	[3]
Total	400	181	380	178	19	3	22

[1] Data not available. [2] No local county or health departments reported. [3] Not reported.

Table 6. Primary roles of county and local directors of public health, United States, 1978, by frequency of response

Function	Rank of function	Percentage of respondents naming function
To enforce appropriate health laws, regulations, and ordinances	1	100
To provide administrative and operational direction of staff	2	94
To assess health needs of community	3	91
To plan, organize, and implement local health programs	4	88
To be leaders and coordinators	4	88
To prevent and control all types of chronic and communicable diseases	5	83
To prepare and implement a fiscal budget	6	71
To make referrals from screening clinics of patients with positive cases	7	65
To medically diagnose illness	8	15
To medically treat illness	9	13
To administer drugs and other medication	9	13
To perform minor surgery	10	4

reported having local units, although the extent to which these units were free standing, autonomous local organizations varied greatly from State to State.

Of the 48 States with local health units, respondents in 21 (44 percent) stated that only physicians might serve as directors of such units; the remaining 27 respondents (56 percent) stated that both physicians and nonphysicians were eligible for such appointments. Five States—Alaska, Iowa, Maine, Massachusetts, and New Hampshire—reported no specific educational or experience requirements for local public health directors (table 1).

Of the 21 States having a minimum requirement of a valid physician's license for the particular State, only 6 required that the director have a graduate degree in public health (usually with a preference for public health administration being stated) or some 2 to 5 years of administrative experience in public health.

In the 27 States that permitted nonmedical as well as medical health directors, a valid medical license was required for physicians in 22 States; 8 of these 22 also required a graduate degree in public health. For nonphysicians to be considered, 18 of the 27 States required a graduate degree in public health and 2 years of experience in the field. In seven States, a baccalaureate degree and experience of varying amounts could be substituted for the graduate degree. Only in Oklahoma was a doctor of philosophy or doctor of public health degree identified as an appropriate qualification for nonphysicians.

Only 38 States reported the average annual salary paid full-time medical health officers—for the 38, it was $39,699. Only 19 provided information on the average annual salary for part-time medical officers—for the 19, it was $7,578 (table 2).

Based on data from 19 States, the average annual salary for full-time nonphysician health officers was $21,818. Over the years 1968 to 1978, the number of nonmedical local health directors remained constant in 27 States, increased in 20 States, and decreased in 1 State (table 3).

As of December 1978, there were 650 full-time and 787 part-time positions for medical health officers in the surveyed States, with 79 reported vacancies among the full-time positions and 50 among the part-time. There were 400 full-time and 181 part-time positions for nonmedical health officers, with 19 full-time vacancies (tables 4 and 5).

Only 1 of the 21 States that limited employment to physicians reported any plans to employ nonmedical personnel as health officers. In States without legal or administrative barriers to the employment of nonphysicians, the respondents revealed no specific plans for use of nonmedical personnel.

Respondents were also asked to identify the primary roles of local directors of public health agencies (table 6). The primary role identified was enforcement of public health laws, with administration and supervision of staff as the second most frequent role. The medical background of the director appeared to be related to only 4 of the 10 most frequently mentioned functions.

Conclusions

The results of our survey indicate that the use of nonmedical personnel as public health officers at the local level, a movement that may date back to the late 1800s, has developed slowly in this century. From 1968 to 1978, the number of nonmedical local health directors increased in 20 States, and by late 1978 such persons filled almost one-third of the total local health director positions in the United States.

This trend toward greater use of nonmedical direc-

tors can be attributed to some or all of the following factors: the continuing lack of interest of most physicians in careers in official public health agencies, the relative shortage of physicians in smaller communities and rural areas where many local public health units are located, the increasing number of nonphysicians with academic preparation in public health, and the competitive salaries that many local health units are offering to attract nonmedical personnel. Before any marked acceleration in this trend can occur, a significant number of States will have to modify laws, regulations, and administrative practices that limit local public health directors to physicians.

There are two implications from recent national studies and the reports of expert commissions that may have a major influence on the future of nonphysicians as directors of local public health units. The first is related to the recent mergers of local public health units with local public hospitals and other medical care programs of government. These mergers may further promote the idea that the director of a local health agency should have a medical degree. The second implication relates to several national commissions and their recommendations that with or without a medical degree, the top leadership in public health units should present evidence of knowledge and skills in the broad areas of management, medical care organization, and the social sciences.

As the mission of public health agencies changes and their organizational structures are modified, obviously the qualifications of those in leadership positions will change also. Since an understanding of the dynamics of such interactive change is vital, it is hoped that in the future, health service researchers will not neglect the public health sector of the health care system.

Further, a uniform reporting system detailing the numbers, characteristics, and other salient features of public health agencies and their staffs appears to be an essential information base for national, State, and local health policy makers. We therefore hope that the Public Health Service or some other appropriate national organization will reinstitute the collection of such information on a regular basis.

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