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ABSTRACT

This second volume of the series of the Albany Regional Medical Program represents a condensation of the collected data relating to the health manpower inventory of the Region and the presently available educational facilities for training health care personnel. Six sections of this volume include: manpower directions in New York State: 1965-1975; health manpower educational facilities; technical manpower in New York State; hospital manpower in New York State; graduate medical education in the Albany Region; and an inventory and distribution of health manpower in the Albany Region. (Author/MJM)

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Albany Regional Medical Program



REGIONAL PROFILE

VOLUME

2

HEALTH MANPOWER

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ALBANY REGIONAL MEDICAL PROGRAM

HEALTH MANPOWER

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Albany Regional Medical Program
Albany, New York

PREFACE

Regional Medical Programs in the United States were made possible by an Act of Congress (P.L. 89-239) in October 1965 to assist in providing the best possible patient care for heart disease, cancer, stroke, and related diseases. The means adopted to provide such care was the process of regionalization or regional cooperative arrangements, whereby patient care was linked with health research and education on a regional (both functional and geographic) basis to effect a mutually beneficial interaction. Regionalization afforded the means for sharing limited health manpower and facilities to maximize the quality and quantity of care and service available to the Region's population, and to do this as economically as possible. It also constituted a mechanism for coordinating the categorical aspects of Regional Medical Programs with other health programs in the Region so that their combined effects might be increased, and thereby contribute to the creation and maintenance of a system of comprehensive health care within the entire Region.

As part of the process of regionalization, a Region must have a continuously updated inventory of existing resources and capabilities in terms of function, size, number, and quality. Because of its extensive and long experience in the continuing education of physicians in the Albany area, the Albany Medical College was in a unique position to take early and prompt action toward the development of an initial inventory of health services and facilities in what presently constitutes the geographic area served by the Albany Regional Medical Program. A concrete result of this was the compilation and publication of a comprehensive three-volume series presenting in considerable detail the Albany Region's health resources, as well as an overview of the Region's socioeconomic profile to be used as a basis for the future development of the Albany Regional Medical Program. In fact, the three volumes became an integral part of the initial application for planning funds for the Region in early 1966.

Since that time, much additional information about the health profile of the Albany Region has been collected from a number of external sources as well as from the activities of the core staff of the Albany Regional Medical Program. This second volume of the series represents a condensation of the collected data relating to the health manpower inventory of the Region and the presently available educational facilities for training health care personnel.

Volume II has been divided into six sections:

- Section 1: Manpower Directions in New York State: 1965-1975
- Section 2: Health Manpower Educational Facilities
- Section 3: Technical Manpower in New York State
- Section 4: Hospital Manpower in New York State
- Section 5: Graduate Medical Education in Albany Region
- Section 6: Inventory and Distribution of Health Manpower in Albany Region

A third volume, to be published in early 1971, will be devoted to a broad view of the socioeconomic characteristics and patterns of the Albany Region which may affect in varying degree the health of the populace. This volume will also contain a descriptive narration of each county in the Region with particular reference to factors which bear a relationship to health. Finally, a detailed section of the Region's vital statistics will complete the volume.

The collaborative efforts of many individuals and organizations have been of great help in the preparation and production of this volume. First and foremost, grateful acknowledgement is made to Frank M. Woolsey, Jr., M.D., Director of the Albany Regional Medical Program for the opportunity to publish this information, as well as for his counsel and constructive criticism. Space does not permit naming all those individuals who, in one way or another, contributed materials or services, but sincere thanks are extended to all.

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Albany Regional Medical Program

Albany, New York
November, 1970

TABLE OF CONTENTS

	<u>Page</u>
<u>MANPOWER DIRECTIONS IN NEW YORK STATE: 1965-1975</u>	1-1
Changes in the labor force	1-2
Manpower requirements	1-7
Industrial change	1-9
Jobs in selected professional and kindred occupations	1-12
Occupational requirements resulting from death and retirement	1-13
Educational requirements of jobs	1-14
Jobs to be filled, by educational and vocational levels	1-17
Job vacancies	1-19
Geographic mobility	1-20
Occupational shifts	1-21
Resident new entrants to labor market	1-23
Manpower differences of local areas	1-24
Projected jobs, by industry, 1970-1975	1-28
Jobs to be filled, by occupation, 1965-1975	1-30
Employment, by industry, Albany SMA	1-32
Projected employment, by occupation, Albany SMA	1-33
Jobs to be filled, 1970-1975, Albany SMA	1-34
<u>HEALTH MANPOWER EDUCATIONAL FACILITIES, N.Y., MASS. & VT.</u>	2-1
Administration of health services	2-4
Hospital administration programs	2-6
Anthropology and sociology	2-7
Automatic data processing	2-9
Basic sciences in the health field	2-9
Biomedical engineering	2-12
Chiropractic and naturopathy	2-14
Clinical laboratory services	2-16
Dentistry and allied services	2-18
Dietetic and nutritional services	2-24
Economic research in the health field	2-28
Environmental control services	2-30
Food and drug protective services	2-37
Health and vital statistics services	2-39
Health education	2-41
Health information and communication	2-43
Library services	2-45
Medical records	2-47
Medicine and osteopathy	2-50
Midwifery	2-51
Nursing and related services	2-52
Occupational therapy	2-54
Orthotic and prosthetic technology	2-57
Pharmacy	2-58
Physical therapy	2-60

	<u>Page</u>
Podiatry	2-62
Psychology	2-64
Radiologic technology	2-66
Secretarial and office services	2-67
Social work	2-68
Specialized rehabilitation services (corrective therapist, educational therapist, manual arts therapist, music therapist, recreation therapist, homemaking rehab- ilitation consultant)	2-70
Speech pathology and audiology	2-75
Veterinary medicine	2-76
Vision care (optometrists, opticians and optical tech- nicians, orthoptists)	2-78
Vocational rehabilitation counseling	2-82
Miscellaneous health services (inhalation therapy tech- nician, electrocardiograph technician, electro- encephalograph technician, aides for different disciplines)	2-84
List of health occupations	2-87
Professional school listing - Albany Region	2-97
Certified laboratory assistant	2-97
Cytotechnology	2-98
Dentistry	2-99
Dietetics	2-99
Histologic technology	2-99
Hospital administration	2-99
Inhalation therapy	2-100
Food service administration	2-101
Therapeutic nutrition and nutrition education	2-102
Library sciences	2-103
Medical assistant	2-103
Medical records	2-103
Medical technology	2-104
Medicine	2-106
Nuclear medicine technology	2-106
Nurse anesthetist	2-107
Nursing, practical	2-108
Nursing, professional	2-109
Occupational therapy	2-110
Orthopedic assistant	2-110
Osteopathy	2-110
Pharmacy, general	2-111
Pharmacy, hospital	2-111
Physical therapy	2-112
Radiation therapy technology	2-112
Radiologic technology	2-113
Social work	2-115
<u>TECHNICAL MANPOWER IN NEW YORK STATE</u>	3-1
Employment in technical occupations	3-3

	<u>Page</u>
Types of technical occupation	3-4
Vacancies	3-5
Sources of workers	3-6
Education and experience requirements	3-7
Tests and licenses	3-9
Content & requirements of technical occupations	3-12
Bacteriology technologists and technicians	3-14
Biochemistry technicians and technologists	3-15
Histology technicians	3-16
Cytotechnologists and cytotechnicians	3-17
Hematology technicians and technologists	3-17
Blood bank technicians and technologists	3-18
Serology technicians and technologists	3-19
Medical assistants	3-20
X-ray technicians and radioisotope technicians	3-20
Electrocardiograph technicians	3-21
Electroencephalograph technicians	3-22
Inhalation therapy technicians	3-23
Other medical technicians	3-23
Therapists, physical	3-25
Medical record librarians	3-26
Dental technicians	3-28
Dental hygienists	3-29
Dental assistants	3-30
Technical writing and illustration specialists	3-31
Sanitation inspectors	3-32
Data-processing personnel	3-34
<u>NEW YORK STATE HOSPITAL MANPOWER</u>	4-1
Central Division - Albany County	4-3
Northern Division - Rensselaer County	4-6
Saratoga County	4-9
Washington County	4-12
Warren County	4-14
Division summary	4-17
Southern Division - Dutchess County	4-20
Ulster County	4-23
Sullivan County	4-25
Delaware County	4-27
Greene County	4-29
Columbia County	4-31
Division summary	4-33
Interface Division - Essex County	4-36
Franklin County	4-39
Clinton County	4-42
Summary, N.Y. counties	4-45
Western Division - Schenectady County	4-48
Montgomery County	4-51
Schoharie County	4-54
Otsego County	4-56
Herkimer County	4-59
Hamilton County	4-61

	<u>Page</u>
Fulton County	4-62
Division summary	4-64
Albany Region summary	4-67
National Health Manpower needs	4-70
<u>INTERNSHIP AND RESIDENCY PROGRAMS - ALBANY REGION</u>	5-1
Consolidated list of programs as of June 30, 1969	5-2
Approved internships, as of July 30, 1969	5-10
Albany, N.Y.	5-14
Cooperstown, N.Y.	5-15
Poughkeepsie, N.Y.	5-16
Schenectady, N.Y.	5-17
Troy, N.Y.	5-17
Pittsfield, Mass.	5-18
Approved residencies in Albany Region	5-19
Anesthesiology	5-19
Dermatology	5-20
Internal medicine	5-21
Neurological surgery	5-22
Neurology	5-23
Obstetrics-Gynecology	5-24
Ophthalmology	5-27
Orthopedic surgery	5-27
Otolaryngology	5-29
Pathology	5-29
Pediatrics	5-33
Physical medicine and rehabilitation	5-35
Plastic surgery	5-35
Preventive medicine	5-36
Psychiatry, general	5-38
Psychiatry, child	5-40
Radiology	5-40
Surgery	5-41
Thoracic surgery	5-45
Urology	5-46
Statistical summary, graduate programs	5-47
<u>INVENTORY AND DISTRIBUTION OF HEALTH PERSONNEL, ALBANY REGION</u>	6-1
Physicians (M.D.)	
Central Division - Albany County	6-6
Northern Division - Rensselaer County	6-8
Saratoga County	6-10
Warren County	6-12
Washington County	6-14
Division summary	6-16

	<u>Page</u>
Southern Division - Columbia County	6-18
Delaware County	6-20
Dutchess County	6-22
Greene County	6-24
Sullivan County	6-26
Ulster County	6-28
Division summary	6-30
Eastern Division - Berkshire County (Mass.)	6-32
Western Division - Fulton County	6-34
Hamilton County	6-36
Herkimer County	6-38
Montgomery County	6-40
Otsego County	6-42
Schenectady County	6-44
Schoharie County	6-46
Division summary	6-48
Interface Division - Clinton County	6-50
Essex County	6-52
Franklin County	6-54
Summary, N.Y. Counties	6-56
Bennington County (Vt.)	6-58
Windham County (Vt.)	6-60
Summary, Vt. Counties	6-62
Division summary	6-64
Albany Region, summary	6-66
Board Diplomates, Albany Region	6-73
Central Division	6-76
Northern Division	6-77
Southern Division	6-79
Eastern Division	6-82
Western Division	6-83
Interface Division	6-86
Regional summary	6-90
Dentists, all	6-92
Dentists, specialists	6-94
Physicians (D.O.)	6-101
Podiatrists	6-103
Chiropractors	6-105
Veterinarians	6-107
Otpometrists and ophthalmic dispensers	6-109
Psychologists	6-111
Nurses, professional (R.N.)	6-112
Nurses, practical (L.P.N.)	6-118
Medical technologists	6-120
Pharmacists and pharmacies	6-122
Physical therapists	6-125
X-Ray technicians	6-127

MANPOWER DIRECTIONS IN NEW YORK STATE:

1965 - 1975

INTRODUCTION

This section (pages 1-1 to 1-34) is devoted entirely to projections of the civilian labor force and of occupational manpower requirements in New York State. The information herein was obtained from surveys and projections made by the New York State Department of Labor, Division of Research and Statistics. It is intended to be the basis for the formulation, funding, and administration of higher education and manpower training programs. Although a general overview of all manpower requirements is presented, emphasis is placed on manpower needs in the health and health-related industries.

The projections cover the ten-year period 1965-1975. While they are, essentially, extensions of past trends and relationships, these estimates take into account special circumstances which in the opinion of qualified observers will modify the directions of the past.

It is convenient to express the projections in specific numbers, but the potential errors of the process preclude any claim of precision. Rather, the data should be viewed as indicators of relative magnitudes and central tendencies. The estimates should be used as work materials - a systematic framework of numbers which the user can modify and supplement in the light of his own knowledge and beliefs about the probable course of events.

As with all projections based on past events, the passage of time and the availability of new data will provide the basis for improving the projections made in this section. Results of the 1970 Census will be particularly pertinent to manpower projections.

CHANGES in the LABOR FORCE

New York State's labor force will, in general, grow as the population grows in the next decade. Projections of the labor force start with estimates of the number of persons who will be 14 years of age and over. The size of this population can be predicted with relative accuracy since all persons 14 and over who will be residing in New York State in 1975 were alive in 1965.

One potential source of projection error is estimating the net effect of migration into and out of New York State during the decade 1965-1975. During the decade 1950-1960 the net migration into the State was considerably smaller than in previous decades, and how it will change between 1965 and 1975 is difficult to predict now.

The number of persons who will be in New York State's civilian noninstitutionalized population in 1975 will also depend upon mortality rates, the size of the armed forces, and the number of persons confined to prisons and hospitals.

Statistics are presently available which show that New York's population aged 14 and over increased by 1,000,000 or 8.5 percent from 1955 to 1965. However, the rate of growth was not the same for all age groups. The net increase of 1,000,000 is made up of an increase of 700,000 young people aged 14-24, and of 600,000 persons aged 45 and over. These increases were offset by a decrease of approximately 300,000 people in the age group 25-44. Percentagewise, the younger group increased by 33 percent, the older people by 12 percent, and the middle group decreased by 6 percent.

Past population changes of this nature are the result of shifts in birth rates, death rates, and migration patterns. For example, the birth rate in New York was about 20 per 1,000 population in the 1920's; it decreased to 14 during the depression 1930's, and to 16.5 during World War II days between 1940 and 1945. During the 3 or 4 years immediately after the war, it rose abruptly to 20.9, and to 21.3 during the 1950's. From 1960-1966 it averaged a bit lower - 20.1. Individual high and low years for the State's birth rate were 1907 (28.7) and 1936 (13.8). More recently, since 1948, it has been declining (18.0 in 1966). In 1969 it was 17.5.

The table below summarizes total population data and projections for New York State by broad age groups.

Age	Number			Percent Change	
	1955	1965	1975	1955-1965	1965-1975
Total, 14 & over	11,812,000	12,812,000	14,500,000	+8.5	+13.2
14 to 24 years	2,063,000	2,740,000	3,649,000	+32.8	+33.2
25 to 44 years	4,646,000	4,359,000	4,549,000	-6.2	+4.4
45 and over	5,103,000	5,713,000	6,302,000	+12.0	+10.3

Since females have a better survival experience than males, they constituted about 53 percent of the total noninstitutionalized population 14 and over in 1965, and this is expected to be the situation in 1975 also.

The State's civilian labor force increased by 379,000 between 1955 and 1965, and is expected to increase by over 1,000,000 between 1965 and 1975. As can be seen in the following table, women will add more to the labor force in 1965-1975 than might be expected from their 1965 share in the labor force.

	<u>Civilian Labor Force</u>		<u>Additions to Labor Force</u>
	<u>1965</u>	<u>1975</u>	<u>1965-1975</u>
Both sexes	100.0	100.0	100.0
Male	62.9	61.6	51.7
Female	37.1	38.4	48.3
All ages 14 and over	100.0	100.0	100.0
14-24	17.7	21.8	51.1
25-44	40.4	37.4	16.1
45 and over	41.9	40.8	32.8

With respect to the 1955-1965 decade, the rate of men's participation in the labor force dropped so much (from 84 to 78) and women's rose so much (from 38 to 41) that women contributed 109.5 percent of the total rise in the labor force in the ten years, while the number of men in the labor force actually dropped. The greatest rise in the participation rates for women was in the 45-64 age bracket. Among the men, it was the young and the old who accounted for the drop in the over-all participation rate. A major reason for the drop in the younger age group (14-24) was that many of these males stayed in school longer and so delayed in entering the labor force. The growing availability of retirement benefits under social security as well as under private pension plans has led more men to retire at 65 or soon after; thus, the decline in participation rates in men in the older age groups.

Young Workers

It is expected that persons aged 25 and under will contribute half of the increase in the labor force between 1965 and 1975. Young people aged 20-24 will constitute about one-eighth of the labor force in 1975, compared with about one-tenth in 1965, and even less in 1955.

The rate of school enrollment is without question the major factor influencing the work-activity rate of teenagers and young people between 20 and 24. Generally, young people go to school for more years now; thus, proportionately fewer will enter the labor force on a full-time basis before age 25. On the other hand, the rising cost of a college education may lead to more part-time work among college students. Another factor, of course, is the armed forces.

As for women aged 20-24, their labor force participation is limited by the fact that many marry about this time, and may then quit their jobs. However, they are more likely to continue working than formerly; also, some young married women continue to work because their

husbands are in military service. Nevertheless, the principal force limiting young women's participation in labor is the fact that women with small children typically do not hold jobs.

Women aged 20-24 constituted 12 percent of the female labor force between 1955 and 1965; this is expected to rise to 14 percent between 1965 and 1975. This figure would be higher were it not for the fact that older women are continually contributing a higher and larger share of the labor force.

In summary, during the 1965-1975 decade about 1,900,000 young people aged 14-24 will enter the labor market in New York State looking for a job. Of these about 1,100,000 will be male, and 800,000 will be female.

Older Workers

The number of men in New York State's labor force between the ages of 45 and 54 remained stationary from 1955 to 1965; in contrast, the number of women at that age level increased substantially - by 30.2 percent. Taking a broader group (45-64), it is expected that the number of men at these ages in the labor force will increase by about 6 percent between 1965 and 1975. The number aged 65 and over will continue to decline. For women, a continuation of recent trends towards greater participation in the labor force can be expected, with an increase in each age group above 44.

At least one reason for the increasing number of women in the older groups at work stems back to the shortage of labor in World War II, which brought many women, both young and old, into the labor market. And Rosie the Riveter continued to work when the war was over. The trend, originating in the desire to raise the family's level of income, has been encouraged by increasing opportunities for work, especially in recent prosperous years. And women today find that their working is socially acceptable, and it is becoming more acceptable as more of them take jobs.

It is anticipated that these trends will continue in the future, and that women aged 45 and over will add about 250,000 to the State's labor force between 1965 and 1975. Even among women aged 65 and over, one out of nine is in the labor force, and this ratio is expected to persist - in contrast to the expected continued drop in the ratio of men aged 65 and over.

Women 25 to 44 Years of Age

There will be 80,000 more women 25-34 in the State's labor force in 1975 than in 1965, even though their average labor-force-participation rate will not rise because many women still have young children to care for. The rise will be due to the increased female population in this age group, as a result of the State's increased birthrate after World War II.

However, in the female age group 35-44, it is expected that there will be 20,000 fewer in the labor force in 1975 than in 1965. This is because there will be less women 35-44 in the population in 1975, due to the lower birthrates in the 1930's.

Men of Prime Working Age

Men aged 25 to 44 form the core of the working population. Almost all are in the labor force; those who are not are usually seriously handicapped or disabled. Also, there is a small number finishing their education, especially in the professional groups.

The low birthrates of the 1930's largely account for the fact that there were relatively few men 25-34 in New York State in 1965. Other factors were at play also, including the migration of young families to Connecticut and New Jersey suburbs, plus the growth of the armed forces. There were about 200,000 (17 percent) fewer men 25-34 in the State in 1965 than in 1955.

In 1975 these same men will be 35-55, and the scarcity will be found at this level, which contributes many experienced men in the higher professional and managerial ranks. In fact this age group will be 14 percent fewer than in 1965. This factor, along with governmental manpower and job development programs, will tend to open opportunities for better jobs to people who are at a disadvantage in the job market: women, Negroes, Puerto Ricans, and older men. Also, promotion will come faster for young people.

There will be about 265,000 (30 percent) more men 25-34 in 1975 than in 1965, because of the higher birth rates in the 1940's than in the 1930's. Thus, between 1965 and 1975, one can expect more professional men at the start of their careers, as well as more young men with some experience who can take over some of the higher level jobs in nonprofessional occupations in business and industry.

Nonwhites and Persons of Puerto Rican Origin

For close to a century the Negro population has been migrating from the South, accelerated during and after World War I and especially so since World War II. In the 1950's more than 1,500,000 Negroes left the South, 70 percent of them going to the industrialized Middle Atlantic and East North Central States; almost all of the remainder went to California. As a result, only 60 percent of all the Negroes in the nation are now in the South where they account for 20 percent of the total population.

In general, the movement of Negroes was one from the farms to the cities so that by 1960, 72.4 percent of the country's Negro population was living in urban areas, as compared with 69.5 percent of the white population.

In 1940, 4.4 percent of New York State's total population was nonwhite; in 1960, it was 8.8 percent; and by 1975, it is expected to be 12.3 percent.

New York City's share of the State's nonwhites (non-Puerto Rican) was 76 percent in 1960, down from 80 percent in 1940. By 1975 this share is expected to be down to 74 percent.

Nonwhites accounted for 13.0 percent of the labor force population in New York City in 1960, 15.5 percent in 1965, and an anticipated 20 percent in 1975.

New York City is also where many Puerto Ricans have settled; in fact, 90 percent of all migrants from Puerto Rico in the 1940's settled in New York City. More recently, this percentage has declined very appreciably. Nevertheless, in 1960 no less than 430,000 of the City's population had been born in Puerto Rico.

The trend toward continued migration from Puerto Rico to New York City, and particularly to other parts of New York State, is expected to occur. This, coupled with the higher-than-average birth rates of this ethnic group will mean that their number in the State will continue to increase in the next decade at a more rapid rate than that of the population as a whole.

On a Statewide basis, nonwhites plus Puerto Ricans made up 15.0 percent of the labor force in 1965; it is expected to be 17.5 percent in 1975.

A far smaller proportion of nonwhites and Puerto Ricans than of non-Puerto Rican whites are in the professional, technical, clerical, sales, and craft occupations. The opposite is true of jobs as operatives, service workers, and laborers. Certainly a part of the reason for the lower occupational status of nonwhites and Puerto Ricans is their lower average educational attainment. In 1960 the white non-Puerto Rican males in New York State aged 14 and over had completed 10.9 years of school on the average. This figure for nonwhite males was 9.5, and for Puerto Ricans, 8.4. Similarly, 41 percent of white males in the State had completed 4 years of high school, compared with 28 percent of nonwhites and 14 percent of Puerto Ricans. Among males aged 20-24, about 35 percent of whites had been to college one or more years, compared with 10 percent of the nonwhites and 3 percent of the Puerto Ricans.

Educational Attainment

Young people in New York State are generally staying in school longer, so that the average number of years of education is expected to increase considerably between 1965 and 1975. In 1965, of the State's total population aged 25 and over, 10 percent had completed 4 or more years of college; by 1975 this is expected to rise to 13 percent. The great expansion of colleges and universities during the recent past, especially State University of New York, has helped make this possible.

Similarly, the proportion of the population aged 25 and over that has not finished high school is expected to decline from 55 percent in 1965 to 46 percent in 1975. One element important in this change is the gradual dying off of the people who arrived as immigrants with little or no schooling before immigration was curtailed about 1920. These are being replaced by younger people who, in part because of compulsory education laws, have higher levels of educational attainment. Nevertheless, there continues to be some

migration into the State (from other states, Puerto Rico, and abroad) of people whose educational attainment is lower than that of people who have grown up in New York State.

Since the State population will be better educated in 1975, the labor force will be better educated. In 1975, some 16 percent of the labor force will have had 4 or more years of college education, in contrast to 12 percent in 1965. An even more striking increase will occur in the proportion of those who will have completed high school and from one to three years of college; these levels accounted for 40 percent of the labor force in 1965, and in 1975 it will be 47 percent.

The next lower level of educational attainment is attendance at high school for less than 4 years, consisting mainly of drop-outs. It will account for 22.5 percent of the labor force in 1975, as against 24.0 percent in 1965.

A very striking decline in the lowest level of educational attainment (elementary school) will be apparent by 1975. While the labor force is rising by a million, a drop of 500,000 is expected to occur in the labor force which has completed only 8 years of schooling - only 15 percent of the total labor force in 1975.

Among men aged 45 and over, those with more education are more likely to be in the labor force. In 1960, 90 percent of college graduates in this age group were in the labor force, in contrast to only 75 percent of those with only a high school education. A major reason for this is that the latter group's lack of job skills frequently makes it difficult for them to continue working after they lose their job, and they are forced into premature retirement.

Women with more educational attainment are more likely to be in the labor force. In 1965, among women aged 45 and over, 64 percent of the college graduates were in the labor force, but only 27 percent of those with simply an elementary school education. In the age bracket 25-44, the time of bearing and rearing children, the difference is less marked -- 57 percent of the college graduates were in the labor force and 43 percent of the elementary school level-group. Taking all females aged 14 and over, 63 percent of the college graduates were in the labor force, and only 28 percent of those with only an elementary school education.

MANPOWER REQUIREMENTS

How many workers and what kinds will be required in the future by New York State employers in industry and government? The projections are made on the basis of a number of assumptions, one of which is that there will be relatively full employment in the projection years (96 percent of the labor force employed). The projections in the following pages are not

intended to pinpoint the future; they should be considered as a projection for a relatively prosperous 1970-1975. If either 1970 or 1975 turns out to be truly depressed, the actual number of jobs available in that year may deviate noticeably from the number projected.

Other major assumptions are:

1. That during the intervening years there will be no major war or other cataclysmic event of a degree to substantially alter the rate and nature of the State's economic growth.
2. That national security expenditures (excluding space) will not be significantly different from what they were in 1964 (in constant dollar terms)*.
3. That economic and social patterns and relationships in our society, including patterns of consumption, will continue to change at about the same rate as in the mid-sixties.
4. That the scientific and technological advances of recent years will continue, and that research and development expenditures will continue to grow, though at a slower rate.

Although the number of jobs in existence between 1970 and 1975 will increase, the degree of change will vary from industry to industry, and even from occupation to occupation in the same industry. In some cases there will be declines. The forces which bring about the increases and decreases of jobs may be summed up by the term "industrial change".

* As this is written, the assumption of no "major" war and the 1964 level of security expenditures does not hold. In mid-1964 defense expenditures began to increase to meet the needs in Vietnam - from \$47.4 billion in fiscal 1965 to \$68.4 billion in 1967. Such increases have had a very substantial impact in several of New York's manufacturing industries, especially electrical and non-electrical machinery, aircraft, and instruments. Employment in these industries in 1967 reached the projections for 1970 or even higher. Cessation or curtailment of activities, as was promised in early 1970, would be likely to reduce the present level of employment in defense industries.

In part at least because of multiplying programs in the late 1960's concerned with poverty, housing, civil rights, narcotics, and other problems mainly of an urban nature, government employment has been increasing more rapidly than anticipated in 1965.

In this sub-section on "Manpower Requirements", the term number of jobs refers to the number there is expected to be in various industries and occupations in the future, in contrast to the number in 1965, as a result of industrial change.

The term job requirements refers to the number of jobs that will open up as a result of industrial change, deaths, and retirements.

It is important to note that the projections of number of jobs in some industries and occupations does not indicate what employment will actually be, because adequate quantities of adequately trained manpower will not necessarily be available to fill all jobs.

Estimates of future manpower needs suffer from inability to anticipate adequately the adjustment processes of the economy. Manpower needs in certain occupations can be met in numerous ways. Normal education and formal training are one means. But much can also be accomplished by utilizing the existing work force more efficiently, by inducing workers to shift from one occupation or area where the need is less urgent, or by inducing nonworking persons to take jobs.

The projections presented in the following pages are a modification of projections made by the United States Bureau of Labor Statistics for the nation as a whole, and are tailored for New York State and its regions.

It should be borne in mind that when the term "industry" is used, it includes the health industry and that, whenever possible, data referable to that industry will be pinpointed.

INDUSTRIAL CHANGE

The kinds of jobs to be available in New York State in the future will depend upon how the structure of New York State industry changes (including government as well as private activities). It will also depend upon how the skill requirements of individual industries change as the result of technologic changes, changes in the form of industrial organization, etc.

Some industries in the State have been growing; others have been declining; and these changes will continue in the future to result in a varying industrial mix.

An overview of the percent distribution of jobs according to industry division, by occupation group, in 1965 with projections to 1975 is shown in the following tables. (Note that jobs in the health industry are reflected broadly in the category "Services and Miscellaneous". More detailed information on the health industry is provided on subsequent pages.)

PERCENT DISTRIBUTION OF JOBS ACCORDING TO INDUSTRY DIVISION, BY OCCUPATION GROUP, NE

Industry Division	All Occupations	Professional ^(a)	Managers ^(b)	Clerical ^(c)	Sales ^(d)
1965					
Number of jobs - all industries	7,500,000	1,072,200	718,300	1,535,300	576,900
<u>PERCENT DISTRIBUTION:</u>					
All Industries	100.0	100.0	100.0	100.0	100.0
Agriculture, forestry, fisheries	1.8	0.4	0.1	0.1	0.1
Contract construction	5.0	2.0	4.9	1.5	0.4
Manufacturing and mining	25.4	17.3	17.1	18.7	14.1
Transportation & Public Utilities	7.8	3.6	6.0	10.2	0.9
Wholesale and Retail Trade	21.1	4.4	39.6	19.6	67.2
Finance, Insurance, & Real Estate	7.4	2.5	12.6	18.5	13.2
Services and Miscellaneous	26.9	65.6	16.3	21.4	4.0
Public Administration	4.6	4.2	3.4	10.0	0.1
1975					
Number of jobs - all industries	8,579,900	1,395,700	781,800	1,829,900	626,700
<u>PERCENT DISTRIBUTION:</u>					
All industries	100.0	100.0	100.0	100.0	100.0
Agriculture, forestry, fisheries	1.1	0.3	0.1	0.1	0.1
Contract construction	5.4	2.2	6.0	1.7	0.4
Manufacturing and mining	22.5	16.5	15.4	16.2	13.0
Wholesale and Retail Trade	20.7	4.0	36.4	19.4	66.9
Finance, Insurance & Real Estate	7.2	2.4	14.2	17.2	14.0
Services and Miscellaneous	30.4	66.5	17.8	26.1	4.5
Public Administration	5.5	4.9	4.6	10.4	0.1

- a. Professional, technical, and kindred workers
- b. Managers, officials, and proprietors, except farm
- c. Clerical and kindred workers
- d. Sales workers
- e. Craftsmen, foremen, and kindred workers
- f. Operatives and kindred workers
- g. Service workers, including private household workers
- h. Farmers, farm managers, and farm laborers
- i. Laborers, except farm and mine

RY DIVISION, BY OCCUPATION GROUP, NEW YORK STATE, 1965 and 1975

	Managers ^(b)	Clerical ^(c)	Sales ^(d)	Craftsmen ^(e)	Operatives ^(f)	Service ^(g)	Farm ^(h)	Laborers ⁽ⁱ⁾
1965								
	718,300	1,535,300	576,900	947,600	1,269,800	987,400	119,600	272,900
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	0.1	0.1	0.1	0.2	0.2	0.1	100.0	0.2
	4.9	1.5	0.4	20.8	2.6	0.3	-	22.4
	17.1	18.7	14.1	40.2	61.5	2.2	-	18.9
	6.0	10.2	0.9	11.8	12.4	2.0	-	20.0
	39.6	19.6	67.2	11.2	13.9	23.1	-	18.6
	12.6	18.5	13.2	1.2	0.3	5.7	-	3.3
	16.3	21.4	4.0	12.7	8.5	57.8	-	12.5
	3.4	10.0	0.1	1.9	0.6	8.8	-	4.1
1975								
	781,800	1,829,900	626,700	1,082,500	1,319,000	1,198,400	86,900	259,000
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
	0.1	0.1	0.1	0.1	0.2	-0.05	100.0	0.1
	6.0	1.7	0.4	21.8	3.7	0.3	-	24.0
	15.4	16.2	13.0	36.3	57.1	1.7	-	15.4
	36.4	19.4	66.9	12.4	15.5	22.3	-	20.2
	14.2	17.2	14.0	1.2	0.3	3.7	-	3.8
	17.8	26.1	4.5	14.3	9.2	59.5	-	15.2
	4.6	10.4	0.1	2.4	0.8	10.8	-	4.3

As can be seen from the preceding table, among the goods-related industries, the industry division with the most notable decline is agriculture. It is expected that this downward trend will continue. Manufacturing jobs also will probably decline somewhat on a percentage basis, although there will be gains in plants making durable goods with the largest growth in jobs in the manufacture of electrical goods and equipment, instruments, and nonelectrical machinery.

In contrast, substantial job increases are taking place in other New York industries, the greatest being in public administration (36 percent increase between 1965 and 1975). Almost all will be in State and local government. Business, educational, welfare, and engineering services will have greater than average growth.

Changes in the structure of industry will help determine what changes in manpower requirements will face New York State during the coming years in various occupations. For example, since State and local government is a large employer of professional workers (civil engineers, social workers, psychiatrists, college teachers, employment interviewers, etc.), the rapid growth in State and local government activities is one of the principal reasons for the large expansion expected in requirements for professional personnel.

Occupational Requirements Resulting from Industrial Change

The major changes in occupational manpower requirements in the foreseeable future will be four in number:

1. Rapid growth in the number of jobs in the white-collar group of occupations (professional, technical, managerial, clerical, and sales.)
2. An equally rapid growth among service workers (food service workers, protective service workers, attendants of various kinds, practical nurses, etc.)
3. A relatively small growth in blue-collar occupations (craftsmen, operatives, and industrial laborers).
4. A sharp decline in needs for farmers and farm laborers.

Two-thirds of the professional, technical, and kindred workers will be in the service industries by 1975, including public and private education, and private and public hospitals.

Next to technicians and technical specialists, the most rapidly expanding group of occupations is the professional. As can be seen in the table on the next page, jobs in this group are expected to increase by 27 percent, almost twice as fast as all occupations combined. The largest growth will take place among natural scientists and engineers; social scientists and social workers; physicians, therapists, and other health personnel; and teachers.

NUMBER OF JOBS IN SELECTED PROFESSIONAL AND KINDRED OCCUPATIONS,1965 and 1975: NEW YORK STATE

Occupation	Number of Jobs		Change 1965-1975	
	1965	1975	Number	Percent
All professional & kindred occupations	896,300	1,137,300	+241,000	+26.9
Engineers, technical	95,400	128,400	+33,000	+34.6
Natural scientists	21,400	30,700	+9,300	+43.5
Chemists	12,000	16,300	+4,300	+35.8
Biological scientists	1,900	2,800	+ 900	+47.4
Mathematicians	2,400	3,900	+1,500	+62.5
Physicists	3,400	5,500	+2,100	+61.8
Medical & other health workers	179,900	226,800	+46,900	+26.1
Dentists	15,600	17,400	+ 1,800	+11.5
Dietitians & Nutritionists	4,100	4,800	+ 700	+17.1
Nurses, professional & student	89,000	116,700	+27,700	+31.1
Optometrists	1,600	1,600	-	-
Osteopaths	800	800	-	-
Pharmacists	13,700	14,900	+ 1,200	+8.8
Physicians	42,300	52,100	+ 9,800	+23.2
Veterinarians	1,200	1,500	+ 300	+25.0
Chiropractors & therapists	8,300	11,700	+ 3,400	+41.0
Psychologists	3,300	5,300	+ 2,000	+60.6
Teachers (all types)	236,200	291,800	+55,600	+23.5
Teachers, Elementary	110,500	119,300	+ 8,800	+ 8.0
Teachers, Secondary	71,000	92,500	+21,500	+30.3
Teachers, College	27,000	42,500	+15,500	+57.4
Teachers, other	27,700	37,500	+ 9,800	+35.4
Social scientists	3,700	11,000	+ 2,300	+26.4
Economists	3,700	4,300	+ 600	+16.2
Statisticians & Actuaries	4,500	5,800	+ 1,300	+28.9
Other social scientists	500	900	+ 400	+80.0
Other professional & kindred workers	304,700	448,600	+93,900	+26.5
Airplane pilots & navigators	3,500	5,100	+ 1,600	+45.7
Clergymen	16,100	16,700	+ 600	+ 3.7
Lawyers & judges	44,800	52,500	+ 7,700	+17.2
Librarians	11,400	14,000	+ 2,600	+22.8
Social, welfare & recreation workers	23,200	34,000	+10,800	+46.6

The largest growth rate is projected for the job group made up of biological, medical, and dental technicians - 71.0 percent between 1965 and 1975. Relatively small increases are projected for broadcasting and motion picture specialist groups.

Various circumstances combine to influence manpower requirements in the professional field. Some of the more pertinent ones expected to be very influential between 1965 and 1975 are the following:

<u>Circumstance</u>	<u>Occupations affected</u>
Rising standard of living, bringing demand for more & better services.	Teachers, physicians, research scientists
Growth of medical & biological research	Life Scientists and physicians
Growth of chemical industries producing plastics, pharmaceuticals, etc.	Chemists, biologists, chemical engineers
Expanding population	Teachers, librarians, vocational counselors, social workers, physicians, nurses, other health personnel
Medicare & Medicaid, and extension of hospital insurance; demand for higher standards of medical service; stress on rehabilitation.	Physicians, nurses, dentists; all other types of health personnel
Expansions of programs of higher education.	College teachers and research scientists
Expansions of programs in care of narcotic addicts	Physicians, nurses, psychologists, social workers, therapists

OCCUPATIONAL REQUIREMENTS RESULTING FROM DEATH AND RETIREMENT

The picture of manpower requirements presented so far is incomplete, since it has shown only those needs resulting from industrial change. To that picture should now be added requirements for replacing workers who will die or will retire from the labor force, including persons who leave because of illness or to take up family responsibilities.

During the decade between 1965 and 1975, requirements because of death and retirement are expected to be about twice as great as those due to industrial change:

- 1,079,900 = Result of industrial change (14.4 percent of 1965 jobs)
- 2,094,600 = Result of death and retirement (27.9 percent of 1965 jobs)
- 3,174,500 = total (42.3 percent of 1965 jobs)

The table below indicates job requirements resulting from death and retirement, compared with those due to industrial change, in selected occupations.

Job Requirements Resulting From Death and Retirement,

Compared With Those Due to Industrial Change:

New York State, 1965-1975

Occupation	Death & Retirement		Industrial Change*	
	Number in decade	As percent of 1965 jobs	Change in no. of jobs	As percent of 1965 jobs
Professional, technical & kindred workers	2,094,600	27.9	+1,079,900	+14.4
Natural scientists	3,300	15.4	+ 9,300	+43.5
Medical & other health workers	73,400	34.8	+ 69,200	+32.8
Teachers	80,100	33.9	+ 55,600	+23.5
Social scientists	2,400	27.6	+ 2,300	+26.4
Clerical & kindred workers	470,200	30.6	+ 294,600	+19.2
Operatives & kindred workers	283,700	22.3	+ 49,200	+ 3.9
Service workers	367,300	37.2	+ 211,000	+21.4
Farmers & farm laborers	34,000	28.4	- 32,700	-27.3

Only in one major occupation category - professional, technical, and kindred workers - is the expected expansion due to industrial change estimated to exceed the number of vacancies created by death and retirement. The replacement needs among women will be highest among librarians, professional and practical nurses, and teachers.

Educational Development and Vocational Preparation

Requirements of Jobs

Aside from aptitudes, interests, and other personal characteristics and qualities which are important to job performance, different occupations and occupation-levels require various kinds and levels of knowledge and skill. The sections on the next page, selected for pertinence to the health and education occupations from the U.S. Department of Labor's Dictionary of Occupational Titles, indicate things which people learn that contribute to

* Net effect of industrial expansion and contraction on number of jobs (1975 projection minus 1965 estimate), stated first as an absolute number and then as a percent of 1965 number of jobs.

"general educational development" useful in handling work at a given level. Only job levels 6, 4, and 1 are given as examples.

LEVEL 6

Reasoning Development

Apply principles of logical or scientific thinking to a wide range of intellectual and practical problems. Deal with nonverbal symbolism (formulas, scientific equations, graphs, musical notes, etc.) in its most difficult phases. Deal with a variety of abstract and concrete variables. Apprehend the most abstruse classes of concepts.

Language Development

Comprehension and expression of a level to:

- a. Report, write, or edit articles for publications such as magazines, newspapers, technical and scientific journals.
- b. Prepare and deliver lectures on economics, politics, education, and science.
- c. Interview, counsel, or advise such people as students, clients, or patients in matters such as welfare eligibility, vocational rehabilitation, mental hygiene, or marital relations.

LEVEL 4

Reasoning Development

Apply principles of rational systems (e.g., bookkeeping, nursing, medical technology) to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Interpret a variety of instructions furnished in written, oral, diagrammatic, or schedule form.

Language Development

Comprehension and expression of level to:

- a. Transcribe dictation, make appointments for executive and handle his person mail, interview and screen people wishing to speak to him, and write routine correspondence on own initiative.
- b. Interview job applicants to determine work best suited for their abilities and experience, and contact employers to interest them in services of agency.
- c. Interpret technical manuals as well as drawings and specifications, such as layouts, blueprints, and schematics.

LEVEL 1

Reasoning Development

Apply common sense understanding to carry out simple one-step or two-step instructions. Deal with standardized situations with occasional or no variables in or from these situations encountered on the job.

Language Development

Comprehension and expression of a level to:

- a. Learn job duties from oral instruction or demonstration.
- b. Write identifying information such as name and address of customer, weight, number, or type of product, on tags or slips.
- c. Request orally, or in writing, such supplies as linen, soap, or work materials.

In each level, there are also mathematical development skills required, but for the sake of brevity these have been omitted. The range, as might be expected, extends from knowledge of advanced mathematical and statistical techniques to the performance of simple addition and subtraction, and the reading and copying of figures.

The next table gives the United States Department of Labor's list of types of Specific Vocational Preparation (SVP), under which is included everything from a short demonstration to a new employee, to a long apprenticeship, or an even longer course of graduate study. A job requiring a long course of SVP may also require the highest degree of general educational development. It is anticipated that in 1975 more than half the jobs in New York State will fall into the higher-skill category. The greatest downward shift in jobs will be those requiring only low or relatively low levels of general educational development.

Distribution of Jobs to be Filled,
By Level of General Educational Development (GED)
 and
Specific Vocational Preparation (SVP):
NEW YORK STATE, 1965-1975

Level of GED and SVP Required	Number of Jobs		Total jobs to be filled 1965-1975	
	1965	1975	Number	Percent
All educational(GED) levels combined	7,500,000	8,579,900	3,174,500	100.0
SVP Group 8: 4 years to 10 years	502,200	602,800	219,700	6.9
SVP Group 7: 2 years to 4 years	1,766,600	2,124,800	821,900	25.9
SVP Group 6: 1 year to 2 years	1,305,100	1,487,400	598,500	18.9
SVP Group 5: 6 months to 1 year	428,500	481,300	163,100	5.1
SVP Group 4: 3 months to 6 months	527,400	644,200	263,000	8.3
SVP Group 3: 30 days to 3 months	2,169,600	2,420,400	829,600	26.1
SVP Group 2: Short demonstration to 30 days	527,500	560,000	236,800	7.5
SVP Group 1: Short demonstration only	273,100	259,000	41,900	1.3

Jobs in the health and education fields may be classified by level of general educational development and by specific vocational development. The more important occupations are officially rated as follows:

GED	SVP	Occupation
6	8	Dentists, chemical engineers, natural scientists, osteopaths, physicians, psychologists, college teachers
6	7	Social scientists
5	8	Veterinarians
5	7	Chiropractors, therapists, data processing and programming specialists, librarians, optometrists, pharmacists, social and welfare workers, statisticians, secondary school teachers, technical writing technicians, electronic engineering technicians, physical science technicians.
5	6	Sanitation inspectors, elementary school teachers.
4	7	Communications specialists, dietitians and nutritionists, professional nurses, service technicians, technical illustrators.
4	6	Attendants in physicians' and dentists' offices, secretaries, medical and dental technicians, bookkeepers.
4	4	Accounting clerks
3	7	Bakers, butchers, cooks
3	6	Opticians and lens grinders
3	5	Receptionists, stenographers, tabulator operators
3	4	Hospital attendants, keypunchers, practical nurses
3	3	Office machine operators, file clerks, other clerical workers, janitors, typists, service workers.
2	3	Counter and kitchen workers
2	2	Chambermaids, parking attendants, cleaners, elevator operators, messengers, porters.
2	1	Laborers

JOB VACANCIES

To complete the picture of job openings to be filled in the 1965-1975 decade in New York State, one must take into account jobs that have not been filled because of the unavailability of qualified workers.

The vacancy rate varies substantially among occupations. It also varies among employers, for the same kind of job, being lower in an establishment with a relatively attractive wage schedule and other terms of employment.

Acute manpower shortages exist in some instances. For example, in the late sixties the State of New York as an employer had thousands of vacancies in professional, administrative, and technical occupations, including mathematicians, statisticians, dentists, physicians, nurses, medical technologists and technicians, psychiatrists, psychologists, social workers, librarians, and various types of educational and training specialists. In some of these occupations the vacancy rates were 20 percent or higher.

Unfortunately, the magnitude of the job-vacancy problem in the economy of New York State is not known for the State as a whole as of the mid and late sixties. However, a survey in the Rochester area (Monroe County) made in 1965 by the National Industrial Conference Board reported about 8,400 vacancies among 275,000 positions - a rate of about 3 percent. This is corroborated by the low unemployment rate in the same area (2.0 percent in 1965).

From certain general observations it may be presumed that the vacancy rates of other principal industrial areas of the State were generally somewhat less than that in Rochester, especially because the unemployment rates were higher. The closest to Rochester was the Albany-Schenectady-Troy area with an unemployment rate of 3.5 percent in 1965.

When certain occupations specifically related to the health and education industries are considered separately, the job vacancy rates in the Monroe County (Rochester) survey were shown to be exceptionally high:

Technical engineers	7.3 percent
Natural scientists	7.9 percent
Social scientists	13.3 percent
Practical nurses and hospital attendants	6.2 percent

MEETING MANPOWER REQUIREMENTS

The economy meets manpower requirements in two broad ways - by the recruitment of new workers without previous job experience, and by the promotion or other shifting of workers from one job to another.

When a worker shifts to a different occupation, the vacancy he leaves adds one item to industry's manpower requirements. In many jobs at the unskilled level, more people leave for jobs of another kind than shift in from other jobs - a deficit occupation. In some other occupations, more persons shift in than shift out - a net in-mobility occupation.

Accordingly, the pattern of meeting manpower requirements in any given occupation over a period of time, may be described as follows:

Manpower requirements (arising from industrial change, death, and retirement) minus net mobility (number moving in less number moving out of the same occupation) equals new entrants who have to be recruited if manpower requirements are to be satisfied.

Stated somewhat differently from a geographic standpoint, the formula may be rephrased:

Manpower requirements minus net occupational mobility within the State and minus net geographic migration into the State equals new entrants to be recruited within the State.

GEOGRAPHIC MOBILITY

New York State has long been a mecca for job-seekers. Earlier, the large immigrations from abroad constantly met expanding manpower needs of employers in the larger cities of New York State. However, with the cessation of mass immigration, manpower needs have been served by migrants from other states.

Since World War II, the interstate migration pattern has consisted of two contrasting flows. On the one hand, there has been an exodus of Negroes from the rural South into New York City and other major cities of the State. There has also been a large migration from Puerto Rico and other West Indian islands, particularly to New York City. On the other hand, there has been a substantial migration of white families out of the State into suburban areas in New Jersey and Connecticut, and also of older residents of New York State to the South, the Southwest, and the West.

From 1950 to 1960, net migration into New York State amounted to 210,000. This consisted of a net in-migration of 282,000 non-whites and a net out-migration of 72,000 whites. It is anticipated that between 1965

and 1975 there will be a net in-migration of about 439,000. Of this number, some 356,000 will be 14 years of age and older, and 218,000 will be in the labor force, mostly under age 45. A net out-migration can be expected in the over-45 group.

If the proportion of whites and non-whites follows the 1950-1960 pattern, net immigration from 1965 to 1975 will fill 7 percent of the job needs in that decade, divided as follows:

- 5 percent of clerical and craft jobs
- 12 percent of service worker jobs
- 28 percent of operative jobs
- 72 percent of the laborer jobs

OCCUPATIONAL SHIFTS

Data on anticipated occupational shifts between 1965 and 1975 are only rough approximations because there are so few data on this subject available over previous periods of years. Obviously many assumptions have gone into these estimates, but the great importance of information on movement among occupations requires that assumptions be made in order to obtain figures that enable one to view in perspective the occupational characteristics of future manpower needs.

Estimates for occupational mobility do not include the upgrading through experience and training of persons who enter the labor force between 1965 and 1975. To be included in the figures, a shift must have been made from one kind of occupation to another (either up or down the skill ladder), either within an establishment or between establishments.

Utilizing such estimates, it is expected that substantial portions of requirements will be met by the method of occupational shifting in the case of higher-skill-level occupations which include, in addition to the managerial group, the professional-technical, craftsmen, and clerical groups. In occupations which are predominantly of a lower level of skill (e.g., operatives, service workers, laborers, etc.), substantial deficits will result from heavy out-movements.

Occupational shifting will not be all upward on the skill ladder. Some of it will be a shifting of subject field at about the same level - e.g., the high school teacher who becomes a school librarian. Some of it will be a downward shifting, not infrequent among workers who are getting older or who have a disability which prevents them from carrying out former duties. Some of the more common types of shifting can be readily illustrated:

1. Upward shifting within a "promotional" line of occupations related in subject matter and technical skill requirements.

The most common form of upward shifting is from a lower grade to a higher grade of the same occupation, such as from a junior accountant to

senior grade level. Other examples include journeyman electrician to electronic trouble-shooting technician; chemical laboratory assistant to industrial chemist; typist to stenographer or stenographer to secretary.

2. Shifting not within promotional lines usually involving a change in the field or type of work.

Examples of this type of shifting include those that result from displacement of workers by technological, product, or other industrial change. A payroll clerk may be displaced by a computer; or a laboratory technician may be displaced by an automated machine which performs laboratory tests.

In addition, this type of shifting may result from lack of interest in a field of work, dissatisfactions with an employer, a desire to improve one's status, changes in the kinds of jobs available in the labor market, changes of residence, etc.

Shifting of occupation may also result from the person's increasing age or physical disability. Usually these are downward shifts resulting in a lower scale of financial compensation. In some instances, the shift is only from full-time work to part-time work.

And, finally, there are shifts from part-time jobs held by high school students and college students in the 14-24 age group to regular jobs after their schooling has been completed.

The educational and training effort needed before an occupational shift can be made will, of course, depend upon the levels of skill and knowledge requirements and the magnitude of the change involved.

Upward shifts within established promotional lines of business and government agencies or between closely related occupations have in the past been related primarily to length of satisfactory job experience. Seniority is the critical consideration under some union agreements. In shifts involving technicians, higher-level clerical and managerial positions, formal instruction by the employer on the premises or course work at an educational institution may be given. This at times may involve employer-paid-for courses at adult vocational schools.

Resident New Entrants

New entrants to the labor force recruited from the resident New York State population for the most part are young people who have recently completed their schooling or who are drop-outs. Between 1965 and 1975 there will be an estimated 2,812,000 resident new entrants into the New York State labor force, about 17 percent of whom will become professional, technical and kindred workers. The important question is how well does the expected supply of resident new entrants match up, in terms of quality, with the number of jobs available to them. Only one measure of quality is available to help answer the question. This is the number of years of schooling completed - the "educational attainment". Unfortunately, this is not a wholly adequate measurement for it does not reflect specific vocational preparation of the sort acquired by job experience. Another weakness lies in the fact that the quality of schooling varies from place to place.

In general, it is expected that in 1975 the supply of persons with only 1 to 3 years of high school and the supply of those with 1 to 3 years of college is expected to exceed the number of jobs expected to be available to people at those levels.

Job expectations at three educational levels may be estimated for 1975 as follows:

1. At the top level (4 years or more of college), it is expected that the difference between supply and demand will not be significant. This projection is based in part on the belief that the master plan of the State University of New York will be implemented. If it is, then projected higher education facilities will probably be adequate to provide the numbers of college graduates who are needed. Shortages may, of course, develop in medicine or engineering, depending upon how much of the educational facilities and teaching staff can be made available for this purpose. Another factor, difficult to estimate for any occupation but particularly for some sectors of the health industry, is how attractive the field will become to prospective students.
2. At the other end of the educational scale (less than high school graduation), there will probably be more jobs calling for just an elementary-school education than persons whose schooling has not gone beyond that point. Presumably such jobs will be filled by the extra persons in the "1 to 3 years high school" group, even though they will be poor and unattractive jobs.
3. At the intermediary level of educational attainment, there are expected to be more jobs requiring high school graduation (but no college) than there will be persons with a high school diploma (but no college credits). The opposite is anticipated to be true at the "1 to 3 years of college" level - more people than jobs. This suggests that some of the latter group will have to take jobs that do not require education beyond high school.

Jobs for Women

Projections indicate that in 1975 about 53 percent of all people aged 14 and over will be women, the same as in 1950. If current trends continue, women will account for almost half (48.3 percent) of the civilians added to the labor force during the decade 1965-1975. Thus in 1975, women will be 38.4 percent of the total labor force in New York State as against 37 percent in 1965.

One group of female workers will account for 20 percent of all jobs in the State. Some of its larger occupations are medical, dental, and biologic technicians; social, welfare, and recreation workers; office machine operators; and hospital attendants.

Jobs in which women in 1960 constituted 75 percent or more of the labor force include professional and practical nurses, dietitians, elementary school teachers, librarians, and various clerical positions. Although these occupations will still be largely filled by women in 1975, it is expected that a somewhat larger proportion of men will be in the ranks of nursing and elementary school teachers. In general, however, there will be no revolutionary changes between 1965 and 1975 in the kinds of jobs women hold.

MANPOWER DIFFERENCES OF LOCAL AREAS

Up to this point, manpower projections for 1975 have applied to New York State as a whole. While such projections are not available for all of the smaller political subdivisions of the State, data are presented below for two areas with which the Albany Regional Medical Program is concerned:

- A. Albany Area (Albany, Rensselaer, Saratoga, and Schenectady counties)
- B. Utica Area (Herkimer and Oneida counties)

Labor Force

Approximately one-half of the total labor force in New York State is within the New York City area. If one adds to this Long Island, Westchester, and Rockland Counties, two-thirds of the entire State labor force is accounted for. Next comes Buffalo (7 percent of total), followed by Albany (3.7 percent) and Rochester (3.6 percent). The Utica area's figure is 1.7 percent.

It is expected that in 1975 the labor force distribution will be as shown in the following table.

<u>Area</u>	<u>Number</u>	<u>Percent of total</u>
New York State	8,526,000	100.0
New York City	3,826,000	44.9
Long Island	1,224,000	14.4
Westchester-Rockland	604,000	7.1
Buffalo	593,000	7.0
Rochester	345,000	4.0
Albany- Schenectady- Troy	326,000	3.8
Utica	142,000	1.7

This estimate represents a 14 percent increase for the State as a whole for 1975 over 1965; 3.0 percent increase for New York City; 41.5 percent for Long Island; 30.5 percent for Westchester-Rockland; 16.7 percent for Buffalo; 29.2 percent for Rochester; 18.1 percent for Albany-Schenectady-Troy; and 14.5 percent for Utica area.

It is particularly important to note that the Capital District's estimated share of the civilian labor market will have an increase of 1975 over 1965 considerably less than that of most other areas of the State.

Occupational Patterns

In any area, the importance of a particular occupation depends in large measure on the type of industry found there. For example, in 1965 firms in the suburban Long Island and Westchester-Rockland areas had high concentrations of (1) professional and technical personnel and (2) managers and proprietors. Craftsmen and operatives figured more prominently in the Upstate occupational areas, whereas service workers were a more important category in the Downstate areas.

The projections for 1975 for New York State, Albany area, and Utica area are depicted in the next table.

Percent Distribution of Jobs by Occupation Group and by Area in 1965,

and

Percent Change in Number of Jobs between 1965 and 1975

Occupation Group	New York State			Albany Area			Utica Area		
	A*	B*	C*	A*	B*	C*	A*	B*	C*
Professional, technical, and kindred workers	14.3	100.0	+30	16.6	4.3	+37	14.8	1.7	+35
Managers, officials, and proprietors	9.6	100.0	+9	8.3	3.2	+9	7.7	1.3	+12
Clerical and kindred workers	20.5	100.0	+19	20.5	3.7	+22	16.6	1.3	+17
Sales Workers	7.7	100.0	+9	7.5	3.6	+10	6.7	1.4	+11
Craftsmen, foremen and kindred workers	12.6	100.0	+14	14.0	4.1	+22	14.0	1.8	+14
Operatives and kindred workers	16.9	100.0	+4	15.2	3.3	+3	19.7	1.9	+10
Service workers	13.2	100.0	+21	12.0	3.4	+26	12.1	1.5	+37
Farmers and farm laborers	1.6	100.0	-27	1.8	4.1	-24	5.1	5.2	-53
Laborers, except farm and mine	3.6	100.0	-5	4.1	4.2	-6	3.3	1.5	-10

*Legend:

A = Percent distribution by occupation group, 1965

B = Percent distribution by area, 1965

C = Percent change in number of jobs between 1965 and 1975

From the preceding table, it can be seen that in the professional, technical and kindred workers group, from which a large proportion of the workers in the health and education industries are derived, the Albany area is expected to have 37 percent more jobs to be filled in 1975 than in 1965. This, then, represents a major challenge to those concerned with health and education manpower in the coming years. A similar, although not quite so large (26 percent), increase in jobs to be filled is anticipated in the service-worker field, another area of great importance in the health industry. It should be noted that in both occupation groups, the Albany area increase in number of jobs in 1975 over 1965 will be proportionately greater than that of the State as a whole. The situation in the Utica area, comprised in part of Herkimer County, is quite similar.

The following tables are self-explanatory.

Employment by Industry, Actual 1960 and 1965, and
Projected 1970 and 1975: New York State

<u>Industry</u>	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>
Total nonagricultural employment	6,181,900	6,505,900	7,083,700	7,585,900
Drugs and medicines	23,300	22,900	25,300	26,500
Radio and television broad- casting	14,700	17,500	20,100	22,000
Drug & Proprietary Stores	23,600	24,700	25,800	27,500
Medical & other health services, total	193,400	234,700	286,400	334,900
Hospitals	143,400	170,900	208,500	243,900
Educational Services	108,900	134,600	162,200	186,200
All Government Jobs	837,700	957,100	1,141,500	1,299,200
Federal, total	184,100	180,200	179,200	182,300
Federal, except postal	104,100	97,100	91,100	90,000
State	118,100	143,600	186,000	226,900
Local	535,500	633,300	776,300	890,000

TOTAL NUMBER OF JOBS, BY INDUSTRY, ESTIMATED 1960 and 1965,
and
PROJECTED 1970 and 1975: New York State*

INDUSTRY	1960	1965	1970	1975
Total number of jobs	7,265,000	7,500,000	8,076,900	8,579,900
Drugs and medicines	23,600	23,200	25,600	26,800
Radio and television broadcasting	15,000	17,500	20,100	22,000
Drug and proprietary stones	30,800	31,400	32,500	34,100
Medical and other health services	375,500	432,700	532,800	630,400
Hospitals	253,100	288,500	359,400	433,700
Educational services	347,200	454,500	556,200	617,900
Public Administration	330,600	347,400	408,000	472,800
Federal, except postal	62,900	56,000	55,800	53,000
State	41,400	47,500	55,400	61,400
Local	146,500	160,800	208,700	266,000

* "Total number of jobs" consists of (1) non-agricultural wage and salary jobs; (2) self-employed and unpaid family workers; (3) domestic workers; and (4) agricultural workers (employed and self-employed). In this table, government employees in education, hospitals, construction, etc. are assigned to their respective industries; the rest are under public administration (e.g., police and fire protection).

OCCUPATION DISTRIBUTION OF JOBS, ESTIMATED 1960 and 1965,
AND PROJECTED 1970 and 1975: NEW YORK STATE

OCCUPATION	1960	1965	1970	1975
Natural scientists	17,900	21,400	26,500	30,700
Chemists	10,200	12,000	14,300	16,300
Biological scientists	1,700	1,900	2,500	2,800
Medical and other health workers, total	188,900	211,100	247,900	280,300
Dentists	14,700	15,600	16,700	17,400
Dietitians and nutritionists	3,900	4,100	4,600	4,800
Nurses, professional, and student	80,800	89,000	103,700	116,700
Nurses, practical	19,200	23,200	30,000	37,200
Optometrists	1,500	1,600	1,600	1,600
Osteopaths	800	800	800	800
Pharmacists	13,800	13,700	14,100	14,900
Physicians	38,000	42,300	48,100	52,100
Psychologists	2,500	3,300	4,400	5,300
Technicians, medical and dental	24,600	31,200	42,300	53,500
Veterinarians	1,200	1,200	1,400	1,500
Chiropractors and therapists	7,100	8,300	10,200	11,700
Teachers, total	191,000	236,200	269,400	291,800
Teachers, elementary	94,700	110,500	116,600	119,300
Teachers, secondary	55,600	71,000	85,000	92,500
Teachers, college	18,800	27,000	34,200	42,500
Teachers, other	21,900	27,700	33,600	37,500
Social scientists	7,900	8,700	9,800	11,000
Librarians	9,500	11,400	13,100	14,000
Secretaries	231,400	254,200	290,000	323,300
Typists	88,300	92,200	100,900	105,000
Keypunch operators	12,900	16,700	21,900	27,000
Attendants in physicians' and dentists' offices	8,600	9,500	11,100	12,600
Attendants in hospitals and other institutions	69,900	86,900	117,700	146,200

NUMBER OF JOBS TO BE FILLED, BY OCCUPATION, 1965-1975
NEW YORK STATE*

<u>OCCUPATION</u>	<u>In</u> <u>1965</u>	<u>JOBS TO BE</u> <u>FILLED</u> <u>1965-1975</u>	<u>% of</u> <u>1965</u>
All occupations	7,500,000	3,174,500	42.5
Natural scientists	21,400	12,600	58.9
Chemists	12,000	6,400	53.3
Biological scientists	1,900	1,200	63.2
Mathematicians	2,400	1,800	75.0
Physicists	3,400	2,400	70.6
Medical and other health workers	234,300	168,700	72.0
Dentists	15,600	7,100	45.5
Dietitians and nutritionists	4,100	2,200	53.7
Nurses, professional and student	89,000	63,000	70.8
Nurses, practical	23,200	26,100	112.5
Optometrists	1,600	400	25.0
Osteopaths	800	300	37.5
Pharmacists	13,700	5,100	37.2
Physicians	42,300	23,300	55.1
Psychologists	3,300	2,600	78.8
Technicians, medical and dental	31,200	31,600	101.3
Veterinarians	1,200	600	50.0
Chiropractors and therapists	8,300	6,400	77.1
Teachers	236,200	135,700	57.5
Teachers, elementary	110,500	49,300	44.6
Teachers, secondary	71,000	41,600	58.6
Teachers, college	27,000	23,500	87.0
Teachers, other	27,700	21,300	76.9
Social scientists	8,700	4,700	54.0
Librarians	11,400	7,200	63.2
Social, welfare, and recreation workers	23,200	18,300	78.9
Stenographers, typists, and secretaries	385,400	210,900	54.7
Attendants, hospital and other institutions	86,900	90,200	103.8

* Only those occupations associated with health and education are shown in this table. The number of jobs to be filled 1965-1975 is a result of industrial change, death, and retirement.

CIVILIAN NON-INSTITUTIONAL POPULATION, AGED 14 and OVER,
AND CIVILIAN LABOR FORCE, ESTIMATED 1960 and 1965, and PROJECTED
1970 and 1975: ALBANY-SCHENECTADY TROY AREA

AGE AND SEX	1960		1965		1970		1975	
	POPULATION	LABOR FORCE						
Total, aged 14 and over	472,000	263,000	498,000	276,000	528,000	301,000	569,000	326,000
Male, total	221,000	171,000	235,000	174,000	250,000	185,000	270,000	199,000
14-24	42,000	20,000	57,000	26,000	72,000	36,000	82,000	42,000
25-44	80,000	78,000	75,000	73,000	72,000	71,000	79,000	78,000
45-64	70,000	64,000	72,000	66,000	74,000	69,000	75,000	70,000
65 and over	29,000	9,000	31,000	9,000	32,000	9,000	34,000	9,000
Female, total	251,000	92,000	263,000	102,000	278,000	116,000	299,000	127,000
14-24	46,000	16,000	58,000	21,000	68,000	27,000	76,000	31,000
25-44	88,000	35,000	83,000	36,000	82,000	36,000	89,000	40,000
45-64	78,000	36,000	80,000	40,000	84,000	47,000	86,000	50,000
65 and over	39,000	5,000	42,000	5,000	44,000	6,000	48,000	6,000

NON-AGRICULTURAL EMPLOYMENT, BY INDUSTRY, ACTUAL
1960 and 1965, and PROJECTED 1970 and 1975,
ALBANY - SCHENECTADY - TROY

INDUSTRY	1960	1965	1970	1975
Total non-agricultural employment	225,300	245,300	268,900	297,500
Manufacturing, total	62,900	63,300	63,800	63,700
Contract Construction	7,700	10,900	13,500	16,300
Transportation, communication, public utilities	15,200	14,100	13,400	12,700
Radio and television broadcasting	400	400	400	400
Wholesale and retail trade	45,000	49,100	52,200	58,500
Drug and proprietary stores	800	900	1,000	1,100
Finance, insurance, real estate	8,900	9,500	10,800	11,500
Services, total	32,700	38,000	44,800	52,300
Medical and other health services	8,800	10,600	13,200	15,900
Hospitals	6,700	8,000	9,900	11,900
Educational services	5,400	6,400	7,600	8,700
Government, total	52,400	59,800	69,700	81,700
Federal, total	10,800	9,600	8,700	7,500
Federal, other than postal	2,300	2,300	2,300	2,300
State	23,200	27,700	33,000	40,400

OCCUPATION DISTRIBUTION OF JOBS, ESTIMATED 1960 and 1965,
AND PROJECTED 1970 and 1975
 ALBANY - SCHENECTADY - TROY AREA*

OCCUPATION	1960	1965	1970	1975
All occupations	261,500	278,500	301,800	328,700
Natural scientists	1,900	2,200	2,700	3,200
Chemists	800	900	1,000	1,200
Biological scientists	300	300	400	500
Mathematicians	200	300	400	500
Physicists	400	500	700	800
Medical and other health workers	7,800	9,200	12,000	14,000
Dentists	500	500	600	600
Dietitians and nutritionists	100	100	100	100
Nurses, professional and student	3,400	3,900	5,000	5,800
Nurses, practical	800	1,000	1,700	1,900
Optometrists	100	100	100	100
Osteopaths	-	-	-	-
Pharmacists	500	500	600	700
Physicians	1,100	1,300	1,600	1,800
Psychologists	-	100	100	100
Technicians, medical and dental	1,000	1,400	1,800	2,400
Veterinarians	100	100	100	100
Chiropractors and therapists	200	200	300	400
Teachers, total	8,400	10,600	12,100	13,400
Teachers, elementary	4,100	4,800	5,200	5,300
Teachers, secondary	2,400	3,200	3,700	4,100
Teachers, college	900	1,300	1,700	2,200
Teachers, other	1,000	1,300	1,500	1,800
Social scientists	400	400	500	600
Librarians	500	600	700	800
Social, welfare, and recreation workers	700	900	1,100	1,400
Stenographers, typists, secretaries	13,700	14,800	16,600	18,700
Attendants, hospital and other institutions	1,800	2,400	3,500	4,700

* Only those occupations associated with health and education are shown in this table.

OCCUPATION DISTRIBUTION OF JOBS TO BE FILLED 1965-1975,
ALBANY - SCHENECTADY - TROY AREA

OCCUPATION	TOTAL		JOBS RESULTING FROM			
	NUMBER	% of 1965	INDUSTRIAL CHANGE NUMBER	% of 1965	DEATH & RETIREMENT NUMBER	% of 1965
All occupations	132,600	48	50,200	18	82,400	30
Natural scientists	1,300	59	1,000	46	300	14
Medical and other health workers	8,500	80	4,800	46	3,700	34
Nurses, professional and student	3,500	87	1,900	46	1,600	41
Nurses, practical	1,700	170	900	90	800	80
Physicians	800	62	500	38	300	23
Technicians, medical and dental	1,500	107	1,000	71	500	36
Other health workers	1,000	63	500	31	500	31
Teachers, total	6,500	61	2,800	26	3,700	35
Teachers, elementary	2,400	50	500	10	1,900	40
Teachers, secondary	1,900	59	900	28	1,000	31
Teachers, college	1,000	77	500	39	500	78
Teachers, other	1,200	92	900	69	300	23
Social scientists	300	75	200	50	100	25
Stenographers, typists, secretaries	9,100	61	3,900	26	5,200	35
Attendants, hospitals and other institutions	300	125	2,300	96	700	29

HEALTH MANPOWER EDUCATIONAL FACILITIES

in

NEW YORK, MASSACHUSETTS and VERMONT

(Note - This section concerns educational facilities within New York State, Massachusetts, and Vermont -- termed the "Albany Region" for convenience -- which confer a graduate or professional degree in disciplines relating to health manpower. In most instances statistics are provided for recent years indicating the types and number of degrees conferred. In some disciplines, all schools in the United States are listed because of the very limited number of facilities in existence.)

INTRODUCTIONEducation

A graduate or professional degree awarded by an educational institution in the United States is positive identification for many professions. Each educational institution maintains a list of the individuals who have been graduated and their levels of degree. Various national educational agencies compile statistics and files of all graduates in their respective disciplines. For example, the American Public Health Association compiles statistics on the annual numbers of graduates of schools of public health, including the professional categories of the degree recipients. Similarly, the Association of American Medical Colleges maintains a file on all graduates from American medical schools, by school and by year of graduation.

The names of all graduates (M.D.) of American medical schools are included in the records of the American Medical Association; those with the D.O. degree, by the American Osteopathic Association; those with a D.V.M. degree, by the American Veterinary Medical Association; and those with a D.D.S. or D.M.D. degree, by the American Dental Association.

Persons with a baccalaureate degree as the highest educational level are not as easy to identify as those with a graduate or professional degree. Below the baccalaureate degree, it is even harder to identify individuals.

License or Permit

A license or permit to practice within a state, issued by a state agency, is a means of identifying some health personnel. For example, this is the best way to obtain statistics on registered and licensed practical nurses.

About 25 occupations in the health field are licensed in one or more states. All states and the District of Columbia require that the following health personnel have a license to practice:

1. Dental hygienists
2. Dentists
3. Environmental health engineers
4. Optometrists
5. Pharmacists
6. Physicians (M.D. and D.O.)
7. Podiatrists
8. Practical nurses
9. Registered Nurses
10. Veterinarians

All except a few states license chiropractors and physical therapists. About 20 to 30 states license midwives, opticians, psychologists, and sanitarians or sanitary inspectors. Fewer than 15 states license clinical laboratory directors including bioanalysts, clinical laboratory personnel such as medical technologists or technicians, naturopaths and other drugless healers, and social workers. Ten states license nursing home administrators. Health department administrators, hospital administrators, and radiologic technologists are licensed in one state each.

The following table provides estimates of the numbers of persons employed in selected health occupations in the United States as of 1967.

<u>Occupation</u>	<u>Number</u>
Total	3,400,000
Administrator of health services	42,000
Anthropologist - cultural and physical	600
Sociologist - medical	400
Systems analyst in health field	500
Research scientists (other than physician, dentist, veterinarian)	52,000
Biomedical engineer	3,000
Chiropractor or naturopath	17,000
Clinical laboratory scientist	4,000
Medical (laboratory) technologist (with bachelor's degree or certified)	40,000
Clinical laboratory technician or aide	56,000
Dentist	98,700
Dental hygienist	15,000
Dental assistant	95,000
Dental laboratory technician	27,000
Dietitian and nutritionist	30,000
Dietary technician or food service supervisor	6,000
Economist - health	550

Environmental engineer	9,000
Sanitarian or sanitary inspector	15,000
Health statistician, vital-records registrar	2,400
Public Health Educator	1,800
School Health Educator	18,000
Health technical writer	2,000
Medical illustrator	500
Medical librarian	3,000
Medical library assistant	5,000
Medical record librarian	12,000
Medical record technician	25,000
Physician (M.D.)	294,000
Physician (D.O.)	11,400
Lay midwife	4,700
Registered nurse	659,000
Practical nurse	320,000
Nurses' aide, orderly	800,000
Home health aide	12,000
Occupational therapists	11,000
Orthotist and prosthetist	3,500
Pharmacist	122,400
Physical therapist	13,000
Physical therapy assistant or aide	7,000
Podiatrist	8,000
Psychologist, clinical	9,000
Radiologic technologist	85,000
Social worker, clinical	20,200
Therapist - manual arts	900
Therapist - recreational	4,000
Speech pathologist	16,000
Veterinarian	24,200
Optometrist	17,000
Optician	8,000
Vocational rehabilitation counselor	7,800
Inhalation therapy technician	7,000
Electrocardiograph technician	6,000
Electroencephalograph technician	2,000
Surgical aide	19,000

ADMINISTRATION OF HEALTH SERVICES

In recent years an increasing number of administrators of health services have been employed with professional training and competence in administration as a specialty within its own right. An estimated 39,000 to 44,000 persons were employed in 1967 in the administrative positions listed below:

- | | |
|---------------------------------|---|
| Health Department | - 3,000 to 4,000 public health administrators, program analysts, and program representatives. |
| Hospitals | - 14,000 to 15,000 hospital administrators and assistants. |
| Nursing and personal care homes | - 13,000 to 15,000 nursing home administrators and assistants. |
| Voluntary health agencies | - 9,000 to 10,000 voluntary health agency administrators and program representatives. |

Health Department Administration

With few exceptions, the health officer or commissioner is a physician who usually has had specialized professional training and experience in public health. As chief executive of the health department, he administers the direct services for which responsibility is assigned to his department by law. He also assumes leadership in stimulating communitywide cooperation and action to strengthen gaps in health practices and services in the area.

In a large health department a public health administrator has responsibility for organizing, planning, and directing such functions as budget, personnel, procurement, legal, and related administrative services, and perhaps statistics, research, and other professional programs. His training may have been in a school of public health. In 1966-67, 103 administrators were graduated from U.S. schools of public health with major subjects in public health, medical care, or hospitals.

Another specialist frequently on the staff of larger health departments is a health program analyst. This person is a planning specialist -- a professional expert in his own right, with basic training in some field such as statistics, economics or sociology.

The director of each program in the health department has on his staff a health program representative. This position requires some one

with a bachelor's degree although he may not be a specific health professional. His responsibility is to take part in promoting public participation in new health services, program planning, and fact gathering.

Administration of Hospitals, Nursing Homes, and Related Institutions

As the hospital developed into a highly specialized institution, it required a skilled and trained person to manage its general activities and functions. This is the role of the hospital administrator who serves as the chief executive officer of the hospital. He provides and maintains facilities, equipment, and assistance in order that the patient may be restored to health.

In 1967, there were about 15,000 administrators, including assistants, in some 9,000 hospitals of all types in the United States. The American College of Hospital Administrators has about 8,000 members. Of the 15,000 hospital administrators, approximately 3,000 are physicians or nurses.

The graduate program for professional administrators consists of one or two years of academic study, and may include a year of "administrative residence" in a hospital. At the end of this program, students are eligible to receive a master's degree in hospital administration. In 1967, 376 students completed the academic requirements for a degree in hospital administration. At present, 24 schools in the nation offer graduate courses in this field.

In 1964, 17,400 nursing care and related homes in the United States required administrative management. Some 21,000 persons were employed as nursing home administrators and assistant administrators. About 9,000 of these had additional duties, such as nursing.

Administration of Voluntary Health Agencies

The administrator or executive director of a voluntary health agency is responsible for coordinating the activities of paid and voluntary personnel to see that an effective program is developed and implemented. He works with the agency's board of directors, informs the community of the health problems and their resources for meeting them, promotes local fund raising, helps recruit volunteer workers, and carries out personnel functions of the staff. In most voluntary health agencies, the local units are so small that the administrator is generally expected to also have specialized skills in one or more aspects of the program -- e.g., physical therapy, nursing, education, etc.

The agency's program representative maintains contact through which the State, Regional and National organization and its affiliates communicate and work with each other.

There are about 60 national voluntary health agencies in the nation. An estimated 9,000 to 10,000 persons are employed in administrative and program professional positions on national, regional and state levels.

SCHOOLS OFFERING HOSPITAL ADMINISTRATION PROGRAMS and
NUMBERS OF STUDENTS AND GRADUATES: 1967 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
Alabama	University of Alabama, Birmingham	12	3
California	University of California, Berkeley	24	14
	University of California, Los Angeles	39	14
Connecticut	Yale University, New Haven	25	10
Dist. Columbia	George Washington Univ., Washington	186	56
Florida	University of Florida, Gainesville	23	8
Georgia	Georgia State College, Atlanta	25	9
Illinois	University of Chicago, Chicago	31	15
Iowa	University of Iowa, Iowa City	38	20
Michigan	University of Michigan, Ann Arbor	34	12
Minnesota	University of Minnesota, Minneapolis	70	36
Missouri	St. Louis University, St. Louis	53	20
	University of Missouri, Columbus	26	*
	Washington University, St. Louis	37	15
New York	Columbia University, New York	33	11
	Cornell University, Ithaca	38	13
	Wagner College, Staten Island	46	*
North Carolina	Duke University, Durham	31	14
Ohio	Xavier University, Cincinnati	77	34
Pennsylvania	University of Pittsburgh, Pittsburgh	30	8
Texas	Baylor Univ. Med. Service School, Fort Sam Houston	113	47
Virginia	Medical College of Virginia, Richmond	51	14
Puerto Rico	University of Puerto Rico, San Juan	<u>47</u>	<u>-</u>
Totals		1,150	376

* First graduating class in 1968

ANTHROPOLOGY and SOCIOLOGY

The contributions of anthropologists and sociologists to health are primarily through research, being most often employed by medical colleges and graduate departments of schools of public health and preventive medicine.

The anthropologist makes comparative studies of the origin, evolution, and races of man; the cultures he has created; and man's distribution and physical characteristics. Physical anthropologists study the significance and causes of physical structures in man, and the effects of culture, heredity, and environment on the human form. Cultural or social anthropologists study cultural factors related to personality, mental illness, psychological development, and psychobiological stress. As of 1967, about 600 anthropologists were employed in the health field.

Sociologists in the health field attempt to identify the occurrence of disease, the behavior of patients, and the organization of the health professions. In 1967, about 400 medical sociologists were employed in the health area.

SCHOOLS CONFERRING DEGREES IN ANTHROPOLOGY and/or SOCIOLOGY
and
NUMBER OF GRADUATES 1965 - 1966

ALBANY REGION

Location	School	Anthropology			Sociology			
		B.*	M.**	D.***	B.*	M.**	D.***	
New York	Adelphi University, Garden City	-	-	-	21	5	-	
	C.U.N.Y., Brooklyn College, Brooklyn	-	-	-	164	3	-	
	C.U.N.Y. City College, New York	-	-	-	89	4	-	
	C.U.N.Y. Queens College, New York	-	-	-	73	1	-	
	C.U.N.Y. Hunter College, New York	55	2	-	214	7	-	
	Columbia University, New York	23	20	6	41	16	8	
	Cornell University, Ithaca	14	3	3	15	9	-	
	Fordham University, New York	-	-	-	18	26	5	
	New School for Social Research, New York	-	-	-	9	24	2	
	New York University, New York	4	1	-	70	19	7	
	St. Bonaventure University, Olean	-	-	-	13	2	-	
	St. John's University, Jamaica	-	-	-	-	5	-	
	S.U.N.Y. College of Agriculture at Cornell, Ithaca	-	-	-	12	9	2	
	S.U.N.Y. at Buffalo	28	5	2	148	6	3	
	Syracuse University, Syracuse	13	1	1	91	3	1	
	University of Rochester, Rochester	5	1	-	-	-	-	
	<u>Totals</u>	<u>142</u>	<u>33</u>	<u>12</u>	<u>978</u>	<u>139</u>	<u>28</u>	
	Massachusetts	Boston University, Boston	-	1	-	82	13	-
		Brandeis University, Waltham	5	5	2	34	5	3
		Clark University, Worcester	-	-	-	18	1	-
Harvard University, Cambridge		25	8	13	159	7	7	
Northeastern University, Boston		-	-	-	28	3	-	
Tufts University, Medford		-	-	-	25	2	-	
University of Massachusetts, Amherst		-	-	-	39	4	4	
<u>Totals</u>		<u>30</u>	<u>14</u>	<u>15</u>	<u>385</u>	<u>35</u>	<u>14</u>	
Vermont		None						
		<u>Grand Totals</u>	<u>172</u>	<u>47</u>	<u>27</u>	<u>1,363</u>	<u>174</u>	<u>42</u>

* Bachelor's
** Master's
*** Doctor's

AUTOMATIC DATA PROCESSING

Since 1950 computers and other electronic business machines have been of great value in helping to streamline and expedite large-scale operations throughout the health field. Three main job areas are involved -- systems analysis, programing, and computer operations.

The health systems analyst defines the broad outlines of the machine solution to the problem. He must have a detailed understanding of the application to the health field and know the overall capacities of the equipment. Such knowledge may have been obtained through formal courses or on-the-job training.

The programmer prepares problem solving procedures, flow charts, and computer instructions for which he does not require specialized competency in the health field. Computer programing usually calls for a bachelor's or master's degree with courses in mathematics, physics, or engineering.

The computer operator operates the computer console and reads the documentation provided. Educational requirements vary from on-the-job training to courses in a technical school or college. Similar educational backgrounds are required for operating punchcard equipment, sorters, collators, and tabulators.

No accurate figures are available on the numbers of health systems analysts, programmers, and computer operators in the health field. A recent estimate is that there are more than 500 health systems analysts.

BASIC SCIENCES in the HEALTH FIELD

Scientists with an academic background in one of the basic scientific disciplines or in the application of mathematics to these disciplines engage in research to provide new knowledge and deeper insights in every health profession.

The 1965 estimates included at least 17,000 doctors of medicine, dentistry, and veterinary medicine engaged in research. In addition, another 32,000 Ph.D's or Sc.D's were carrying out health research; plus 15,000 persons with bachelor's or master's degrees.

Nearly two-thirds of the total number are engaged in medical research in universities and research institutes. The remainder are about equally divided between industry and government.

SCHOOLS CONFERRING DOCTOR'S DEGREES IN BASIC MEDICAL SCIENCES
and
NUMBERS OF GRADUATES 1965 - 1966 -

Location	School	Anatomy	Biochemistry	Biophysics	Microbiology	Pathology	Pharmacology	Physiology
New York	Columbia University, New York	6	5	2	-	-	2	-
	Cornell University, Ithaca	1	10	2	5	1	-	4
	Fordham University, New York	-	-	-	-	-	-	2
	New York University, New York	9	5	-	4	-	-	3
	Rockefeller University, New York	3	7	1	-	-	1	-
	St. Bonaventure Univ., Olean	-	-	-	1	-	-	-
	St. John's University, Jamaica	-	-	1	3	-	-	1
	S.U.N.Y. Downstate Medical Center, Brooklyn	-	1	-	-	-	2	3
	S.U.N.Y. at Buffalo, Buffalo	1	2	6	2	-	1	1
	S.U.N.Y. Upstate Medical Center, Syracuse	1	1	-	-	-	-	-
	Syracuse University, Syracuse	-	2	-	4	-	-	-
	Univ. of Rochester, Rochester	1	3	3	2	1	-	2
	<u>Totals</u>	22	36	15	21	2	6	16
Massachusetts	Boston University, Boston	1	5	-	1	-	-	4
	Brandeis University, Waltham	1	4	1	1	-	-	-
	Clark University, Worcester	-	-	-	-	-	-	1
	Harvard University, Cambridge	1	18	5	2	-	2	4
	Mass. College of Pharmacy, Boston	-	1	-	-	-	1	-
	Mass. Institute of Technology, Cambridge	1	6	1	1	-	-	2
	Univ. of Massachusetts, Amherst	-	-	-	-	-	-	1
Tufts University, Medford	-	4	-	-	-	-	-	
	<u>Totals</u>	4	38	7	5	-	3	12
Vermont	University of Vermont and State Agricultural College, Burlington	-	2	-	-	-	1	-
	<u>Totals</u>	-	2	-	-	-	1	-
	<u>Grand Totals</u>	26	76	22	26	2	10	28

SCHOOLS CONFERRING DOCTOR'S DEGREES IN PHYSICAL SCIENCES
and
NUMBERS OF GRADUATES 1965-1966 - ALBANY REGION

Location	School	Chemistry	Physics
New York	Adelphi University, Garden City	3	1
	Clarkson College of Technology, Potsdam	3	1
	Columbia University, New York	24	29
	Cornell University, Ithaca	25	23
	C.U.N.Y. University Programs, New York	1	-
	Fordham University, New York	8	2
	New York University, New York	7	12
	Polytechnic Inst. of Brooklyn, Brooklyn	27	8
	Rensselaer Polytechnic Institute, Troy	14	16
	Rockefeller University, New York	1	1
	St. John's University, Jamaica	1	-
	S.U.N.Y. College of Forestry, Syracuse	5	-
	S.U.N.Y. at Buffalo, Buffalo	14	4
	S.U.N.Y. at Stony Brook, Stony Brook	1	-
	Syracuse University, Syracuse	5	10
	University of Rochester, Rochester	9	20
Yeshiva University, New York	-	2	
	<u>Totals</u>	148	129
Massachusetts	Boston College, Chestnut Hill	3	3
	Boston University, Boston	4	3
	Brandeis University, Waltham	4	11
	Clark University, Worcester	2	-
	Harvard University, Boston	18	37
	Lowell Technological Institute, Lowell	2	-
	Mass. Inst. of Technology, Cambridge	51	44
	Northeastern University, Boston	2	2
	Tufts University, Medford	3	1
	University of Massachusetts, Amherst	17	-
	Worcester Polytechnic Inst., Worcester	-	1
	<u>Totals</u>	106	102
Vermont	University of Vermont & State Agricultural College, Bennington	8	-
	<u>Totals</u>	8	-
	<u>Grand Totals</u>	262	231

BIOMEDICAL ENGINEERING

Biomedical engineering involves the application of the principles and practices of engineering science to biomedical research and health care. Typical activities in this relatively new area include the development of new instruments for use in patient care or research, the invention and perfection of orthopedic and prosthetic appliances, and the adaptation of computer technology and bioengineering methods for research use in medicine and biology.

Biomedical engineers (also called bio-engineers or medical engineers) work with physicians and medical scientists in utilizing engineering ideas and techniques to improve medical care. In 1967, about 3,000 persons in the nation were employed as biomedical engineers.

The minimal educational requirement for biomedical engineers is a bachelor's degree in engineering with some courses in the biophysical sciences. At least 20 institutions in the country support doctoral training programs in biomedical engineering.

Biomedical engineering technicians are responsible for assembling, adapting, and maintaining many new kinds of medical devices and instruments. These technicians come from many diverse fields. Persons with special training in plastics, for example, work on repair or replacement materials and the development of artificial organs.

It is estimated that in 1967 there were about 6,000 individuals employed as biomedical engineering technicians.

SCHOOLS OFFERING DOCTORAL PROGRAMS IN BIOMEDICAL ENGINEERING:1967 - UNITED STATES

<u>Location</u>	<u>School</u>
California	California Institute of Technology, Pasadena University of California, Berkeley University of Southern California, Los Angeles
Connecticut	University of Connecticut, Storrs
Illinois	Northwestern University, Evanston University of Illinois College of Engineering, Chicago
Maryland	Johns Hopkins University, Baltimore
Massachusetts	Massachusetts Institute of Technology, Cambridge
Michigan	University of Michigan, Ann Arbor
New York	Brooklyn Polytechnic Institute, Brooklyn New York University College of Medicine, New York University of Rochester, Rochester
North Carolina	University of North Carolina, Chapel Hill
Ohio	Case Institute of Technology, Cleveland
Pennsylvania	Carnegie Institute of Technology, Pittsburgh Drexel Institute of Technology, Philadelphia University of Pennsylvania, Philadelphia
Texas	Baylor University, Houston
Washington	University of Washington, Seattle
Wisconsin	Marquette University, Milwaukee

CHIROPRACTIC and NATUROPATHY

Chiropractors

Chiropractic is a system of mechanical therapeutics based on the belief that the nervous system largely determines the state of health, and that any interference with this system impairs normal functions and lowers the body's resistance to disease. Treatment consists of specific "adjustments" of parts of the body, especially the vertebral column. Drugs and surgery are not used. In 1965, there were about 19,100 chiropractors licensed by the various states, of whom some 16,000 were actively engaged in practice.

As of 1966, chiropractors were licensed in 48 states and the District of Columbia. Most states require the successful completion of a 4-year chiropractic course leading to a Doctor of Chiropractic (D.C.). In addition, 28 states require one or two years of college as a prerequisite for entrance into a school of chiropractic, while 4 states require a one-year internship. A basic science certificate based on an examination is mandatory in 24 states before chiropractors are permitted to take licensing examinations.

Naturopaths

Naturopathy is a school of healing employing a combination of nature's forces such as air, light, water, vibration, heat, electricity, dietetics, and massage. Drugs, surgery, and X-Radiation (except for diagnosis) are not used. Many naturopaths are former chiropractors and use chiropractic treatment.

Fewer than 1,000 naturopaths are currently licensed. The greatest number are probably located in Oregon, Washington, Florida, and Arizona. More than half the states license this type of "healer". In 1958 there were 5 institutions that taught naturopathy; in 1968 only one such school was still in existence -- the National College of Naturopathic Medicine in Seattle, Washington.

CHIROPRACTIC SCHOOLS
and
NUMBERS OF STUDENTS AND GRADUATES: 1967 - United States

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
California	Los Angeles School of Chiropractic, Glendale	208	46
	Cleveland College of Chiropractic, Los Angeles	160	50
Illinois	National College of Chiropractic, Lombard	304	75
Indiana	Lincoln Chiropractic College, Indianapolis	149	35
Iowa	Palmer College of Chiropractic, Davenport	1,019	257
Minnesota	Northwestern College of Chiropractic Minneapolis	41	8
Missouri	Logan College of Chiropractic St. Louis	227	69
	Cleveland Chiropractic College, Kansas City	161	31
New York	Columbia Institute of Chiropractic, New York	103	42
Oregon	Western States College of Chiropractic Portland	30	5
Texas	Texas Chiropractic College, Pasadena	<u>121</u>	<u>13</u>
	<u>Totals</u>	2,523	631

CLINICAL LABORATORY SERVICES

More than 100,000 persons in several occupations are engaged full or part time in providing services within the clinical laboratory setting, in addition to the physicians who specialize in clinical pathology. This is in marked contrast to only 30,000 in 1950, 50,000 in 1955, and 68,000 in 1960.

Nearly half of the workers are college graduates with a bachelor's or higher degree. Others are high school or junior college graduates with varying combinations of formal education, commercial or vocational training, apprenticeship training in a clinical laboratory, and/or experience.

CLINICAL LABORATORY SCIENTIST*

About 4,000 scientists with graduate degrees in chemistry, microbiology, or other biological sciences were engaged in clinical laboratory services in 1967. An academic degree in a specific science followed by a period of work experience in a laboratory is the usual course of entry into this field.

In 1967 the American Association of Clinical Chemists had 1,750 members, although there were other qualified chemists who were not members but did work in clinical laboratories. The same year 760 members of the American Academy of Microbiology were associated with this field.

CLINICAL LABORATORY TECHNOLOGIST*

Technologist, as used here, means either a person with a bachelor's degree in chemistry or a biological science, or a person registered with the Board of Registry of Medical Technologists of the American Society of Clinical Pathologists. In 1967 there were about 40,000 such individuals. In addition, at least 4,000 college graduates were working in clinical laboratories but not registered with the previously mentioned Board.

The minimal educational requirement for a medical technologist is 3 years of college plus 12 months of specialized training in an accredited school of medical technology. The American Society of Medical Technologists has a membership of about 12,000.

*List of educational facilities in Albany Region is provided, beginning on p. 2-97.

CLINICAL LABORATORY TECHNICIAN or ASSISTANT

There are currently well over 50,000 individuals with varying combinations of experience and post high school training engaged in clinical laboratory work. Certified laboratory assistants numbered about 3,300 in 1967. These persons work under the supervision of a medical technologist, performing the simpler laboratory tests and procedures. Graduation from high school, preferably with ability in science and mathematics, is required for admission to a school accredited by the A.S.C.P. Board of Certified Laboratory Assistants. In 1966-67, there were 1,100 students enrolled in the 12-month course of practical and technical training. Graduates who pass an examination given by the C.L.A. Board may place the letters CLA after their names.

Note: List of educational facilities in Albany Region is provided, beginning on page 2-97.

DENTISTRY and ALLIED SERVICES

Modern dentistry places great emphasis on the prevention and control of dental disease, through such measures as the early detection and correction of diseases of the teeth and supporting dental structures, fluoridation, and dental health education. Educational programs stress the importance of proper diet, correct oral hygiene practices, and the importance of regular dental examinations.

The dental work force consists of dentists and three allied occupational groups - dental hygienists, dental assistants, and dental laboratory technicians. In 1967, there were 99,000 active dentists, 15,000 dental hygienists, 95,000 dental assistants, and 27,000 dental laboratory technicians.

DENTISTS

The nation's supply of dentists in relation to the civilian population declined sharply between 1950 and 1960. In 1950, there were 50 active non-federal dentists per 100,000 civilians; in 1960, the ratio had dropped to 46 dentists per 100,000 civilians. Distribution varies widely, from a high of 67 active, non-federal dentists per 100,000 civilians in New York to 23 in South Carolina.

Although most dentists are general practitioners, the number of specialists showed a threefold increase between 1955 and 1966. In the latter year, 9,200 dentists were recognized as specialists by the American Dental Association in 8 areas of dentistry. Four thousand of these limit their practice exclusively to orthodontics. The next largest group, 2,200, specialized in oral surgery, followed by 1,000 in pedodontics. The remaining 2,000 were divided into the following specialties: periodontics (treatment of gums and underlying bone); prosthodontics (providing artificial replacements for missing teeth); endodontics (root canal therapy); public health dentistry; and oral pathology.

In every state and the District of Columbia, a dentist (D.D.S. or D.M.D.) must be a graduate of an accredited school of dentistry and must obtain a license before practicing. Dentists receive 4 years of professional education in a dental school, after having had 2 or more years of college. To qualify for licensure, dental school graduates must pass both a written and a clinical examination.

A very small number of dentists have immigrated to this country in recent years. In 1966 209 dentists came to the United States from some 40 foreign countries.

DENTAL HYGIENISTS

Dental hygienists are the only dental auxiliaries who provide service directly to the patient. They are required to obtain a state license before being permitted to practice. The dental hygienist, working under the direction of a dentist, performs prophylaxes (scaling and polishing of teeth), exposes and processes dental X-Ray films, applies fluoride solution to children's teeth, instructs individual patients in toothbrushing techniques and proper diet as related to teeth, and performs other duties in conforming with her training and licensing.

Of the 15,000 dental hygienists in active practice in 1967, about 7,000 were members of the American Dental Hygienists' Association. At present, there are about 16 dental hygienists per 100 active dentists.

Dental hygienists receive at least 2 years of education at the college level. The dental hygiene curriculum includes basic sciences, dental sciences, and liberal arts, is usually open to high school graduates. However, about 20 percent of institutions require some college education before admission to the program. Originally, dental hygiene programs were provided mainly by dental schools; more recently, increasing numbers of junior colleges and technical schools are now offering this training.

Two types of college training are now being offered. The 2-year associate degree or certificate program qualifies a dental hygienist for clinical practice. The level of training required for leadership positions in teaching and public health is provided by the 4-year bachelor's degree program in dental hygiene. Some schools also provide additional training leading to the master's degree.

DENTAL ASSISTANTS

The primary function of a dental assistant is to assist the dentist at the chairside. Specifically, she prepares the patient for treatment, keeps the operating field clear, mixes filling materials, and passes instruments. Other duties include exposing and processing x-ray films, sterilizing instruments, assisting with laboratory work, ordering supplies, and handling the office records and accounts. Presently, more than 4 out of 5 dentists in private practice employ one or more dental assistants.

Traditionally, dental assistants have been trained on the job by their dentist-employers. However, there are now well over 100 institutions offering accredited training programs for dental assistants. Accreditation involves at least one academic year of training in dental assisting, although there are some 2-year programs available.

Experienced dental assistants who are graduates of a 1-year or 2-year program, or who have completed equivalent training, are eligible to be certified by the certifying Board of the American Dental Assistants' Association. This association had 16,200 members in 1967, of whom 6,000 were certified.

DENTAL LABORATORY TECHNICIANS

These individuals are highly skilled craftsmen who perform many tasks involved in the construction of complete and partial dentures, fixed bridgework, crowns, and other such dental restorations and appliances. Specific procedures done by them include waxing, investing, casting, soldering, finishing, and polishing. Most of these individuals are employed in commercial dental laboratories which serve the majority of dentists, although some work in the dentist's office and are employed directly by him. About 80 percent of the nation's 27,000 dental laboratory technicians (1967) worked in 6,700 commercial dental laboratories. The Joint Commission on Accreditation of Dental Laboratories was established in 1963 to accredit commercial laboratories. In 1967, there were some 350 such laboratories so accredited.

Relatively few formal educational programs for dental laboratory technicians are presently available (about 20 two-year programs are now accredited). In 1967-68, there were some 700 students enrolled in these programs, which provide one year of basic and dental sciences and a second year of supervised practical laboratory experience.

Most technicians receive on-the-job training in commercial laboratories or dental offices. In 1965, a formal apprenticeship program was established. Apprentices receive 8,000 hours of on-the-job training, including a minimum of 144 hours of related supplemental instruction.

Technicians who have completed the 2-year accredited curriculum and have 3 years of employment experience, or who have fulfilled other requirements in lieu of formal training, may be certified after passing an examination given by the National Board for Certification of the National Association of Certified Dental Laboratories.

DENTAL SCHOOLS and NUMBERS OF STUDENTS AND GRADUATES
1967-8

Location	School	Students 1967-8	Graduates 1967
New York	Columbia University School of Dental & Oral Surgery, New York	131	30
	New York University College of Dentistry	658	164
	S.U.N.Y. at Buffalo School of Dentistry, Buffalo	279	62
	<u>Totals</u>	1,068	256
Massachusetts	Harvard University School of Dental Medicine, Boston	51	17
	Tufts Univ. School of Dental Medicine, Boston	399	95
	<u>Totals</u>	450	112
Vermont	None	-	-
<u>Grand Totals</u>		1,518	368

SCHOOLS FOR TRAINING DENTAL HYGIENISTS AND
NUMBERS OF STUDENTS AND GRADUATES 1967-8

Location	School	Students 1967-8	Graduates 1967
New York	Broome Tech. Com. College, Binghamton	81	28
	C.U.N.Y. Coll. of App.Arts & Sciences, Brooklyn	141	73
	Columbia University, New York *	46	24
	Erie Co. Technical Inst., Buffalo	105	67
	Hudson Valley Community College, Troy	108	38
	Monroe Community College, Rochester	82	42
	Onondaga Community College, Syracuse	36	29
	S.U.N.Y. Agr. & Tech. Inst., Farmingdale	176	60
<u>Totals</u>		775	361
Massachusetts	Forsyth School for Dental Hygienists, Boston	204	95
Vermont	University of Vermont, Burlington	34	16
<u>Grand Totals</u>		1,013	472

*4-year program; all other schools offer 2-year programs

SCHOOLS OFFERING DENTAL ASSISTANT TRAINING PROGRAMS and
NUMBERS OF STUDENTS AND GRADUATES 1967-8

<u>Location</u>	<u>School</u>	<u>Students</u> <u>1967-8</u>	<u>Graduates</u> <u>1967</u>
New York	Dutchess Community College, Poughkeepsie*	21	6
	New York University, New York	32	35
	S.U.N.Y. Urban Center, Buffalo	30	17
	<u>Totals</u>	83	58
Massachusetts	Beth Israel Hospital, Boston	12	16
	Fanning Trade High School, Worcester	24	21
	Northeastern University, Boston	157	108
	Springfield Tech. Inst., Springfield	30	30
	University Hospital, Boston	29	26
	<u>Totals</u>	252	201
Vermont	None		
	<u>Grand Totals</u>	335	259

*2-year program; all other schools offer 1-year programs

INSTITUTIONS OFFERING TRAINING PROGRAMS FORDENTAL LABORATORY TECHNICIANS

and

NUMBERS OF STUDENTS AND GRADUATES 1967 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
California	University of California Extension Dental Program, Los Angeles	81	35
	City College of San Francisco, San Francisco	41	10
	Los Angeles City College, Los Angeles	115	14
	Diablo Valley College, Pleasant Hill	33	*
Florida	Lindsey Hopkins Educ.Center, Miami	28	12
	Palm Beach Junior College, Lake Worth	30	*
Georgia	Atlanta Technical School, Atlanta	31	12
Illinois	Southern Illinois University Vocational Technical Institute, Carbondale	48	16
Kentucky	University of Kentucky Program in Dental Technology, Lexington	17	5
Michigan	Ferris State College, Big Rapids	44	*
New York	C.U.N.Y. Community College, Brooklyn	101	40
North Carolina	Durham Technical Institute, Durham	43	12
Oregon	Portland Community College, Portland	39	6
Texas	James Connally Tech. Institute, Waco	58	*
Wisconsin	Milwaukee Inst. of Technology, Milwaukee	<u>20</u>	<u>*</u>
	<u>Totals</u>	729	162

*First graduating class in 1969

DIETETIC and NUTRITIONAL SERVICES

These services deal with the application of the scientific principles of nutrition to the feeding of individuals and groups. Dietitians assume major responsibility for food selection, preparation, and management of food services. Nutritionists engage in investigating and solving problems of nutrition for the promotion of health.

For both groups, the college major is generally home economics with special emphasis on foods and nutrition and/or institution management. Some 400 colleges and universities throughout the nation provide such educational experiences. In 1965-66, some 5,700 persons were awarded baccalaureates in home economics, 660 of which were for majors in food and nutrition and 250 in institution management or administration. There were in the same year only 22 bachelor's degrees awarded in nutrition.

DIETITIANS

These individuals plan and direct food service programs in hospitals, schools, restaurants, and other public and private institutions. Their work includes planning menus and diets that meet nutritional requirements for health or medical treatment, directing the personnel who prepare and serve the meals, managing purchases and accounts, and providing guidance on the application of principles of nutrition to the selection of food.

About 13,000 dietitians work in hospitals and related institutions. It is of interest to note that in 1967 the American Dietetic Association reported that more than 35 percent of its 20,000 members were not working - generally, retired persons and homemakers not seeking work.

Four types of dietitians are recognized:

1. Administrative Dietitians. This is the most numerous group, being directly concerned with food service programs.
2. Therapeutic Dietitians. These are employed by hospitals to formulate modified diets prescribed by the physician and to instruct patients and their families on how to meet their special food needs.
3. Dietary Consultants. This group advises on food service practices and facilities and on nutritional problems in group feeding for child care centers, hospitals, nursing homes, schools, and other establishments.
4. Teaching Dietitians. These conduct educational programs in dietetics, nutrition, and institution management for dietetic interns, nursing students, and other personnel.

For qualification as a professional dietitian, the American Dietetic Association recommends the completion of an approved dietetic internship or 3 years of supervised experience meeting established standards. Membership in the A.D.A. serves as a high standard of qualification in lieu of a certificate or a license.

NUTRITIONISTS

Nutritionists plan and conduct programs concerning food in relation to health. Their work includes interpreting and evaluating food and nutrition information for acceptance and use by individuals and groups.

Three types of nutritionists are recognized:

1. Public health nutritionists are responsible for the nutrition component of health programs, providing consultation and education for professional workers, and participating in research studies.
2. Teaching nutritionists conduct educational programs in nutrition for the preparation of professional workers as well as for the public. In college they train nutrition personnel, in the Federal Extension Service they advise agency administrators and county home economists, and in business they provide technical advice in connection with consumer education programs.
3. Research nutritionists are concerned with the interrelationships of nutrients in food and their effects on health.

Preparation for nutritionist positions usually requires academic training at both the undergraduate and the graduate levels. For qualification as a public health nutritionist, the American Public Health Association recommends an advanced degree in nutrition.

OTHER FOOD SERVICE STAFF

The dietary technician, also identified as the food service manager or technician, assists the dietitian rather than being directly involved with the food service area.

The food service supervisor has specific duties which include the supervision of employees and of food service areas - depending on the size of the dietary department of the institution and the way in which it is organized.

Food service clerical workers, with basic stenographic and clerical skills, assist the dietitian with the paperwork of the dietary department.

Food service workers have a wide range of jobs in food storing, preparing, cooking and serving, and in cleaning the dishes and kitchen.

Courses are offered by high schools and technical institutions to prepare individuals for food service employment. As part of these courses, students spend a number of hours in on-the-job training. In addition, these schools as well as certain health departments and hospitals offer short-term training institutes to bring persons currently employed in food service up to date. A correspondence course conducted by the American Dietetic Association has trained almost 1,000 food service supervisors in the past decade. This is apparently becoming more popular with increasing enrollment each year.

SCHOOLS CONFERRING DEGREES IN FOOD AND NUTRITION,
INSTITUTION MANAGEMENT AND ADMINISTRATION, AND NUTRITION

AND

NUMBERS OF GRADUATES BY LEVEL OF DEGREE 1965-6

ALBANY REGION

Location	School	Foods & Nutrition			Inst. Mgmt & Admin.			Nutrition		
		B*	M**	D***	B*	M**	D***	B*	M**	D***
New York	C.U.N.Y. Hunter College, New York	-	5	-	-	-	-	-	-	-
	Columbia University, New York	-	-	-	-	-	-	-	23	1
	Cornell University, Ithaca	-	-	-	-	-	-	-	14	1
	Marymount College, Tarrytown	4	-	-	-	-	-	-	-	-
	New York University, New York	7	4	-	-	-	-	-	-	-
	Pratt Institute, Brooklyn	-	-	-	23	-	-	-	-	-
	Rochester Inst. of Tech, Rochester	-	-	-	14	-	-	-	-	-
	Russell Sage College, Troy	4	-	-	-	-	-	-	-	-
	S.U.N.Y. College of Home Ec. at Cornell, Ithaca	-	7	-	-	-	-	-	-	-
	Syracuse University, Syracuse	1	-	-	-	-	-	8	1	-
	<u>Totals</u>	<u>16</u>	<u>16</u>	<u>-</u>	<u>37</u>	<u>-</u>	<u>8</u>	<u>38</u>	<u>2</u>	
Massachusetts	Mass. Institute of Technology, Cambridge	-	-	-	-	-	-	-	22	7
	Simmons College, Boston	-	-	-	7	-	-	-	-	-
	State College at Framingham, Framingham	30	-	-	-	-	-	-	-	-
	<u>Totals</u>	<u>30</u>	<u>-</u>	<u>-</u>	<u>7</u>	<u>-</u>	<u>-</u>	<u>22</u>	<u>7</u>	
Vermont	University of Vermont & State Agric. College, Burlington	5	1	-	-	-	-	-	-	-
	<u>Totals</u>	<u>5</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	
	<u>Grand Totals</u>	<u>51</u>	<u>18</u>	<u>-</u>	<u>51</u>	<u>-</u>	<u>8</u>	<u>82</u>	<u>16</u>	

* Bachelor's degree
** Master's degree
*** Doctor's degree

APPROVED DIETETIC INTERNSHIP PROGRAMS AND NUMBER OF INTERNS - 1966ALBANY REGION

<u>Location</u>	<u>Program & Institution</u>	<u>Interns</u>
<u>Food Clinic Internship</u>		
New York	None	
Massachusetts	Frances Stern Food Clinic - Boston Dispensary	6
Vermont	None	
	<u>Totals</u>	6
<u>Hospital Internships</u>		
New York	Grasslands Hospital, Valhalla	10
	N.Y.S. Dept. Mental Hygiene (Food Service Admin.), Poughkeepsie	8
	New York Hospital, New York	17
	U.S. Pub. Health Service Hospital, New York	12
	Veterans Administration Hospital, New York	11
	<u>Totals</u>	58
Massachusetts	Beth Israel Hospital, Boston	13
	Massachusetts General Hospital, Boston	25
	Peter Bent Brigham Hospital, Boston	15
	<u>Totals</u>	53
Vermont	None	
<u>Business & Industry Internships</u>		
New York	Eastman Kodak Company, Rochester	10
Massachusetts	None	
Vermont	None	
	<u>Totals</u>	10
	<u>Grand Total</u>	127

ECONOMIC RESEARCH in the HEALTH FIELD

The major functions of the health economist, whether or not he is formally trained in economics, are to appraise health as an economic asset and to analyze ways in which the provision of health care goods and services affects the health of individuals and hence the well-being of families and communities. Usually health economic research activities are grouped into five broad categories related to health -- financing, organization, facilities, utilization, and manpower.

The health economist makes his contribution mainly through research and analytical studies rather than through the provision of services. For this reason, the field is relatively small -- only 600 persons were employed as health economists in 1967.

Health economists employed by universities may teach health economics, conduct research studies, and provide outside consultations. In other than an academic setting, the health economist is generally a part of the administrative staff with responsibility for conducting specialized studies, advising and consulting in program analysis, and developing new programs.

A bachelor's degree with a major in economics is usually required for most beginning jobs in health economics. A master's degree, and usually a doctorate, is required for career appointments at universities and research foundations.

At present, few courses limited to health economics are offered. At most schools, health economics is taught as part of a more comprehensive course such as economic development, social insurance, investment in human resources, welfare economics, hospital administration, or medical care administration. However, in view of the current status of health care services, it is anticipated that more graduate schools will begin to develop teaching programs geared to the student whose major area of concentration is health economics.

SCHOOLS CONFERRING DEGREES IN ECONOMICS
and
NUMBERS OF GRADUATES 1965-6 - ALBANY REGION

Location	School	Graduates		
		B*	M**	D***
New York	Columbia University, New York	84	35	17
	Cornell University, Ithaca	79	5	8
	C.U.N.Y. Brooklyn College, Brooklyn	107	9	-
	C.U.N.Y. City College, New York	122	39	-
	C.U.N.Y. Hunter College, New York	74	3	-
	C.U.N.Y. Queens College, New York	100	1	-
	Fordham University, New York	68	14	4
	Long Island University, Greenvale	24	1	-
	New School for Social Research, New York	1	13	9
	New York University, New York	75	41	10
	Rensselaer Polytechnic Institute, Troy	6	1	-
	St. John's University, Jamaica	75	6	-
	S.U.N.Y. College of Forestry, Syracuse	-	4	3
	S.U.N.Y. at Buffalo, Buffalo	28	2	-
	Syracuse University, Syracuse	55	7	3
University of Rochester, Rochester	15	6	2	
	<u>Totals</u>	<u>913</u>	<u>187</u>	<u>56</u>
Massachusetts	Boston College, Chestnut Hill	132	6	4
	Boston University, Boston	35	9	1
	Clark University, Worcester	14	4	3
	Harvard University, Cambridge	118	9	33
	Mass. Institute of Technology, Cambridge	15	3	15
	Mount Holyoke College, South Hadley	53	1	-
	Tufts University, Medford	25	4	-
	University of Massachusetts, Amherst	39	18	2
Williams College, Williamstown	33	19	-	
	<u>Totals</u>	<u>464</u>	<u>73</u>	<u>58</u>
Vermont	University of Vermont State Agric. College, Burlington	44	2	-
	<u>Totals</u>	<u>44</u>	<u>2</u>	<u>-</u>
<u>Grand Totals</u>		<u>1,421</u>	<u>262</u>	<u>114</u>

* Bachelor's degree
** Master's degree
*** Doctor's degree

ENVIRONMENTAL CONTROL

The nation's growth and productivity have resulted in a host of newly recognized and highly complex environmental problems which are a grave challenge to man's health and well-being. Among the many problems are those related to pollution of air, water, soil, and food - occupational and community stresses - noise - vibration - inadequate housing and work environments - hazards on the highway and in homes - radiation - and innumerable other threats to a healthy existence. In brief, the current quality of our environment is quite unacceptable in terms of public health and well-being.

Environmental control calls for a multidisciplinary approach combining the efforts of engineers, physical and biological scientists, social scientists, physicians, administrators, and all sorts of technical support personnel. Principal activities of the environmental control team include:

1. Detection, analysis, and measurement of environmental hazards.
2. Determining the biological and other effects of environmental hazards.
3. Development of standards and criteria.
4. Planning and conducting of prevention and control programs.

A major deterrent to early implementation of the environmental control problem is the absence of a comprehensive roster of qualified personnel primarily concerned with environmental protection in the United States. Some of the reasons for the delay in developing such a meaningful roster include a lack of understanding of the roles and functions of the various disciplines and the interpretation of occupations in terms of basic discipline versus categorical program specialization.

Historically, an effort has been made to delineate the manpower situation into two basic environmental disciplines: 1.) environmental engineering, and 2.) sanitary sciences. Little or no meaningful data are presently available for other basic disciplines.

Environmental Engineer

The environmental engineer applies engineering principles to the prevention, control, and management of environmental factors that influence man's physical, mental, and social health and well-being. The rapid and recent recognition of the need for a comprehensive view of all environmental factors and their interrelationships has greatly broadened the opportunities for engineers. Previously, the engineer was primarily concerned with such factors as water supply and pollution, and thus the title, "sanitary engineer" was not inappropriate.

One of the best current estimates of the number of environmental engineers is that there are some 10,000 such individuals now employed. In 1950 a survey indicated the existence of about 5,000 "sanitary engineers".

A number of professional organizations are currently concerned with the field of environmental engineering. Seven* of these have joined in sponsoring the Environmental Engineering Intersociety Board, Inc. The Board's objectives are to improve the practice, elevate the standards, and advance the cause of environmental engineering. Certification as a diplomate of the American Academy of Environmental Engineers is awarded by the Board, based upon compliance with educational and experience standards, State licensure, and satisfactory completion of a written examination. Four subspecialties are recognized:

1. Air pollution control
2. Industrial hygiene
3. Radiation and hazard control
4. Sanitary engineering

In 1967, the American Academy of Environmental Engineers had a membership of 1,100.

Sanitarian

The Sanitarian applies his knowledge of the principles of the physical and biological sciences to the prevention, control, and management of man's environment in one or more areas of environmental sanitation. Some 31 states, including Massachusetts but not New York or Vermont, require the registration or licensure of sanitarians.

In 1960, a model registration act was developed by the Sanitarians Joint Council (International Association of Milk, Food, and Environmental Sanitarians with 3,000 members; National Association of Sanitarians with 6,000 members, and the American Public Health Association). The minimum requirements for qualification as a sanitarian are:

- * Air Pollution Control Association
- American Institute of Chemical Engineers
- American Public Health Association
- American Society for Engineering Education
- American Society of Civil Engineers
- American Water Works Association
- Water Pollution Control Federation

1. A bachelor's degree with at least 30 semester hours of academic work in environmental health or in the physical and biological sciences.
2. Employment full time as a sanitarian for not less than 2 years.
3. Successful completion of an examination given and conducted by the State Registration Board.

An American Intersociety Board of Certification of Sanitarians, organized in 1964, provides recognition of professional achievement.

Program Specialist

Presently, there are three recognized types of environmental protection specialists.

Industrial hygienists conduct health programs in industrial plants and similar settings to eliminate or control occupational health hazards and diseases. They are concerned with four categories of stress:

1. Chemical stresses such as dust or gas.
2. Physical stresses such as radiation or noise.
3. Biological factors such as insects and fungi.
4. Ergonomic items such as monotony and work pressure.

There are about 2,500 industrial hygienists currently employed in this country -- four times as many as in 1950. Most work in an industrial setting, but increasing numbers are employed by transportation companies, public utilities, insurance companies, and universities.

Radiation protection personnel include health physicists and other scientists with special training in the health aspects of radiation. Problems with which they are concerned include the safe use of x-ray machines, radioactive materials, nuclear reactions, particle accelerators, and environmental radiation contamination. Health technicians trained in radiation monitoring and other supportive services assist radiation protection scientists.

Several professional associations in this field include the Health Physics Society, the American Public Health Association, and the American College of Radiology. The first two of these serve as sponsors of the American Board of Health Physics, organized in 1959 to improve the practice

and elevate the standards of health physics. Certification is achieved through written and oral examinations after the following prerequisites have been fulfilled:

1. Graduation with a bachelor's degree in a physical science, or a biological science with a minor in physical sciences.
2. Six years of responsible professional experience in health physics.

Air pollution control personnel include chemical and mechanical engineers, chemists, meteorologists, statisticians, biological scientists, sanitarians, technicians, and inspectors. Their principal activities are:

1. Identification and measurement of chemical pollutants and airborne particulate matter within the atmosphere.
2. Measurement and analysis of the effects of meteorological variables on atmospheric pollution conditions.
3. Determinations of the effects of air pollution on biological systems and inorganic materials.
4. Control of sources of air pollution including industrial production processes, combustion, and space heating equipment, and vehicular sources.
5. Development, installation, and operation of a variety of processes and equipment designed to reduce or eliminate the emission of air pollutants.
6. Development and enforcement of air quality and emission standards.
7. Coordination and integration of air pollution control efforts with other environmental health activities and with diverse industrial and governmental programs and agencies conducting activities which affect, directly or indirectly, the quality of the air.

The Air Pollution Control Association is the major professional society concerned with air pollution.

Education and Training

The minimum educational requirement for environmental engineers, sanitarians, and other specialists in this field is the bachelor's degree. However, the trend is towards a requirement of graduate education in one of the basic disciplines or in an area of categorical program specialization. In a few basic disciplines the qualifying professional degree is the doctorate.

The usual undergraduate curriculum of the environmental engineer is in chemical, civil, electrical, or mechanical engineering.

The minimum educational requirement for the environmental technologist or sanitarian is a baccalaureate with a major in environmental health or in the physical or biological sciences.

In 1968 the National Association of Sanitarians initiated an accreditation program for undergraduate environmental health (or related) curricula, including those offered by junior colleges.

The minimum educational requirement for the sanitarian technician is an associate degree in environmental health, radiologic technology, or related areas of specialization.

The environmental aide usually is a high school graduate with varying amounts of appropriate short-course training in specialized subjects.

SCHOOLS OFFERING GRADUATE PROGRAMS IN ENVIRONMENTAL PROTECTIONSUPPORTED BY FEDERAL GRANT PROGRAMS 1967 - ALBANY REGION

Location	School	Area of Program Emphasis					
		Air Pollution	Industrial Hygiene	Radiation Protection	Solid Wastes	Water Supply and/or Water Pollution	General
New York	Columbia University, New York	-	-	x	-	-	x
	Cornell University, Ithaca	-	-	-	-	x	x
	C.U.N.Y. City College, New York	-	x	-	-	-	-
	Manhattan College, New York	-	-	-	-	x	-
	New York University, New York	x	-	x	-	x	-
	Rensselaer Polytechnic Inst., Troy	-	-	x	x	-	-
	Syracuse University, Syracuse	-	-	-	-	-	x
Massachusetts	University of Rochester, Rochester	-	x	-	-	-	-
	Harvard University, Cambridge	x	x	x	-	x	x
	Mass. Institute of Tech., Cambridge	-	-	-	-	-	x
	Northeastern University, Boston	-	-	-	-	x	x
	Tufts University, Medford	-	-	-	-	x	x
Vermont	University of Mass., Amherst	-	-	-	-	x	x
	University of Vermont, Burlington	-	-	-	-	x	-

INSTITUTIONS OFFERING UNDERGRADUATE PROGRAMS INENVIRONMENTAL HEALTH: 1968 - UNITED STATES

<u>Location</u>	<u>School</u>
Alabama	Troy State College, Troy
California	California State College, Los Angeles California State College, Long Beach Fresno State College, Fresno Sacramento State College, Sacramento San Diego State College, San Diego San Fernando State College, San Fernando San Jose State College, San Jose
District of Columbia	George Washington University, Washington
Florida	Florida State University, Tallahassee University of Florida, Gainesville
Illinois	Southern Illinois University, Carbondale
Indiana	University of Indiana, Indianapolis Indiana State University, Terre Haute
Louisiana	Louisiana State University, Baton Rouge McNeese State College, Lake Charles
Massachusetts	University of Massachusetts, Amherst
Michigan	Ferris State College, Big Rapids
Montana	Montana State College, Bozeman
New Jersey	Rutgers, The State University, New Brunswick
Oklahoma	University of Oklahoma, Norman
Oregon	Oregon State University, Corvallis Portland State College, Portland
South Dakota	South Dakota State University, Brookings
Tennessee	East Tennessee State University, Johnson City
Utah	Brigham Young University, Provo
Washington	University of Washington, Seattle Washington State University, Pullman
Wisconsin	Wisconsin State University, Eau Claire

FOOD AND DRUG PROTECTIVE SERVICES

Government and industry share in the efforts to protect health and lives through safeguarding the quality of food and drugs.

Food Technologist

The food technologist applies science and engineering to the production, packaging, distribution, preparation, and utilization of foods. He is involved with the development of new products, processes, and equipment; selection of raw materials; changes in the composition or physical condition of food for industrial processing; and the nutritional value and suitability of foods for human consumption.

In terms of work activity, the greatest proportion of the 20,000 to 25,000 food technologists in the nation are engaged in product development. Almost one-fourth of the members of the Institute of Food Technologists have a doctorate, and another one-fifth have a master's degree. The remainder hold bachelor's degrees.

A bachelor's degree in food science, or in a related science (chemistry, biochemistry, biology, or bacteriology) is the minimum educational requirement for entrance into the field.

Government Food and Drug Inspector and Analyst

Both the Federal Government and the States have food and drug laws which provide broad responsibility for protective services.

The Federal F.D.A. food and drug inspector has responsibility to provide protection before the product reaches the consumer by checking processes involved from raw materials to delivery. He is usually a college graduate with a science major.

The Federal F.D.A. food and drug analyst provides more intensive checking of the inspector's samples for purity and whether they comply with their labels. The minimum educational requirement is 4 years of college with a major in chemistry, bacteriology, pharmacology, or a related science. A master's degree or a doctorate is required for the research analyst's top positions.

SCHOOLS OFFERING TRAINING IN FOOD SCIENCE AND TECHNOLOGY
and
NUMBERS OF GRADUATES: 1965-6 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>B*</u>	<u>M**</u>	<u>D***</u>
New York	Columbia University, New York	-	-	-
	Cornell University, Ithaca	-	-	-
	S.U.N.Y. College of Agriculture at Cornell University, Ithaca	10	1	1
	<u>Totals</u>	<u>10</u>	<u>1</u>	<u>1</u>
Massachusetts	Massachusetts Institute of Technology, Cambridge	-	-	-
	University of Massachusetts, Amherst	10	9	11
	<u>Totals</u>	<u>10</u>	<u>9</u>	<u>11</u>
Vermont	None			
<u>Grand total</u>		20	10	12

* Bachelor's degree

** Master's degree

*** Doctor's degree

HEALTH AND VITAL STATISTICS

Statistical data are required in administrative planning and evaluation, as well as in research and interpretation of the health needs of the community to the public.

Health statisticians (sometimes called biostatisticians) are primarily concerned with the use of statistical theory, techniques, and methods to determine useful measurements or meaningful relationships of quantified information on a particular subject relating to health and disease. In addition to identifying and measuring health problems, they devise special studies for use in planning and evaluating health services.

In 1965, between 1,000 and 2,000 statisticians were active in the health field. A bachelor's degree with courses in mathematics, physical sciences, biological sciences, and social sciences is the usual requirement for a beginning position as a health statistician. Advanced training in statistics and public health leading to a master's degree or doctorate is highly desirable.

The less complex and routine statistical functions are performed by statistical clerks who generally have a background of high school mathematics. They may abstract material from technical reports and prepare code sheets from which data can be summarized or tabulated. Other duties include assisting in analyzing statistical data, computing and verifying statistical tables, drafting graphic presentations, and maintaining files of records and statistics.

Vital record registrars may be public health statisticians or persons with educational backgrounds in business administration, law, science, or arts. They direct and coordinate the registration of births and deaths, and usually marriages and divorces, in cities, counties, and States. Probably fewer than 300 persons qualify through education and experience for the professional character of the position.

Health demographers have interests similar to health statisticians and vital record registrars, but with greater concentration on the measurement of the elements of population growth such as factors associated with family formation and dissolution, fertility, and death and the relation of these factors to economic development. There is only a small number of demographers engaged in the health field.

SCHOOLS CONFERRING DEGREES IN STATISTICS
and
NUMBERS OF GRADUATES: 1965-66 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>B*</u>	<u>M**</u>	<u>D***</u>
New York	Columbia University, New York	-	11	3
	Cornell University, Ithaca	-	5	1
	C.U.N.Y. City College, New York	22	7	-
	C.U.N.Y. Hunter College, New York	1	-	-
	New York University, New York	7	17	2
	S.U.N.Y. at Buffalo, Buffalo	1	-	-
	Syracuse University, Syracuse	-	1	2
	University of Rochester, Rochester	-	3	-
	<u>Totals</u>	<u>31</u>	<u>44</u>	<u>8</u>
Massachusetts	Harvard University, Cambridge	2	6	6
	Northeastern University, Boston	-	12	-
	University of Massachusetts, Amherst	-	8	-
	<u>Totals</u>	<u>2</u>	<u>26</u>	<u>6</u>
Vermont	None			
	<u>Grand Total</u>	<u>33</u>	<u>70</u>	<u>14</u>

* Bachelor's degree
** Master's degree
*** Doctor's degree

HEALTH EDUCATION

Health education is the process through which individuals acquire knowledge and behavior consistent with the achievement of optimum individual and community health. The practitioners of health education are public health educators and school health educators.

The public health educator has a major interest in educating all segments of the community and is concerned with those forces which create or change behavior. It is estimated that there are almost 2,000 public health educators in the nation. More than one-third of these are employed by State and local health departments; the remainder are employed by the Federal Government, voluntary health agencies, schools and colleges, hospitals and clinics, and industry.

The public health educator receives his preparation in a school of public health. Admission to such a school generally requires a bachelor's degree in health education or an allied field. Recently the American Public Health Association decided to accredit curricula in health education in institutions other than a school of public health.

The school health educator is mainly concerned with classroom teaching and other influences which the school exerts on health knowledge, behavior, and attitudes. Since responsibility for health education programs in schools is often shared with other subject areas, it is difficult to identify all school health educators. However, it is estimated that about 20,000 persons are engaged in this activity throughout the nation.

The school health educator must meet the regular certification standards for teachers in his State. Four years of college is the minimum requirement, although a master's degree is becoming increasingly required.

SCHOOLS OFFERING SPECIALIZATION IN HEALTH EDUCATION AT
UNDERGRADUATE AND GRADUATE LEVELS AND NUMBERS OF GRADUATES
1967 - ALBANY REGION

Location	School	Bach- elor's	Mas- ter's	Doc- tor's
New York	C.U.N.Y. Brooklyn College, Brooklyn	31	**	*
	C.U.N.Y. Hunter College, New York	*	85	*
	Columbia University Teachers College, New York	*	22	21
	New York University, New York	28	15	8
	S.U.N.Y. at Brockport, Brockport	*	13	*
	S.U.N.Y. at Cortland, Cortland	201	51	*
	S.U.N.Y. at Buffalo, Buffalo	*	42	1
	Syracuse University, Syracuse	6	-	-
	<u>Totals</u>	266	228	30
Massachusetts	Boston University, Boston	82	40	10
	Springfield College, Springfield	6	*	*
	State College at Lowell, Lowell	15	*	*
	University of Massachusetts, Amherst	9	3	*
		<u>Totals</u>	112	43
Vermont	none			
	<u>Grand Total</u>	378	271	40

* No program

** New program 1967

HEALTH INFORMATION and COMMUNICATION

The great importance of making authoritative health information available to the public in an understandable and appealing form is reflected in the increasing number of writers and graphic arts specialists employed by health organizations. Some of these individuals are also involved with making professional, scientific, and technical information accessible to the health specialists themselves.

Information Specialist and Science Writer

The distinction between these two careers depends primarily on where they do their work rather than on what they do. The health information specialist is usually employed by large health organizations to inform the public of achievements and of the organization's programs. He utilizes leaflets and other printed materials, newspapers, magazines, radio, television, exhibits, and motion pictures.

The health science writer is a journalist specializing in health subjects. Writing for public communication media, he acquaints the public with new developments and trends in the health fields. These persons are usually employed by newspapers, magazines, or have staff positions in health organizations.

Technical Writer

The technical writer develops materials designed primarily for professional persons in the field; thus, the emphasis is on specifics in great detail. Between 30,000 and 40,000 technical writers and editors are active in the nation. About 20 percent of these are associated with the biomedical sciences.

Illustrator, Poster and Display Artist, and Draftsman

Illustrators, poster and display artists, and draftsmen are being utilized increasingly in the health field. These positions do not require special scientific training, but do demand technical flair for putting abstract ideas into visual form. Training is usually acquired from technical institutes, colleges offering special 2-year programs, vocational and technical schools, and correspondence schools. Training may also be obtained through apprenticeship or on-the-job training.

Medical Illustrator

Medical illustrators, of which there are less than 1,000 in the United States, graphically record facts and progress in the health field. Generally, they are employed by hospitals, medical schools, research institutes,

pharmaceutical organizations, and medical publishers. They may also freelance.

Educational requirements are relatively high. The six programs available in the nation require 3 to 5 years at the college level for admission.

SCHOOLS OFFERING COURSES IN MEDICAL ILLUSTRATION

1967 - UNITED STATES

Location	School	<u>Curricula offered</u>		
		Certificate only	Bachelor's degree	Master's degree
Georgia	Medical College of Georgia, Augusta	-	x	x
Illinois	University of Illinois College of Medicine, Chicago	-	x	-
Maryland	Johns Hopkins University School of Medicine, Baltimore	-	-	x
Michigan	University of Michigan Medical School, Ann Arbor	-	-	x
Ohio	University of Cincinnati College of Medicine, Cincinnati	x	-	-
Texas	University of Texas Southwestern Medical School, Dallas	-	-	x

LIBRARY SERVICES in the HEALTH FIELD

Library services in the health field are designed to meet the needs of professional staff - medical, scientific, administrative, and others; the needs of professional schools; and the needs of hospital patients.

Medical Librarian

The medical library has as its function the acquisition, indexing, cataloguing, classification, storage, and dissemination of medical knowledge. It is estimated that between 3,200 and 3,500 hospitals have medical libraries. The remainder of the estimated 6,500 medical libraries in the nation are distributed among schools of the health disciplines, research and industrial institutions, and the Federal Government.

Medical librarians are few in number. Probably no more than 1,000 are professionally trained, although it is estimated that there are some 2,000 others who have had training of various degrees.

The basic requirement for certification as a medical librarian is an undergraduate degree plus a master's degree from an accredited library school offering an approved course in medical bibliography. This five-year course may be supplemented by an internship or other specialized training.

Several associations or institutions offer short-term (one week or less) courses for individuals without formal education in library science. Sponsors include the American Hospital Association and the Catholic Hospital Association.

In addition to librarians and clerical staff, medical libraries may employ other personnel such as indexers, abstractors, translators, and specialists trained in automatic data processing.

Patients' Librarian

The patients' library in a hospital is designed to meet the reading needs of individual patients in the hospital. Although volunteers frequently perform this service, especially in smaller hospitals, the patients' librarian (sometimes called the hospital librarian) in a larger institution should have some library training to perform efficiently.

SCHOOLS OF LIBRARY SCIENCE OFFERING SPECIAL COURSES IN MEDICALBIBLIOGRAPHY: 1968 - UNITED STATES

<u>Location</u>	<u>School</u>
California	University of California, Los Angeles University of Southern California, Los Angeles
District of Columbia	Catholic University of America, Washington
Georgia	Emory University, Atlanta
Illinois	University of Chicago, Chicago University of Illinois, Urbana
Maryland	University of Maryland, College Park
Michigan	University of Michigan, Ann Arbor
Minnesota	University of Minnesota, Minneapolis
New York	Columbia University, New York
North Carolina	University of North Carolina, Chapel Hill
Ohio	Case Western Reserve University, Cleveland
Oklahoma	University of Oklahoma, Norman
Pennsylvania	Drexel Institute of Technology, Philadelphia University of Pittsburgh, Pittsburgh

MEDICAL RECORDS

In 1967, there were close to 40,000 medical record librarians and technical and clerical workers employed in the nation's medical record departments of hospitals, clinics, health departments, and industrial establishments.

Medical Record Librarians

This type of personnel is responsible for the coordination of all the medical and surgical information on each patient. In smaller facilities additional duties may consist of serving as admitting officer or as book-keeper or secretary to the administrator.

The minimum educational requirement for professional registration as a medical record librarian is 2 years of general college work plus one year of study in medical record science in an approved school. Beginning in 1970 all approved schools will have to be at the baccalaureate level and above, incorporated into a 4-year baccalaureate program, or in a post-baccalaureate program.

Qualified individuals may complete the national registration examination of the American Association of Medical Record Librarians, permitting them to use the professional designation of Registered Record Librarian (RRL).

Medical Record Technician

The medical record technician assists the medical record librarian and performs technical tasks associated with the maintenance and use of medical records. Formal training for these persons was started about 15 years ago. Courses last for 9 to 12 months in approved hospital schools and junior colleges. Practical instruction is given in medical terminology, anatomy, physiology, and medical record procedures.

The correspondence course of the American Association of Medical Record Librarians - open to persons who are employed in medical record work and who are high school graduates - is another avenue to becoming a medical record technician. Those who satisfactorily complete the 25-lesson course may apply to the national accreditation examination for the designation of Accredited Record Technician.

APPROVED SCHOOLS FOR MEDICAL RECORD LIBRARIANS

in the

UNITED STATES

There are 27 schools which are approved for training medical record librarians in the United States. Most are located in the Midwest and the Far West. Only four are located in the East:

1. U.S. Public Health Service Hospital,
Baltimore, Maryland
Average of 12 students per class
2. George Washington University,
Washington, D.C.
Average of 3 to 5 students per class
3. Mount Mercy College - Mercy Hospital,
Pittsburgh, Pennsylvania
Average of 4 to 6 students per class
4. University of Pennsylvania Graduate Hospital,
Philadelphia, Pennsylvania
Average of 12 students per class.

In 1966-1967 all schools in the nation graduated a total of 192 students.

APPROVED SCHOOLS FOR MEDICAL RECORD TECHNICIANS (U.S.)
and

NUMBERS OF STUDENTS AND GRADUATES:

1966-67 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
California	East Los Angeles College, Los Angeles	10	10
	Fullerton Junior College, Fullerton	10	3
Indiana	St. Margaret's Hospital, Hammond	7	6
Kansas	Hutchinson Junior College, Hutchinson	5	5
Massachusetts	St. Joseph's Hospital, Lowell	9	8
Minnesota	St. Mary's Junior College, Minneapolis	9	9
Missouri	Research Hospital, Kansas City	21	19
Ohio	Marymount Hospital, Garfield Heights	6	5
Tennessee	Madison Hospital, Madison	7*	-
Texas	Hendrick Memorial Hospital, Abilene	8	8
Washington	Spokane Community College, Spokane	21	20
	St. Joseph Hospital, Tacoma	5*	-
	<u>Totals</u>	<u>118</u>	<u>93</u>

* Students enrolled in the final year of a 2-year program with an affiliated junior college.

MEDICINE and OSTEOPATHY

(Note: Because the educational requirements and facilities for doctors of medicine are so well known to the users of this publication, no discussion or listings of them will be provided.)

OSTEOPATHY

As of December 31, 1967 there were 13,415 individuals in the nation with the D.O. degree. A license is required to practice in all States and the District of Columbia. In addition to practicing general medicine and surgery, osteopaths may be certified in 12 specialties by boards associated with the American Osteopathic Association. The five schools of osteopathy in the nation are all 4-year institutions requiring at least 3 years of previous college academic education.

APPROVED SCHOOLS OF OSTEOPATHY

and

NUMBERS OF STUDENTS AND GRADUATES: 1966-67 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
Illinois	Chicago College of Osteopathy, Chicago	272	56
Iowa	College of Osteopathic Medicine & Surgery, Des Moines	317	68
Missouri	Kansas City College of Osteopathy & Surgery, Kansas City	414	97
	Kirksville College of Osteopathy & Surgery, Kirksville	395	101
Pennsylvania	Philadelphia College of Osteopathic Medicine, Philadelphia	365	80
	<u>Totals</u>	<u>1,763</u>	<u>405</u>

MIDWIFERY

There are approximately 1,000 trained nurse-midwives in the United States, most of whom are actively engaged in this field, in addition to some 5,000 lay midwives who provide assistance to pregnant women.

Nurse-midwife

The nurse-midwife is a registered nurse who has successfully completed a recognized program of study and clinical experience leading to a certificate in nurse-midwifery. She provides prenatal, intrapartum, and postpartum care which is geared to the individual needs of each mother and family. She cares for the pregnant woman during pregnancy, and stays with her during labor, providing continuous emotional and physical support. She evaluates progress and manages the labor and delivery, always watchful for signs which indicate the need for medical intervention. She also evaluates and provides immediate care for the newborn. She helps the mother to care for herself and her child; to adjust the home situation to the new child; and to lay a healthful foundation for future pregnancies. The American nurse-midwife always functions within the framework of a medically directed health service.

The American College of Nurse-Midwives reports that the majority of nurse-midwives are located in the eastern half of the nation. Licensure laws for nurse-midwives exist only in the state of New Mexico and the City of New York. In other states they function under the lay midwives licensure.

In contrast to the lay midwife, the nurse-midwife functions as a member of the obstetrical team in medical centers and universities having active programs of nurse-midwifery.

Lay Midwife

The lay midwife provides assistance to women during childbirth in the absence of a medical practitioner. She is usually a woman with a limited education who learns largely through apprenticeship. Generally, she serves in low economic and rural areas, and the delivery of the baby usually occurs in the home.

Twenty-three States and the District of Columbia have licensing or registration laws for the lay midwife. In others, permits to practice are issued annually in an attempt to keep them under supervision. Unlicensed midwives function under the supervision of the state health department. They receive instruction from public health nurses in the selection of materials and simple procedures.

NURSING and RELATED SERVICES*

As of early 1968 nursing personnel of various categories were actively employed in the nation as follows:

Registered nurses	- 659,000
Practical nurses	- 320,000
Nursing aides, orderlies, attendants	- 800,000
Home health aide-homemakers	- 12,000

Registered Nurses

Registered nurses (sometimes also called graduate nurses) are responsible for the nature and quality of all nursing care received by patients. They supervise practical nurses and other nonprofessional personnel who perform routine care and treatment of patients.

About two-thirds of the employed registered nurses work in hospital nursing services, not including the self-employed private duty nurses. Some of the hospital nurses specialize in clinical areas such as obstetrics, pediatrics, psychiatry, or the recently introduced intensive coronary care. Public health, school, and industrial nurses comprise 10 percent of the total.

A license to practice is required in all States, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. Licensure entails graduation from a school approved by the state board of nursing and successful completion of a state board examination.

Graduation from high school is required for admission to all schools of nursing. There are 3 alternative initial programs of nursing education which prepare R.N.'s. Diploma programs require 3 years of training conducted by hospital schools; associate degree programs in community colleges are usually 2 years in duration; and baccalaureate programs generally require 4 years of study in a college or university, although a few require 5 years.

Practical Nurses

Practical nurses, also known as vocational nurses, provide nursing care and treatment of patients under the supervision of a registered nurse. The majority of them work in hospitals, clinics, homes for the aged, and nursing homes. About 1,000 are employed in public health work.

Licensure is required in all states, the District of Columbia, and territories. Examination prior to licensure is mandatory, and licensure

*List of educational facilities in Albany Region is provided, beginning on page 2-97.

by waiver of the educational requirements is no longer permitted.

Requirements for admission to a practical nursing program vary. In most states the applicant must have completed at least 2 years of high school; a few states require a high school diploma. The training lasts from 12 to 18 months, and may be obtained in trade, technical, or vocational schools operated by public school systems; or in private schools controlled by hospitals, health agencies, or colleges. The National Federation of Licensed Practical Nurses with 28,000 members is the association for individuals in this field.

Nursing Aides, Orderlies, and Attendants

Auxiliary nursing workers in hospitals and nursing homes function as assistants to nurses in providing many services related to the patient's comfort and welfare. Nursing aides, usually women, assist registered and practical nurses by performing less skilled tasks for patients. Orderlies and attendants, usually men, assist by performing a variety of duties for male patients and certain heavy duties in the care of the physically ill, mentally ill, and mentally retarded.

Although there are no definite educational requirements, on-the-job training may include classroom instruction, demonstration, and practice taught by a registered nurse. Training usually lasts several months.

Psychiatric aides employed in mental institutions are about 140,000 in number. Three states - Arkansas, California, and Michigan - license them.

Home Health Aides and Homemakers

Home health aides, also called home aides or visiting health aides, give supportive services required to maintain normal bodily and emotional comfort and to assist the patient toward independent living in a safe environment. The services are given under the supervision of a nurse or, when appropriate, of a physical, speech, or occupational therapist.

Homemakers provide similar services, although some provide care and assistance to families and individuals in times of stress resulting from problems other than illness.

Home health aides and homemakers are recruited from persons who have had little formal education and no health training. The employing agency is responsible for on-the-job training, with a nurse providing the basic and on-going training in personal care services, and other health personnel involved in their appropriate aspects. A state license is not required for persons providing these services.

OCCUPATIONAL THERAPY

Occupational therapy is the use of purposeful activity as treatment in the rehabilitation of persons with physical or emotional disability. There are about 7,000 occupational therapists employed in the United States at present. Some 2,000 others are not in practice. About two-thirds work in hospitals, with a large proportion in Federal institutions. Others work in rehabilitation centers, nursing homes and homes for the aged, schools and camps for handicapped children, and teaching institutions.

About 40 colleges and universities offer programs leading to professional qualification in occupational therapy under 3 plans of education:

1. A minimum 4-years bachelor's degree program (most programs).
2. A minimum one-year certificate course for students who already have a bachelor's degree.
3. A 2-year graduate program leading to a master's degree.

In addition to the academic work, a minimum of 6 months of supervised clinical practice in health facilities or agencies is required to complete professional education and to qualify for admission to the national examination conducted by the American Occupational Therapy Association for professional registration.

The occupational therapist may be assisted by an occupational therapy technician - generally known as an occupational therapy assistant - in carrying out the program of rehabilitating patients in various health care facilities. The assistant participates directly in the patient's activities. About 5,000 such persons are currently employed.

Some 20 occupational therapy assistant programs of training are now available, conducted by hospitals, health agencies, vocational and adult education schools, and community colleges. Graduates are eligible for certification as occupational therapy assistants and for membership in the American Occupational Therapy Association.

Trained volunteers also play an important part in occupational therapy services. Professional artists, musicians, and others lend their abilities and special talents to assist the therapist in providing a well-rounded program for patients.

SCHOOLS OFFERING ACCREDITED COURSES IN OCCUPATIONAL THERAPY
AND
NUMBERS OF STUDENTS AND GRADUATES: 1967 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>Seniors & Post-baccalaureate Students *</u>	<u>Students in Clinical Practice</u>	<u>Graduates</u>
New York	Columbia University College of P. & S., New York	31	22	25
	New York University School of Education, New York	20	13	13
	S.U.N.Y. at Buffalo, Buffalo	<u>19</u>	<u>13</u>	<u>12</u>
	<u>Totals</u>	70	48	50
Massachusetts	Boston University, Sargent College, Boston	27	14	9
	Tufts University, Boston School of Occupational Therapy, Boston	<u>9</u>	<u>31</u>	<u>28</u>
	<u>Totals</u>	36	45	37
Vermont	None			
	<u>Grand Totals</u>	106	93	87

* October 1967 enrollment of undergraduate students in 4th year of O.T. degree program and 5th year for students with degree other than O.T.

TRAINING PROGRAMS FOR OCCUPATIONAL THERAPY ASSISTANTS,

TYPE OF PROGRAM, and NUMBER OF GRADUATES: 1967

ALBANY REGION

<u>Location</u>	<u>School</u>	<u>Type of Program</u>	<u>Graduates</u>
New York	Erie County Technical Institute, Buffalo	Combined prog., all areas	*
	Marcy State Hospital, Marcy	Psychiatry	12
	Bird S. Coler Hospital, New York	Combined prog., all areas	17
	Rockland State Hospital, Orangeburg	Psychiatry	11
	<u>Totals</u>		<u>40</u>
Massachusetts	Boston State Hospital, Boston	Psychiatry	10
	<u>Total</u>		<u>10</u>
Vermont	None		50
	<u>Grand Total</u>		50

* New school - first class in 1967-8

ORTHOTIC and PROSTHETIC TECHNOLOGY

Orthopedic and prosthetic appliance makers fabricate and fit artificial limbs to replace those lost or disabled through injury or disease. On the basis of a surgeon's or other physician's prescription, the prosthetist makes and fits artificial limbs, while the orthotist makes and fits orthopedic braces. The physical therapist and occupational therapist train the patient in the use and care of his new equipment, and the prosthetist and/or orthotist assist with his training. A person who both designs and fits the appliance may be certified in both prosthetics and orthotics.

Presently there are between 3,500 and 4,000 people working as prosthetists and/or orthotists. Included in this figure are some 1,300 who have been certified by the American Board on Certification in Orthotics and Prosthetics.

Orthotists and prosthetists have in the past been trained by the apprenticeship method. This type of training requires 4 years on-the-job under the supervision of a Board-certified prosthetist-orthotist. Examination, and recommendation by three physicians (two of whom must be orthopedic surgeons) are requirements for subsequent certification.

Recently, courses of study in prosthetics and orthotics have been started in universities and junior colleges. New York University offers a 4-year course leading to the B.S. degree. Two junior colleges (Cerritos in Los Angeles and Chicago City College) offer a 2-year associate degree program in prosthetics. In addition, Delgado Junior College in New Orleans recently started a one-year course in prosthetics and orthotics to train aides in this field.

PHARMACY

At the present time there are about 125,000 pharmacists employed in the nation. The pharmacist practices in community pharmacies and institutional pharmacies. Others are employed in academic, association, government, and industry settings.

Many pharmacists in community pharmacies have managerial duties in addition to their professional functions. Pharmacists in hospitals may also advise the medical staff on certain drugs, make sterile solutions, purchase medical supplies, teach in schools of nursing, and perform administrative duties.

About 85 percent of all active pharmacists practice in community pharmacies. Some 13,000 others are employed by hospitals and/or nursing homes on a full-time or part-time basis. In some instances, community pharmacists spend part of their time in such institutions.

A minimum of 5 years of study beyond high school is required for a B.S. in pharmacy or a Bachelor of Pharmacy. Some colleges offer a 6-year program and confer the degree of Doctor of Pharmacy. This includes the additional requirement by most schools of a year or two of preprofessional education taken in colleges or universities. With advanced study a student may qualify for an M.S. and/or a Ph.D.

There are about 75 colleges of pharmacy in the country at present. A license to practice pharmacy is required in all States and the District of Columbia. To obtain a license, graduation from an accredited college of pharmacy is required, plus an internship of from 6 to 12 months in 46 states, and then pass an examination given by the State Board of Pharmacy. A license obtained in one state is valid in most states by a reciprocity agreement.

Pharmacy aides work under the direct supervision of the pharmacist. No formal training programs exist. Presently, there are about 6,000 pharmacy aides in the country.

SCHOOLS OF PHARMACY AND NUMBERS OF STUDENTS AND GRADUATES:1966-67 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
New York	Albany College of Pharmacy of Union University, Albany	247	68
	Brooklyn College of Pharmacy of Long Island University, Brooklyn	285	85
	Columbia University College of Pharmacy, New York	180	61
	Fordham University College of Pharmacy, New York	134	41
	St. John's University College of Phar- macy, Jamaica	200	47
	S.U.N.Y. at Buffalo College of Phar- macy, Buffalo	135	33
	<u>Totals</u>	<u>1181</u>	<u>335</u>
Massachusetts	Massachusetts College of Pharmacy, Boston	334	117
	Northeastern University College of Pharmacy, Boston	112	18
	<u>Totals</u>	<u>446</u>	<u>135</u>
Vermont	None		
<u>Grand Totals</u>		1,627	470

PHYSICAL THERAPY

Physical therapy is concerned with the restoration of function and the prevention of disability following disease, injury, or loss of a bodily part. The goal is to help the patient reach his maximum performance and to assume his due place in society while learning to live within the limits of his capabilities.

There are some 15,000 physical therapists currently employed in the nation. More than half work in hospitals, while others are employed in rehabilitation centers, schools, societies for crippled children, and public health agencies.

A license to practice is required in 48 States, the District of Columbia, and Puerto Rico. To obtain a license, an applicant must have a degree or certificate from an approved school and pass a State board examination.

About 50 colleges and universities offer programs of education under 3 plans:

1. A 4-year's bachelor's course (most programs).
2. A 12- or 16-month certificate course for students already holding a bachelor's degree in a subject other than physical therapy.
3. A 2-year graduate program leading to a master's degree.

All programs provide a minimum of 4 months' clinical education experience in health care facilities.

The physical therapist may have the help of a physical therapy assistant and/or aide who works directly under supervision of the therapist. In-service training programs or junior college programs provide the necessary training. Some 8,000 assistants are currently employed.

INSTITUTIONS OFFERING APPROVED COURSES IN PHYSICAL THERAPY

and

NUMBERS OF STUDENTS AND GRADUATES: 1967 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>Seniors</u>	<u>Post-bacca- laureate Students</u>	<u>Graduates</u>
New York	Columbia University College of P. & S., New York	9	19	30
	Ithaca College - Albert Einstein College of Medicine, Ithaca	64	-	44
	New York University School of Education New York	17	7	21
	Russell Sage College- Albany Medical College, Albany	19	-	23
	S.U.N.Y. at Buffalo, Buffalo	20	4	16
	<u>Totals</u>	<u>129</u>	<u>30</u>	<u>135</u>
Massachusetts	Boston University-Sargent College, Boston	28	-	30
	Northeastern University - Boston- Bouve College, Boston	29	-	31
	Simmons College, Boston	7	3	13
	<u>Totals</u>	<u>64</u>	<u>3</u>	<u>74</u>
Vermont	None			
	<u>Grand Totals</u>	<u>193</u>	<u>33</u>	<u>209</u>

PODIATRY

Podiatry, formerly known as chiropody, is that profession which deals with the examination, diagnosis, prevention, treatment and care of conditions and functions of the human foot. The podiatrist fits corrective and supportive devices, performs surgical and other operative procedures on the foot, prescribes proper foot-gear, and administers and prescribes drugs and physical therapy for patient care.

There are about 8,500 practicing podiatrists in the country, 95 percent of whom are active and self-employed. A few hold full-time salaried positions in hospitals or schools of podiatry.

Podiatry specialty organizations recognized by the American Podiatry Association include the following:

- American College of Foot Orthopedists (105 specialists)
- American College of Foot Roentgenologists (56 specialists)
- American College of Foot Surgeons (325 specialists)
- American Society of Podiatric Dermatology (35 specialists)

All states and the District of Columbia require a license for the practice of podiatry. To qualify for a license, an applicant must have graduated from a college of podiatry and have passed a State or National Board examination. In addition, 3 states require a period of internship or practice.

The five colleges of podiatry in the United States admit students who have already completed 2 years of college. The podiatry program is 4 years in duration, leading to the degree of Doctor of Podiatric Medicine (D.P.M.) or Doctor of Podiatry (Pod.D. or D.P.).

APPROVED PODIATRY COLLEGES

and

NUMBERS OF STUDENTS AND GRADUATES: 1966-67 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
California	California Podiatry College, San Francisco	176	25
Illinois	Illinois College of Podiatry, Chicago	150	42
New York	M. J. Lewi College of Podiatry, New York	153	30
Ohio	Ohio College of Podiatry, Cleveland	247	51
Pennsylvania	Pennsylvania College of Podiatry, Philadelphia	117	18
		<hr/>	<hr/>
	Totals	843	166

PSYCHOLOGY

Psychology is a science dealing with the understanding and modification of human behavior. About one-third of all psychologists are engaged in health activities (10,000 individuals).

Some 5,200 individuals are in an area of psychology related to the health field called clinical psychology. Clinical psychologists are engaged primarily in the diagnosis and treatment of mental illness in hospitals and clinics, although some are in private practice. These persons act as consultants to community mental health programs and to school systems in increasing numbers. The training of a clinical psychologist, in addition to research training and experience, entails one year of supervised internship in an approved setting prior to the granting of the Ph.D. degree.

About 2,000 counseling psychologists work in schools, industry, and community agencies to prevent mental illness.

Not limited to the health field are social psychologists who are concerned with group reactions and the ways in which our social attitudes develop. In addition, there are the measurement psychologists (also called psychometrists) who devise tests for measuring people's mental, emotional, and social characteristics. There are only about 600 social psychologists and 300 psychometrists in the country at present.

Psychologists, as of 1967, were licensed in 30 states. Although some of the practicing psychologists have had only a year or two of graduate study in psychology, the usual requirement for practice is 4 years of study leading to a Ph.D., plus about a year of internship to provide supervised clinical experience. About 100 universities offer doctoral degrees in clinical psychology, including more than 70 which are accredited by the American Psychological Association.

SCHOOLS CONFERRING MASTER'S DEGREES INSELECTED FIELDS OF PSYCHOLOGY:1965-66 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>Clinical Psychology</u>	<u>Counseling Psychology</u>	<u>Social Psychology</u>
New York	Columbia University, Teachers College, New York	11	-	1
	Cornell University, Ithaca	-	-	1
	<u>Totals</u>	<u>11</u>	<u>-</u>	<u>2</u>
Massachusetts	Clark University, Worcester	6	-	-
	Harvard University, Cambridge	2	-	3
	Springfield College, Springfield	18	19	-
	Assumption College, Worcester	-	22	-
	<u>Totals</u>	<u>26</u>	<u>41</u>	<u>3</u>
Vermont	None			
	<u>Grand Totals</u>	<u>37</u>	<u>41</u>	<u>5</u>

RADIOLOGIC TECHNOLOGY

Radiologic technologists, also called x-ray technologists or technicians, operate x-ray equipment under the general direction of a physician who is usually a radiologist. Some 100,000 are currently employed. The American Registry of Radiologic Technologists lists about 50,000 persons of whom two-thirds are professionally active.

Three specialties are recognized:

1. General x-ray technology.
2. Nuclear medicine technology using radioactive isotopes.
3. Radiation therapy technology using radiation producing devices.

About 25 percent of radiologic technologists work in hospitals, while the remainder are employed in independent laboratories, in physicians' and dentists' offices, and in government agencies.

A license to practice is required in one state (New York), and in Puerto Rico.

There are over 1,000 programs in radiologic technology, conducted by hospitals, community colleges, and medical schools. Prerequisite to admission is a high school diploma, although a few schools require a year or two of college or graduation from a school of nursing. The length of training varies from a minimum of 2 years in a hospital radiology department or junior college, to a 4-year university course leading to the bachelor's degree. Ninety percent of the programs are hospital-based.

After completion of training, a technologist may take an examination given by the American Registry of Radiologic Technologists and, if he passes, may use the title Registered Technologist -- RT (ARRT).

SECRETARIAL and OFFICE SERVICES

Secretarial and office services are usually provided to health professionals by receptionists, secretaries, assistants, and/or aides.

The person who prepares the examination room and passes instruments and materials to physicians as directed is called an office assistant or aide rather than a secretary.

The receptionist's office procedures are closely related to those of the secretary. However, the latter plays a more important role.

High school graduation is the minimum educational requirement for secretarial and office services. In addition to the required training in office procedures and skill in typing, shorthand, and book-keeping, courses in biology, chemistry, health education, and medical or dental terminology are highly desirable. Formal programs are available at some junior colleges and in technical or vocational schools.

Dental secretaries and receptionists are relatively few, only 21,000 being employed by nonsalaried dentists in 1965.

Optometrists' assistants receive training on-the-job or in 2-day workshops offered by the Optometric Extension Program Foundation. A 4-week course of study offered by the same organization is usually attended by more than 1,000 persons annually.

Note: Because of the large number of institutions offering training at the secretarial level in the Albany Region, no inventory is provided.

SOCIAL WORK

Social work programs designed to meet the special needs of persons who are ill, disabled, aged, or crippled are one component of the many types of services concerned with the serious social problems of individuals and families. Of the more than 130,000 social workers employed in social welfare settings, about 15 percent are in health and related programs. Those in health programs are mainly in psychiatric settings. However, an increasing number are to be found associated with general hospitals, 25 percent of which have social service departments.

Social workers in hospitals and clinics work directly with patients and their families in helping them to cope with problems related to severe or long illness, recovery, and rehabilitation. They utilize community health agencies and other resources to assist the patient in adjustment to disability and to life in the community.

By the end of 1967, five states had enacted laws to protect the title of social worker from being assumed by persons without qualification - California, New York, Oklahoma, Rhode Island, and Virginia. Puerto Rico requires a license to practice as a social worker.

The educational requirement for full professional status is a master's degree, which necessitates completion of 2 years of graduate study in an accredited school of social work. Approximately 20 percent of all social workers meet this requirement.

There are about 70 graduate schools of social work in the United States accredited by the Council on Social Work Education. Some 600 colleges and universities offer courses with social service content at the undergraduate level, 220 of which are affiliated with the Council of Social Work Education.

More than half of the graduates with a bachelor's degree in social work go directly to social welfare employment. In medical and psychiatric settings, such individuals are more likely to be called social work assistants. They receive additional on-the-job training under the supervision of social workers.

Membership in the National Association of Social Workers is open only to graduates and students of accredited graduate professional schools of social work. Social workers in the health field may identify with two of the Association's nine councils:

1. Medical and Health Services Council
2. Mental Health and Psychiatric Services Council

Eligibility requirements for membership in the Academy of Certified Social Workers are 2 years of membership in the National Association of Social Workers and 2 years of paid social work employment under the supervision of a member of the Academy. In 1967 the Academy had 33,000 members.

ACCREDITED SCHOOLS OFFERING MASTER'S PROGRAMS IN
SOCIAL WORK and NUMBERS OF STUDENTS AND GRADUATES:
1967 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
New York	Adelphi University, Garden City	159	51
	C.U.N.Y., Hunter College, New York	224	51
	Columbia University, New York	409	192
	Fordham University, New York	229	99
	New York University, New York	268	110
	S.U.N.Y. at Buffalo, Buffalo	145	58
	Syracuse University, Syracuse	122	47
	Yeshiva University, New York	87	36
	<u>Totals</u>	<u>1,643</u>	<u>644</u>
Massachusetts	Boston College, Boston	123	61
	Boston University, Boston	127	62
	Simmons College, Boston	120	58
	Smith College, Northampton	135	56
		<u>Totals</u>	<u>505</u>
Vermont	None		
	<u>Grand Totals</u>	<u>2,148</u>	<u>881</u>

SPECIALIZED REHABILITATION SERVICES

Several types of specialized rehabilitation therapists, other than occupational therapists and physical therapists (q.v.) may be employed to assist the person who is physically and/or mentally disabled to regain his maximum capacity for self-help and independent living.

Corrective Therapist

Corrective therapy is the treatment of patients by medically prescribed physical exercises and activities designed to strengthen and coordinate functions and to prevent muscular deconditioning resulting from long convalescence or inactivity due to illness. The corrective therapist treats all diagnostic categories of patients on the prescription of a physician.

Corrective therapist is the usual title used by persons who work in hospitals, nursing homes, and rehabilitation centers, while those employed in educational institutions are known as adapted physical educators. It is estimated by the American Corrective Therapy Association that there are about 1,200 to 1,500 corrective therapists and some 4,000 adapted physical educators. The Veterans' Administration employs the largest number of personnel specifically identified as corrective therapists.

The recommended educational and clinical experience program for the corrective therapist qualifies the person for responsibilities in a hospital, nursing home, clinic, or educational institution. The minimum educational requirement is a baccalaureate in physical education from an accredited school, followed by a period of clinical training involving 400 to 600 hours in an approved affiliated hospital.

No information is available on the institutions offering advanced training in corrective therapy, except for training centers affiliated with 67 V.A. Hospitals.

The American Corrective Therapy Association is concerned with standards of education and clinical training. The American Board for Certification of Corrective Therapists is a component of that Association. The Board passes on the qualifications of therapists and maintains a national register of those entitled to use the identification of a Certified Corrective Therapist (C.C.T.), of which there are about 1,000.

Educational Therapist

Educational therapy is the utilization of academic teaching designed to develop the mental and physical capacities of hospitalized patients.

The educational therapist administers medical treatment through the use of educational activities that are of significance to the patient.

The educational therapist is a college graduate who has majored in education or physical education. In addition, 2 to 7 months of clinical training are required, either as inservice training or at certain training centers affiliated with professional schools. No information is available on graduate degrees awarded in educational therapy.

The American Association for Rehabilitation Therapy had 650 members in 1967, representing both educational and manual arts therapists.

Manual Arts Therapist

Manual arts therapy is the professional use of industrial arts activities of vocational significance to assist in the restoration of patients to their fullest capacity within the limits of their abilities. The manual arts therapist administers a program of actual or simulated work situations that help the patient to prepare for an early return to family life and become a productive member of the community.

About 1,000 manual arts therapists are employed in hospitals and rehabilitation centers. The minimum qualification for employment is a college education, with a major in industrial arts, agriculture, or a related field. The degree is followed by 2 to 7 months of clinical training, usually given as inservice training or at hospitals and rehabilitation centers affiliated with professional schools.

Music Therapist

The professional application of the art of music for therapeutic purposes is relatively new and would appear to have a wider application in mental illness than in physical illness. The music therapist uses instrumental or vocal music to bring about changes in behavior that can serve as a basis for improved mental and physical health. There are more than 2,000 music therapists, 850 of whom belong to the National Association for Music Therapy.

Music majors may qualify by taking courses in music therapy. A baccalaureate in music therapy is offered by 13 schools; a master's program is available in 5 universities; and 3 universities offer doctoral programs.

For employment as a music therapist, the college graduate must complete a 6-month internship in an approved psychiatric hospital which is affiliated with an accredited school.

Recreation Therapist

Therapeutic recreation is the specific use of recreational activity in the care, treatment, and rehabilitation of ill, handicapped, and aged persons within a directed program. Activities commonly found include: music, art, drama, sports, games, camping, outdoor and nature activities, cooking, sewing, hobbies, social clubs, and committees.

The Recreation Therapist, also known as the therapeutic recreation specialist, recreator, or adjunctive therapist, uses a program which is ordinarily associated with leisure as part of the treatment for people with physical and psychological handicaps, illnesses, or conditions.

Currently, some 5,000 recreation therapists are employed in both private and governmental agencies; most are in hospitals. In 1966, the National Recreation and Park Association (14,000 members) was formed from a merger of several organizations. The following year, the National Therapeutic Recreation Society was formed as a branch of the Association with 1,000 members.

The therapeutic recreation staff is usually comprised of a director who holds a master's degree in recreation, plus staff members who may have a master's or a bachelor's degree in recreation or in one of the activity specialties. Although most recreation therapy staffs provide their services directly to clients, they also act as consultants to health or community agents.

The National Therapeutic Recreation Society maintains a registry at 3 levels:

1. Director - requires a master's degree plus 2 years of experience
2. Leader - requires a bachelor's degree
3. Aide - requires a high school diploma plus 400 hours of inservice education

In 1967, 125 colleges offered courses leading to the B.S. degree in Recreation; 25 had master's programs; and 13 had doctorate programs.

The National Therapeutic Recreation Society recently developed a certification program to maintain and elevate educational standards.

The recreational therapist may have the help of a recreation therapy assistant or aide in carrying out his program. At least 3 community colleges are known to be offering 2-year programs for the training of assistants.

Homemaking Rehabilitation Consultant

The specialist with a home economics background and training in occupational therapy can adapt the knowledge of home management, family finance, nutrition, and other home-related subjects to meet the needs of the handicapped person who has housekeeping responsibilities.

The homemaking rehabilitation consultant may offer direct re-training in homemaking competencies to individuals or indirect counseling as a resource person for the rehabilitation team.

Activities of this type are of particular concern to the American Home Economics Association. It administers traineeships provided by the Rehabilitation Services Administration for home economists to study toward a master's or doctor's degree in the area of rehabilitation.

Homemaking rehabilitation consultants are usually college graduates, with a background in home economics or occupational therapy, followed by inservice or graduate training in the special education of the physically or mentally ill. Practical experience in homemaking and child care is needed.

SCHOOLS OFFERING RECREATIONAL THERAPY PROGRAMS:

1967 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>B.*</u>	<u>M.**</u>	<u>D.***</u>
New York	Columbia University, New York	-	-	x
	Cornell University, Ithaca	x	-	-
	New York University School of Education, New York	x	x	x
	S.U.N.Y. at Cortland, Cortland	x	x	-
Massachusetts	Boston University School of Education, Boston	x	x	x
	Northeastern University, Boston-Bouve College, Boston	x	-	-
	Springfield College, Springfield	x	x	-
	University of Massachusetts, Amherst	x	-	-
Vermont	None			

* Bachelor's Program

** Master's Program

*** Doctor's Program

SCHOOLS OFFERING MUSIC THERAPY PROGRAMS

and

NUMBERS OF GRADUATES: 1967-68 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Bachelor's Degree</u>	<u>Master's Degree</u>	<u>Internship</u>
California	University of the Pacific, Stockton	7	-	6
Florida	Florida State Univ.*, Tallahassee	5	1	4
Indiana	Indiana University*, Bloomington	6	-	5
Kansas	University of Kansas*, Lawrence	8	4	7
Louisiana	Loyola University, New Orleans	8	-	7
Michigan	Michigan State University, East Lansing	7	2	7
	Western Michigan University, Kalamazoo	3	-	2
Missouri	Lincoln University, Jefferson City	2	-	4
Ohio	Ohio University, Athens	4	-	3
Texas	Texas Women's University, Denton	4	-	3
Oregon	Williamette University, Salem	3	-	3
Wisconsin	Alverno College, Milwaukee	3	-	2
	University of Wisconsin, Milwaukee	3	-	3
	<u>Totals</u>	<u>63</u>	<u>7</u>	<u>56</u>

* Offers doctoral program with a major in music therapy

SPEECH PATHOLOGY and AUDIOLOGY

Speech pathologists and audiologists are mainly concerned with disorders in the production, reception, and perception of speech and language. They help in identifying persons who have such disorders and determining the etiology, history, and severity of specific disorders through interviews and special tests. Speech, hearing, and language, remedial, or conversational procedures are utilized in their work.

In 1967, there was estimated to be over 16,000 speech pathologists and audiologists, most of whom were members of the American Speech and Hearing Association. Most are engaged in clinical work.

Two certificates of competence are awarded by the Association, one in speech pathology and one in audiology. Both require academic training at the master's level, one year of experience in the field, plus passing an examination. As of early 1968, 4,400 persons held a certificate in speech pathology, and 900 in audiology.

Almost 300 schools offer programs in speech pathology and audiology. The bachelor's (preprofessional) level is offered by 80; 135 offer the master's degree; and 55 award a doctorate.

SCHOOLS OFFERING PROGRAMS IN SPEECH PATHOLOGY AND AUDIOLOGY

UNITED STATES

No specific listings of schools offering programs in speech pathology and audiology are readily available. However, there are at least 270 such institutions in the nation, 22 of which are located in New York State. Massachusetts has 4 such programs, and Vermont has one. All other states have one or more programs with the exceptions of Alaska, Delaware, and Rhode Island, which had none as of 1968.

Most institutions offer a bachelor's, master's and doctor's degree.

In 1967-68, a total of 270 institutions conferred the following numbers of degrees:

Bachelor's	81
Master's	135
Doctor's	55

VETERINARY MEDICINE

In addition to treating sick and injured animals, veterinarians give advice regarding the care and breeding of animals and help prevent the outbreak and spread of diseases among them. Thus, the profession shields the human population from animal diseases which may affect man.

There are almost 30,000 veterinarians in the United States, 95 percent of whom are active. More than half are in private practice; others work in the regulatory and public health aspects of veterinary medicine, and in the military.

Veterinary medical specialty organizations recognized by the American Veterinary Medical Association are:

1. American Board of Veterinary Public Health (111 specialists)
2. American Board of Veterinary Radiology (20 specialists)
3. American Board of Veterinary Toxicology (8 specialists)
4. American College of Laboratory Animal Medicine (106 specialists)
5. American College of Veterinary Microbiologists (76 specialists)
6. American College of Veterinary Surgeons (36 specialists)

A license to practice veterinary medicine is required in all States and the District of Columbia. To obtain a license, an applicant must be a graduate of an accredited veterinary school and pass a State Board examination. A few states require some practical experience under the supervision of a licensed veterinarian.

For positions in public health, research, laboratory animal medicine, or teaching, the master's or Ph.D. degree in a field such as pathology, public health, or bacteriology may be required, in addition to the degree of D.V.M.

The minimum time required to earn the D.V.M. is 6 years beyond high school, consisting of 2 to 4 years in college plus 4 years in veterinary school.

In some cases graduates of foreign veterinary schools serve as interns and residents in this country and then establish practices.

SCHOOLS OF VETERINARY MEDICINE
and
NUMBERS OF STUDENTS AND GRADUATES: 1968 - United States

Location	School	Students	Graduates
Alabama	Auburn Univ. School of Vet. Med., Auburn	387	99
	Tuskegee Institute School of Vet. Med., Tuskegee	111	15
California	Univ. of California, School of Vet. Med., Davis	282	54
Colorado	Colorado State Univ. School of Vet. Med., Fort Collins	278	63
Georgia	Univ. of Georgia School of Vet. Med., Athens	235	53
Illinois	Univ. of Ill. College of Vet. Med., Urbana	258	51
Indiana	Purdue Univ. School of Vet. Science & Med., Lafayette	213	44
Iowa	Iowa State Univ. College of Vet. Med., Ames	278	67
Kansas	Kansas State Univ. School of Vet. Med., Manhattan	312	75
Michigan	Michigan State Univ. College of Vet. Med., East Lansing	287	59
Minnesota	Univ. of Minn. College of Vet. Med., St. Paul	233	55
Missouri	Univ. of Missouri School of Vet. Med., Columbia	191	29
New York	S.U.N.Y. Vet. College at Cornell University, Ithaca	231	59
Ohio	Ohio State Univ. College of Vet. Med., Columbus	318	79
Oklahoma	Oklahoma State Univ. College of Vet. Med., Stillwater	181	48
Pennsylvania	Univ. of Penn. School of Vet. Med., Philadelphia	280	60
Texas	Texas A & M Univ. College of Vet. Med., College Station	360	104*
Washington	Washington State Univ. College of Vet. Med., Pullman	188	50
<u>TOTALS</u>		<u>4,623</u>	<u>1,064</u>

* 3rd year students under trimester system

VISION CARE

The responsibility for visual care and services is divided among three major categories of health personnel - ophthalmologists, optometrists, and opticians. Since the education and role of the ophthalmologist is well known to the reader, no further mention of this specialty will be made here.

Optometrists

Optometry is the profession specifically licensed in all States to care for human vision. An optometrist (Doctor of Optometry) is educated and trained to examine the eyes and related structures to determine the presence of vision impairments, eye diseases, vision malfunctions related to educational difficulties, or other abnormalities. He prescribes and adapts lenses, contact lenses, or other optical aids, and utilizes vision training to preserve, restore, and improve vision efficiency.

There are approximately 17,000 optometrists in the United States, 14,500 of whom are members of the American Optometric Association. About 75 percent are in private practice.

All States and the District of Columbia require a license to practice. To qualify for a license, the applicant must be a graduate of an accredited school of optometry and pass a State Board examination. Two states (Delaware and Rhode Island) require a 6-month internship, and Mississippi requires a year of experience.

All ten accredited colleges of optometry require a 6-year curriculum leading to a doctorate in optometry (O.D.), which includes 2 years of preoptometry education at an accredited college plus 4 years of optometry college.

Opticians and Optical Technicians

An optician, sometimes called a dispensing optician, makes and fits eyeglasses prescribed by an ophthalmologist or optometrist. The mechanical grinding and polishing of the lenses and assembling in a frame are done by an optical technician, also known as an optical laboratory mechanic, lens grinder, polisher, surfacer, edger, benchman, or assembler. In some states the dispensing optician may fit contact lenses and is called a contact lens technician.

There are at least 25,000 opticians and optical technicians in the nation. The Guild of Prescription Opticians estimates there are more than 8,000 opticians who are active.

Dispensing opticians require licensure in 15 states. In addition, California and Hawaii license opticianry establishments. In both Connecticut and New Jersey, a license is required for optical technicians.

In states where an optician is required to be licensed, high school graduates prepare for this occupation through an apprenticeship program lasting from one to four years. An alternate method of entering this field is through completion of a one-or-two-year formal program in ophthalmic dispensing or optical technology in an appropriate school. Six schools granting an associate degree in ophthalmic dispensing have been certified by the American Board of Opticianry.

Orthoptists

An orthoptist is an assistant to an ophthalmologist who teaches patients to overcome the handicap of crossed eyes by certain exercises. Some 400 persons were employed as orthoptists in 1967, as reported by the American Orthoptic Council.

Specialized training in orthoptics is available to individuals with at least 2 years of college. There are 10 training centers in the nation, in addition to 14 preceptorships. Fifteen months of training are required, and after passing an examination given by the American Orthoptic Council, a certificate is awarded.

INSTITUTIONS OFFERING TRAINING PROGRAMS FOR OPTICIANS
and
NUMBERS OF GRADUATES: 1967 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Graduates</u>
California	Los Angeles City College, Los Angeles	3
Massachusetts	Worcester Industrial Tech. Inst., Worcester	13
Michigan	Ferris State College, Big Rapids	13
Minnesota	Eveleth Area Vocational-Technical School, Eveleth*	7
New York	C.U.N.Y. - N.Y.C. Community College of Applied Arts and Sciences, New York	-
	Erie County Technical Institute, Buffalo	37
	<u>Totals</u>	73

* Not listed by American Board of Opticianry Accrediting body.

ACCREDITED SCHOOLS OF OPTOMETRY

and

NUMBERS OF STUDENTS AND GRADUATES: 1967 - UNITED STATES

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
California	Los Angeles College of Optometry, Los Angeles	171	52
	University of California School of Optometry, Berkeley	123	29*
Illinois	Illinois College of Optometry, Chicago	270	69
Indiana	Indiana University Division of Optometry, Bloomington	125	28
Massachusetts	Massachusetts College of Optometry, Boston	158	43
Ohio	Ohio State University School of Optometry, Columbus	168	13*
Oregon	Pacific University College of Optometry, Forest Grove	162	67
Pennsylvania	Pennsylvania College of Optometry, Philadelphia	348	55
Tennessee	Southern College of Optometry, Memphis	286	106
Texas	University of Houston College of Optometry, Houston	183	22
	<u>Totals</u>	<u>1,994</u>	<u>484</u>

* Small number of graduates due to change from 3-year to 4-year program

ACCREDITED TRAINING CENTERS and PRECEPTORSHIPS IN ORTHOPTICS andNUMBERS OF STUDENTS: 1966 - UNITED STATES

<u>Location</u>	<u>Training Center</u>	<u>Students</u>
Georgia	Emory Univ. Orthoptic Training School, Atlanta	3
Louisiana	Tulane Univ. School of Medicine, New Orleans	3
Massachusetts	Harvard Med.Sch.-Mass. Eye & Ear Infirmary, Boston	2
Michigan	Wayne State Univ.Sch. of Med.-Kresge Eye Inst., Detroit	2
Missouri	Univ. of Missouri School of Medicine, Columbia	2
New York	N.Y. Eye & Ear Infirmary, New York	4
	N.Y. University College of Medicine, New York	3
Ohio	Ohio State University Hospitals, Columbus	1
Oklahoma	Univ. of Oklahoma Medical Center, Oklahoma City	2
Texas	Baylor Univ.Coll. of Med.-Methodist Hospital, Houston	4
	<u>Totals</u>	<u>26</u>

<u>Location</u>	<u>Preceptorships</u>	<u>Students</u>
California	Univ.of Calif., San Francisco Med. Ctr, San Francisco	1
Florida	Univ.of Florida Coll. of Med., Gainesville	1
	Univ. of Miami Sch.of Med.-Bascon Palmer Eye Inst., Miami	2
Iowa	Univ. of Iowa - University Hospitals, Iowa City	3
Maryland	Johns Hopkins Univ.Sch. of Medicine, Baltimore	2
Michigan	Office of Edmond L. Cooper, M.D., Royal Oak	1
	Univ. of Michigan Medical Center, Ann Arbor	1
Missouri	St. Louis Ophthalmic Laboratory, St. Louis	2
	Washington Univ. School of Medicine, St. Louis	2
New York	Buffalo Eye & Ear Hospital, Buffalo	3
	Inst.of Ophthalmology Presby.Medical Center, New York	3
	S.U.N.Y. Downstate Medical Center, Brooklyn	1
Ohio	Cleveland Clinic Foundation, Cleveland	1
Wisconsin	Milwaukee Ophthalmic Institute, Milwaukee	1
	<u>Totals</u>	<u>24</u>

VOCATIONAL REHABILITATION COUNSELING

The vocational rehabilitation counselor is concerned with evaluating the vocational potentialities of the patient, attempting to match the patient's abilities with a suitable job when the time comes for starting work. Some counselors specialize in services for the blind, paraplegics, the mentally ill, the retarded, and other special groups. They also engage in community activities to interest prospective employers, educators, and others in the problems of the handicapped and in their rehabilitation.

All 50 states have rehabilitation programs financed by Federal and State funds. In early 1968, about 6,000 rehabilitation counselors were active. They are usually based in the agencies' headquarters or field service stations, in mental hospitals, rehabilitation centers, sheltered workshops, and similar settings. In addition, about 2,500 rehabilitation counselors are employed by the Veterans' Administration.

The minimum educational requirement is usually a bachelor's degree, preferably with a major in psychology, social welfare, or education. Following graduation from college, most potential rehabilitation counselors avail themselves of graduate training, with a master's degree being attained in 1½ to 2 years, and a doctorate in another 2 or 3 years. Sixty-five universities offer such training. Courses include human behavior, personality functioning, counseling principles and techniques, information on occupations, and methods of developing job resources for the disabled.

SCHOOLS OFFERING GRADUATE TRAINING PROGRAMS IN
REHABILITATION COUNSELING and NUMBERS OF STUDENTS AND GRADUATES:
1967 - ALBANY REGION

<u>Location</u>	<u>School</u>	<u>Students</u>	<u>Graduates</u>
New York	S.U.N.Y. at Albany, Albany	-	-
	S.U.N.Y. at Buffalo, Buffalo	54	18
	Columbia University, New York	50	26
	Hofstra University, Hempstead	-	-
	C.U.N.Y. Hunter College, New York	19	9
	New York University, New York	51	21
	Syracuse University, Syracuse	46	14
	<u>Totals</u>	220	88
Massachusetts	Boston University, Boston	28	12
	Springfield College, Springfield	20	13
	<u>Totals</u>	48	25
Vermont	None		
	<u>Grand Totals</u>	268	113

MISCELLANEOUS HEALTH SERVICES*Inhalation Therapy Technician

The inhalation therapy technician, often called a therapist, uses skills and equipment to attempt to restore the respiratory system to its normal function. In smaller hospitals this is frequently done by the regular nursing staff. In larger institutions, an inhalation therapy department conducts this activity, usually under the direction of the anesthesiology department or the pulmonary department. Some 8,000 inhalation therapy technicians were employed in 1968. The American Association for Inhalation Therapy had 4,200 members in that year. A registry is maintained by the Association of those persons who have qualified by oral and written examinations; in late 1967 there were 515 technicians so registered.

Between 40 and 50 schools provide training programs of inhalation therapy. Courses are a minimum of 9 months in duration, and it is anticipated that accredited courses will soon be of 24 months' duration. Programs are open to high school graduates and nurses. Although most schools are hospital-based, colleges and universities are becoming increasingly interested in the education of these personnel.

Electrocardiograph Technician

The electrocardiograph technician operates the electrocardiograph and gives recorded tracings to the cardiologist for interpretation. Well over 6,000 such technicians are currently employed, the great majority by hospitals.

No specialized formal education is required, but high school graduates with courses in the physical sciences and some college work are desirable. On-the-job training in a hospital setting lasts from 3 to 6 months, under the supervision of an experienced technician or a cardiologist.

Electroencephalograph Technician

The electroencephalograph technician utilizes the electroencephalograph to record brain waves, the tracings then being interpreted by a physician, usually a neurologist. More than 2,000 such technicians are employed full or part time.

Training may be on-the-job with an apprenticeship of from 3 to 6 months, supplemented by lectures on neuroanatomy, neurophysiology, and electronics. A minimum background of high school with science courses and an aptitude for working with electronic equipment are needed. Formal training programs are being developed by colleges and universities; for some of these, 2 years of college is a prerequisite.

*List of educational facilities in Albany Region is provided, beginning on page 2-97.

An American Board of Electroencephalographic Technicians was established in 1964 and by early 1968, about 60 persons had successfully completed a written and an oral examination, and obtained a certificate of registration entitling the holder to use the designation R.EEG.T.

Other Assistants for Patient Care

Surgical Aides, also called surgical technical aides, or operating room assistants, work under the continuous supervision of the operating room nurses and surgeons. They assist in the care of patients in the operating room, and in the care, preparation, and maintenance of sterile and nonsterile supplies and equipment. Between 20,000 and 25,000 such personnel are currently employed in hospitals.

There are also obstetrical aides, orthopedic aides, pediatric aides, and others involved in patient care.

There are no formal educational requirements for any of these, and inservice training is the usual method of training. However, very recently vocational and trade schools have developed courses for training these persons.

INSTITUTIONS OFFERING TRAINING PROGRAMS IN ELECTROENCEPHALOGRAPHY:1968 - UNITED STATES

<u>Location</u>	<u>Institution*</u>
Georgia	Emory University, Atlanta
Iowa	University of Iowa, Iowa City
Louisiana	Louisiana State Univ. Medical School, New Orleans
Maryland	Johns Hopkins Hospital, Baltimore
Massachusetts	Massachusetts General Hospital, Boston Children's Hospital Medical Center, Boston
Minnesota	Mayo Clinic, Rochester
North Carolina	Duke University Medical Center, Durham
Virginia	Medical College of Virginia, Richmond
Washington	University of Washington Medical Center, Seattle
Wisconsin	University of Wisconsin Medical Center, Madison

* Incomplete list. Numbers of students are not available.

LIST OF HEALTH OCCUPATIONS

The Division of Allied Health Manpower, Bureau of Health Manpower, Health Services and Mental Health Administration, has identified approximately 125 different health occupations. The following list of these shows some 250 alternate titles such as synonyms or designations related to form of practice, type of specialty, or place of practice.

For an occupation to be designated as a "health occupation", it is required that the workers have special education or training designed to help them function in a health setting.

In this list, the terms "technologist" or "therapist" as a primary title indicate at least the baccalaureate level of preparation. The terms "technician" or "assistant" indicate the associate degree (two years of college education or other formal preparation beyond high school). The term "aide" indicates on-the-job training or specialized training of less than two years duration after high school.

The list omits some workers within the health service industry. There are many business, clerical, and maintenance occupations that are essential but not unique to the industry since no special education or formal training for the health field is required. Among such titles are accountants, admitting officers, business managers, cashiers, comptrollers, credit managers, directors of office services, directors of volunteer services, employment interviewers, housekeepers and housekeeping workers, job analysts, laundry managers and workers, maintenance workers, personnel directors and office workers, public relations directors, purchasing agents, stationary engineers, and stockroom managers.

The health occupations have been grouped into 32 fields for convenience.

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
<u>ADMINISTRATION</u>	Health Administrator	Health officer or commissioner Environmental control administrator Health agency executive director Health care administrator Hospital administrator Medical care administrator Nursing home administrator Public health administrator
	Health Program Analysts	Public health analyst Public health specialist
	Health Program Representative	Public health advisor Public health representative
	Health Systems Analyst	
<u>BIOMEDICAL</u>	Biomedical Engineer	Bioengineer Medical engineer
<u>ENGINEERING</u>	Biomedical Engineering Technician	Medical Engineering technician
	Biomedical Engineering Aide	
<u>CHIROPRACTIC</u> and <u>NATUROPATHY</u>	Chiropractor	Doctor of chiropractic
	Naturopath	Naturopathic physician
<u>CLINICAL</u>	Clinical Laboratory Scientist**	Clinical Chemist** Microbiologist**
<u>LABORATORY</u> <u>SERVICES*</u>	Clinical Laboratory Technologist	Medical laboratory technologist Medical technologist Blood banking technologist Chemistry technologist Hematology technologist Microbiology technologist Nuclear medical technologist

* includes pathology laboratory

** see NATURAL SCIENCES

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
	Clinical Laboratory Technician	Medical laboratory technician Medical technician Cytotechnician Cytotechnologist
	Clinical Laboratory Aide	Laboratory assistant Certified laboratory assistant Histologic aide Histologic technician Pathology laboratory aide
<u>DENTISTRY</u> and <u>ALLIED</u> <u>SERVICES</u>	Dentist	Endodontist Oral pathologist Oral surgeon Orthodontist Pedodontist Periodontist Prosthodontist Public health dentist
	Dental Hygienist Dental Assistant Dental Laboratory Technician	Dental laboratory assistant (aide)
<u>DIETETIC</u> and <u>NUTRITIONAL</u> <u>SERVICES</u>	Dietitian	Administrative dietitian Consultant(public health) dietitian Research dietitian Teaching dietitian Therapeutic dietitian
	Nutritionist* Dietary Technician	Public health nutritionist Dietary(food service) assistant Food service manager Food service technician
	Dietary Aide Food Service Supervisor	Dietary(food service) worker Dietary(food service) worker
<u>ENVIRONMENTAL</u> <u>CONTROL**</u>	Environmental Scientist*	Sanitary sciences specialist* Air pollution meteorologist* Environmental control chemist* Estuarine oceanographer* Ground water hydrologist* Health physicist* Limnologist*

* See NATURAL SCIENCES

** For some of the occupations listed, only a minority of the workers may be engaged in health related work.

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
	Environmental Engineer	Sanitary engineer Air pollution engineer Hospital engineer Industrial hygiene engineer Public health engineer Radiological health engineer
	Environmental Technologist	Sanitarian Air pollution specialist Industrial hygienist Radiological health specialist
	Environmental technician	Sanitarian technician Environmental engineering technician Radiological health technician
	Environmental Aide	(monitor) Sanitarian aide Environmental engineering aide Sewage plant assistant Waterworks assistant
<u>FOOD and DRUG PROTECTIVE SERVICES</u>	Food Technologist Food and Drug Inspector Food and Drug Analyst	
<u>HEALTH EDUCATION</u>	Health Educator Health Education Aide	Community health educator Public health educator School health coordinator School health educator
<u>INFORMATION and COMMUNICATION</u>	Health Information Specialist Health Science Writer Health Technical Writer Medical Illustrator	Biomedical communication specialist Medical writer Medical technical writer Medical editor Medical photographer
<u>LIBRARY SERVICES</u>	Medical Librarian Medical Library Assistant Hospital Librarian	Patients' librarian

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
<u>MATHEMATICAL SCIENCES*</u>	Mathematician	Biomathematician Demographer
	Statistician	Biostatistician Health statistician Vital record registrar
<u>MEDICAL RECORDS</u>	Medical Record Librarian	Medical record specialist Medical record technologist
	Medical Record Technician	Medical record assistant
	Medical Record Clerk	Medical record aide
<u>MEDICINE AND OSTEOPATHY</u>	Physician	Doctor of medicine (M.D.) Doctor of osteopathy (D.O.)
	Osteopathic Physician	Allergist Anesthesiologist Aviation medicine specialist Cardiovascular disease specialist Colon and rectal surgeon (proctologist) Dermatologist Forensic pathologist Gastroenterologist General practitioner Gynecologist Internist Manipulative therapy specialist Neurological surgeon Neurologist Occupational medicine specialist Obstetrician Ophthalmologist Orthopedic surgeon Otolaryngologist (otorhino- laryngologist) Pathologist Pediatrician** Physiatrist (physical medicine & rehabilitation specialist) Plastic surgeon Preventive medicine specialist
	M.D. or D.O.	

* For some of the occupations listed, only a minority of the workers may be engaged in health related work.

** Includes specialists in pediatric allergy and cardiology

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
		Psychiatrist*
		Public health physician
		Pulmonary disease specialist
		Radiologist**
		Surgeon
		Thoracic Surgeon
		Urologist
		Intern
		Resident
		Fellow
<u>MIDWIFERY</u>	Midwife	Lay midwife Nurse midwife ¹
<u>NATURAL SCIENCES</u> ²	Anatomist	Cytologist Embryologist Histologist
	Botanist	
	Chemist	Bioanalyst Biochemist Clinical chemist*** Environmental control chemist****
	Ecologist	
	Entomologist	
	Epidemiologist	
	Geneticist	
	Hydrologist	Ground water hydrologist****
	Immunologist	
	Meteorologist	Air pollution meteorologist****
	Microbiologist***	Bacteriologist Mycologist Parasitologist Virologist
	Nutritionist*****	
	Oceanographer	Estuarine oceanographer****

* includes specialists in child psychiatry

** includes specialists in diagnostic and therapeutic radiology

*** see CLINICAL LABORATORY SERVICES

**** see ENVIRONMENTAL CONTROL

1 see NATURAL SCIENCES

2 for some of the occupations listed, only a minority of the workers may be engaged in health related work

***** see DIETETIC and NUTRITIONAL SERVICES

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
	Pathologist	
	Pharmacologist	Toxicologist
	Physicist	Biophysicist
		Health physicist*
	Physiologist	
	Sanitary Sciences Specialist*	
	Zoologist	Limnologist*
<u>NURSING</u> and <u>RELATED</u> <u>SERVICES</u>	Nurse	Registered nurse (R.N.) Graduate nurse Professional nurse Hospital nurse Occupational health(industrial) nurse Office nurse Private duty nurse Public health nurse School nurse Nurse anesthetist Nurse midwife** Obstetrical nurse Pediatric nurse Psychiatric nurse Surgical(operating room) nurse Licensed practical nurse Vocational nurse Licensed vocational nurse
	Practical Nurse	Nursing assistant Nursing assistant Nursing assistant
	Nursing Aide	Psychiatric(mental health) aide
	Orderly	Home aide - homemaker
	Attendant	Visiting health aide
	Home Health Aide	Floor clerk
	Ward Clerk	
<u>OCCUPATIONAL</u> <u>THERAPY</u>	Occupational Therapist	
	Occupational Therapy Assistant	Occupational therapy technician
	Occupational therapy Aide	

* See ENVIRONMENTAL CONTROL

** See MIDWIFERY

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
<u>ORTHOTIC</u> and <u>PROSTHETIC</u> <u>TECHNOLOGY</u>	Orthotist	Orthopedic brace maker
	Orthotic Aide	
	Prosthetist	Artificial limb maker
	Prosthetic Aide Restoration Technician	
<u>PHARMACY</u>	Pharmacist	Community pharmacist Hospital pharmacist Industrial pharmacist
	Pharmacy Aide	Pharmacy helper
<u>PHYSICAL</u> <u>THERAPY</u>	Physical Therapist	
	Physical Therapy Assistant	Physical therapy technician
	Physical Therapy Aide	
<u>PODIATRY</u>	Podiatrist	Chiropodist
		Foot orthopedist
		Foot roentgenologist
		Podiatric Surgeon
		Pododermatologist
<u>RADIOLOGIC</u> <u>TECHNOLOGY</u>	Radiologic Technologist	
	Radiologic Technician	X-ray technician Nuclear medicine technician Radiation therapy technician
<u>SECRETARIAL</u> and <u>OFFICE</u> <u>SERVICES*</u>	Secretary	Dental Secretary Medical Secretary
	Office Assistant	Dentist's office assistant
		Medical assistant
		Optometrist's office assistant
		Physician's office assistant

* for some of the occupations listed, only a minority of the workers may be engaged in health related work.

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
<u>SOCIAL SCIENCES*</u>	Anthropologist	Cultural(social) anthropologist Physical anthropologist
	Economist	Health economist
	Psychologist	Clinical psychologist Counseling psychologist Measurement psychologist (psychometrist) Social psychologist
		Medical sociologist
	Sociologist	
<u>SOCIAL WORK</u>	Clinical Social Worker	Medical social worker Psychiatric social worker
	Clinical Social Work Assistant	
	Clinical Social Work Aide	Clinical casework aide
<u>SPECIALIZED REHABILITATION SERVICES</u>	Corrective Therapist	
	Corrective Therapy Aide	
	Educational Therapist	
	Manual Arts Therapist	
	Music Therapist	
	Recreation Therapist	Therapeutic recreation specialist
	Recreation Therapy Aide	
	Homemaking Rehabilitation Consultant	
<u>SPEECH PATHOLOGY AND AUDIOLOGY</u>	Audiologist	Hearing therapist
	Speech Pathologist	Speech therapist
<u>VETERINARY MEDICINE</u>	Veterinarian	Laboratory (animal medicine) veterinarian Public health veterinarian Veterinary laboratory diagnostician Veterinary microbiologist Veterinary pathologist Veterinary radiologist Veterinary surgeon Veterinary toxicologist
		Animal technician
	Veterinary Technician	

<u>Field</u>	<u>Primary Title</u>	<u>Alternate Title</u>
<u>VISION CARE</u>	Ophthalmologist*	
	Optometrist	
	Vision Care Technologist	Ocular care technologist Ophthalmic technologist Optometric technologist
	Technician:	
	Vision Care Technician	Ocular care technician Ophthalmic technician (assistant) Optometric technician (assistant)
	Orthoptic Technician	Orthoptist
	Optician	Dispensing Optician Ophthalmic dispenser (optical fitter) Contact lens technician Lens grinder-polisher** Optical (laboratory) mechanic
	Visual Care Aide	Ocular care aide Ophthalmic aide Optometric aide Visual training aide
<u>VOCATIONAL REHABILITATION COUNSELING</u>	Vocational Rehabilitation Counselor	Rehabilitation counselor
<u>MISCELLANEOUS HEALTH SERVICES</u>	Physician's Associate*** Physician's Assistant Physician's Aide	Pediatric associate Orthopedic assistant Obstetrical aide Pediatric aide Surgical aide
	Community Health Aide	School health aide Dental health aide Mental health aide (worker)
	Medical Machine Technician	Biomedical equipment technician Cardiopulmonary technician Electrocardiograph technician Electroencephalograph technician
	Miscellaneous Health Workers:	
	Extracorporeal Circulation Specialist	
	Inhalation Therapist (Technician)	
	Inhalation Therapy Aide	
	Medical Emergency Technician	
	Ambulance Attendant (Aide)	

* See MEDICINE and OSTEOPATHY

** Also known as assembler, benchman, edger, or surfer; optical technician or shopman

*** Baccalaureate or higher educational background

PROFESSIONAL SCHOOLS IN ALBANY REGION

(INCLUDING ALLIED MEDICAL EDUCATIONAL PROGRAMS)

Note: This section consists of a listing of professional schools and allied health educational programs in the Albany Region which are approved by the agencies as noted for each discipline. In many instances, particularly in the case of nursing schools, descriptive information concerning programs and courses offered will be found in the section on "Education" of each County's profile (Volume III of this series).

CERTIFIED LABORATORY ASSISTANT

Programs are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; American Society of Clinical Pathologists, 710 South Wolcott Avenue, Chicago, Illinois 60612 (C.R. MacPherson, M.D. is Chairman of Board of Schools); and American Society of Medical Technologists, Hermann Professional Building (Suite 1600), Houston, Texas 77025.

NEW YORK STATE

Vassar Brothers Hospital, Poughkeepsie, N.Y.

Affiliation: None

Directors: M. Dreyfuss, M.D., F.J. McMahon, M.D. and H. Tsitsera, M.T.

Entrance Requirements: High School

Length of Program: 14 months

Student Capacity: 5

Classes Begin: July

Tuition: None

Stipend: None

MASSACHUSETTS

None in Albany Region

VERMONT

Putnam Memorial Hospital, Bennington, Vermont

Affiliation: None

Directors: C.M. Flory, M.D. and H. Wood, M.T.

Entrance Requirements: High School

Length of Program: 13 months

Student Capacity: 5

Classes Begin: September

Tuition: \$50.

Stipend: None

CYTOTECHNOLOGIST

The following programs are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610, in collaboration with the Board of Schools of Medical Technology of the American Society of Clinical Pathologists, 710 South Wolcott Avenue, Chicago, Illinois 60612, (C. R. MacPherson, M.D. is Chairman of the Board of Schools)

NEW YORK STATE

Albany School of Cytotechnology, New York State Department of Health,
Division of Laboratories and Research, Albany, N.Y.

Director: S. S. Katz, M.D.
Entrance requirements: 2 years college
Length of program: 12 months
Student capacity: 6 per class
Classes begin: September
Tuition: None
Stipend: Yes

MASSACHUSETTS

Berkshire Medical Center (Pittsfield General and St. Luke's Hospitals),
Pittsfield, Mass.

Directors: William Beautyman, M.D., and E. Booth, FIMLT, CT.
Entrance requirements: 2 years college
Length of program: 12 months
Student capacity: 4 per class
Classes begin: September
Tuition: None
Stipend: Yes

VERMONT

None in Albany Region

DENTISTRY

None in Albany Region.

DIETITIAN

Programs in Dietetics are approved by the American Dietetic Association, 620 North Michigan Avenue, Chicago, Illinois 60611.

No programs in Albany Region.

HISTOLOGIC TECHNICIAN

Programs are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; American Society of Clinical Pathologists, 710 South Wolcott Avenue, Chicago, Illinois 60612 (E.R. MacPherson, M.D. is Chairman of the Board of Schools); and the American Society of Medical Technologists, Hermann Professional Building (Suite 1600), Houston, Texas 77025.

No programs in Albany Region.

HOSPITAL ADMINISTRATION

Programs in this discipline are members of the Association of University Programs in Hospital Administration, 1642 East 56th Street, Chicago, Illinois 60637; and are accredited by the Accrediting Commission on Graduate Education for Hospital Administration.

No programs in Albany Region.

INHALATION THERAPY TECHNICIAN

The programs listed are approved by the Council of Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610, in collaboration with the Board of Schools of Inhalation Therapy of the American Society of Anesthesiologists, 515 Busse Highway, Park Ridge, Illinois 60068, the American College of Chest Physicians, 112 East Chestnut Street, Chicago, Illinois 60611, and the American Association for Inhalation Therapy, 4075 Main Street, Riverside, California 92501.

The Chairman of the Joint Review Committee for Inhalation Therapy Technicians is Frederic Helmholtz, Jr., M.D., Mayo Clinic, Rochester, Minnesota 55901.

NEW YORK STATE

Aurelia Osborn Fox Memorial Hospital, Oneonta, N.Y.

School of Inhalation Therapy

Directors: J. E. Merzig, M.D. and J. Accurso, I.T.

Entrance Requirements: High school

Length of Program: 24 months

Student Capacity: 16

Classes Begin: July

Tuition: \$350. per year

Stipend: Yes

MASSACHUSETTS

None in Albany Region.

VERMONT

None in Albany Region.

INTERNSHIP WITH EMPHASIS ON FOOD SERVICE ADMINISTRATION

NEW YORK STATE

New York State Department of Mental Hygiene: Hudson River State
Hospital, Poughkeepsie, N.Y.

MASSACHUSETTS

None in Albany Region.

VERMONT

None in Albany Region.

INTERNSHIP WITH EMPHASIS ON THERAPEUTIC NUTRITION AND NUTRITION EDUCATION

None in Albany Region.

INTERNSHIP WITH EMPHASIS ON HOSPITAL FOOD SERVICE ADMINISTRATION AND
THERAPEUTIC DIETETICS

None in Albany Region.

LIBRARY SCIENCES

Schools in this discipline are accredited by the American Library Association, 50 East Huron Street, Chicago, Illinois 60611; and the special courses offered by them in hospital and medical library science are approved by the Medical Library Association, 919 North Michigan Avenue, Chicago, Illinois 60611.

None in Albany Region.

MEDICAL ASSISTANT

Programs in this field are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; and the American Association of Medical Assistants, 200 East Ohio Street, Chicago, Illinois 60611.

None in Albany Region.

MEDICAL RECORD LIBRARIAN
MEDICAL RECORD TECHNICIAN

Programs in this discipline are accredited by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610, in collaboration with the Committee on Education and Registration of the American Association of Medical Record Librarians, 211 East Chicago Avenue, Chicago, Illinois 60611, (Laura Anne Bigelow, R.R.L., is Director, Academic Department).

None in Albany Region.

MEDICAL TECHNOLOGIST

Programs in this field are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; the Board of Schools of Medical Technology of the American Society of Clinical Pathologists, 710 South Wolcott Avenue, Chicago, Illinois 60612 (G.R. MacPherson, M.D., Chairman of Board of Schools); and the American Society of Medical Technologists, Hermann Professional Building - Suite 1600, Houston, Texas 77025.

NEW YORK STATEAlbany Medical Center Hospital, Albany, N.Y.

Affiliations: Russell Sage College, State University of New York at Albany, Vermont College.

Directors: W. A. Thomas, M.D. and V. M. Dylong, M.A., M.T.

Entrance Requirements: 3 years college

Length of Program: 12 months

Student Capacity: 20

Classes Begin: September

Tuition: None

Stipend: Yes

Scholarship: Yes

St. Peter's Hospital, Albany, N.Y.

Affiliation: Albany College of Pharmacy, Union University

Directors: T.S. Beecher, M.D. and K. Bradley, M.T.

Entrance Requirements: 3 years college

Length of Program: 12 months

Student Capacity: 16

Classes Begin: June

Tuition: None

Stipend: None

Ellis Hospital, Schenectady, N.Y.

Affiliation: Russell Sage College, Hartwick College, Vermont College

Directors: G.F. Parkhurst, M.D. and A.A. Jaquay, M.T.

Entrance Requirements: 3 years college

Length of Program: 13 months

Student Capacity: 12

Classes Begin: Varies

Tuition: University

Stipend: Yes

Samaritan Hospital, Troy, N.Y.

Affiliation: Russell Sage College

Directors: O.R. Zumbo, M.D. and M. Mastrianni, M.T.

Entrance Requirements: 3 years college

Length of Program: 12 months

Classes Begin: September

Tuition: None

Stipend: Yes

MASSACHUSETTS

Berkshire Medical Center (Pittsfield General and St. Luke's Hospitals),
Pittsfield, Mass.

Affiliations: Springfield College, State College at North Adams,
Nasson College, College of Our Lady of the Elms

Directors: W. Beautyman, M.D. and Sister M.C. Griffin, M.T.

Entrance Requirements: 3 years college

Length of Program: 12 months

Student Capacity: 20

Classes Begin: January and July

Tuition: None

Stipend: Yes

Scholarship: Yes

VERMONT

None in Albany Region.

MEDICINE

Programs are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610, and the Association of American Medical Colleges, 2530 Ridge Avenue, Evanston, Illinois 60201.

NEW YORK STATE

Albany Medical College of Union University

MASSACHUSETTS

None in Albany Region.

VERMONT

None in Albany Region.

NUCLEAR MEDICAL TECHNICIAN
NUCLEAR MEDICAL TECHNOLOGIST

Programs are approved by the Council on Medical Education, American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; American College of Radiology, 20 North Wacker Drive, Chicago, Illinois 60606; American Society of Clinical Pathologists, 710 South Wolcott Avenue, Chicago, Illinois 60612; American Society of Medical Technologists, Hermann Professional Building (Suite 1600), Houston, Texas 77025; American Society of Radiologic Technologists, 645 North Michigan Avenue, Chicago, Illinois 60610; Society of Nuclear Medical Technologists, P.O. Box 30, Oak Park, Illinois 60405; and Society of Nuclear Medicine, 211 East 43rd Street, New York, New York 10017

No programs in Albany Region.

NURSE ANESTHETISTS

These programs are approved by the American Association of Nurse Anesthetists, 3010 Prudential Plaza, Chicago, Illinois 60601.

NEW YORK STATE

Albany Medical Center Hospital

MASSACHUSETTS

North Adams Hospital
Berkshire Medical Center

VERMONT

Henry W. Putnam Memorial Hospital

NURSES

PRACTICAL NURSING

These programs are approved by the respective state approving authorities.

CENTRAL DIVISION

Albany Board of Education, Albany, N.Y.
Albany School of Practical Nursing, Albany, N.Y.

NORTHERN DIVISION

Mary McClellan Hospital, Cambridge, N.Y.
Glens Falls Hospital, Glens Falls, N.Y.
Saratoga County Occupational Educational Program, Saratoga Springs, N.Y.
Rensselaer County Area Occupational School, Troy, N.Y.

SOUTHERN DIVISION

Columbia County B.O.C.E.S. Program, Chatham, N.Y.
Delhi College (S.U.N.Y.), Delhi, N.Y.
Ulster County B.O.C.E.S. School of Practical Nursing, Kingston, N.Y.
Middle School, Monticello, N.Y.
Dutchess County B.O.C.E.S., Poughkeepsie, N.Y.
Poughkeepsie School of Practical Nursing, Poughkeepsie, N.Y.

ALBANY-VERMONT INTERFACE DIVISION

Park Street School, Malone, N.Y.
Clinton County B.O.C.E.S. School of Practical Nursing, Plattsburgh, N.Y.
Henry W. Putnam Memorial Hospital, Bennington, Vt.
Thompson School, Brattleboro, Vt.

EASTERN DIVISION

Charles H. McCann Regional Vocational High School, North Adams, Mass.
Pittsfield Vocational High School, Pittsfield, Mass.

WESTERN DIVISION

Amsterdam School of Practical Nursing, Amsterdam, N.Y.
Herkimer County B.O.C.E.S., Mohawk, N.Y.
Otsego Area School, Oneonta, N.Y.
Practical Nursing School of Oneonta, Oneonta, N.Y.
Schenectady Cooperative Program in Practical Nurse Education, Schenectady, N.Y.

PROFESSIONAL NURSING

These programs are approved by the respective state approving authorities.

CENTRAL DIVISION

Albany Medical Center, Albany, N.Y.
Junior College of Albany, Albany, N.Y.
Maria College, Albany, N.Y.
Memorial Hospital, Albany, N.Y.
State University of New York at Albany, Albany, N.Y.

NORTHERN DIVISION

Adirondack Community College, Glens Falls, N.Y.
Hudson Valley Community College, Troy, N.Y.
Russell Sage College, Troy, N.Y.
Samaritan Hospital, Troy, N.Y.

SOUTHERN DIVISION

Columbia Memorial Hospital, Hudson, N.Y.
Benedictine Hospital, Kingston, N.Y.
Kingston Hospital, Kingston, N.Y.
Dutchess Community College, Poughkeepsie, N.Y.
Hudson River State Hospital, Poughkeepsie, N.Y.
St. Francis Hospital, Poughkeepsie, N.Y.
Vassar Brothers Hospital, Poughkeepsie, N.Y.
Ulster County Community College, Stone Ridge, N.Y.
Harlem Valley State Hospital, Wingdale, N.Y.

ALBANY-VERMONT INTERFACE DIVISION

Champlain Valley Physicians Hospital Medical Center, Plattsburgh, N.Y.
State University of New York College at Plattsburgh, Plattsburgh, N.Y.

EASTERN DIVISION

Berkshire Community College, Pittsfield, Mass.
Berkshire Medical Center, Pittsfield, Mass.

WESTERN DIVISION

Fulton Montgomery Community College, Johnstown, N.Y.
Hartwick College, Oneonta, N.Y.
Ellis Hospital, Schenectady, N.Y.

OCCUPATIONAL THERAPIST

Programs are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610, and the Council on Education of the American Occupational Therapy Association, 251 Park Avenue South, New York, N.Y. 10010. (Virginia T. Kilburn, O.T.R., is Director of Professional Educational Services.)

No programs in Albany Region.

ORTHOPAEDIC ASSISTANT

Programs in this field are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; and the American Academy of Orthopaedic Surgeons, 430 North Michigan Avenue, Chicago, Illinois 60611.

No programs in Albany Region.

OSTEOPATHY

Programs are approved by the American Osteopathic Association, 212 East Ohio Street, Chicago, Illinois 60611.

No programs in Albany Region.

PHARMACY

Programs are accredited by the American Council on Pharmaceutical Education, 77 West Washington Street, Chicago, Illinois 60602.

NEW YORK STATE

Albany College of Pharmacy, Union University, Albany, N.Y.

MASSACHUSETTS

None in Albany Region

VERMONT

None in Albany Region

RESIDENCIES IN HOSPITAL PHARMACY

Programs are approved by the American Society of Hospital Pharmacists, 4630 Montgomery Avenue, Washington, D.C. 20014.

NEW YORK STATE

Albany Medical Center Hospital, Albany, N.Y.

MASSACHUSETTS

None in Albany Region

VERMONT

None in Albany Region

PHYSICAL THERAPIST

Programs in this discipline are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; and the American Physical Therapy Association, 1740 Broadway, New York, N.Y. 10019 (Beth J. Phillips is Consultant, Division of Education).

NEW YORK STATE

Albany Medical College School of Physical Therapy, Albany, N.Y.

Affiliation: Russell Sage College

Directors: Boris Paul, M.D. and A.P. Snyder, M.S.

Entrance Requirements: 3 years college

Length of Program: 12 months

Student Capacity: 30

Classes Begin: September

Tuition: \$2,000

Stipend: None

Degree conferred: Yes

MASSACHUSETTS

None in Albany Region.

VERMONT

None in Albany Region.

PUBLIC HEALTH

Programs in the field of Public Health are accredited by the American Public Health Association, 1790 Broadway, New York, N.Y. 10019.

No programs in Albany Region.

RADIATION THERAPY TECHNOLOGIST

Programs in this field are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; the American College of Radiology, 20 North Wacker Drive, Chicago, Illinois 60606; and the American Society of Radiologic Technologists, 645 North Michigan Avenue, Chicago, Illinois 60610.

No programs in Albany Region.

RADIOLOGIC TECHNOLOGIST

Programs in this field are approved by the Council on Medical Education of the American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610; the American College of Radiology, 20 North Wacker Drive, Chicago, Illinois 60606; and the American Society of Radiologic Technologists, 645 North Michigan Avenue, Chicago, Illinois 60610.

CENTRAL DIVISION

Albany Medical Center Hospital, Albany, N.Y.

Affiliation: None
Directors: J.F. Roach, M.D. and R.J. Sweeney, R.T.
Entrance Requirements: High school
Length of Program: 24 months
Student Capacity: 36
Classes Begin: September
Tuition: \$100
Stipend: Yes

Memorial Hospital, Albany, N.Y.

Affiliation: None
Directors: W.J. Gorday, M.D. and L.D. Chetwynd, R.T.
Entrance Requirements: High School
Length of Program: 24 months
Student Capacity: 6
Classes Begin: September
Tuition: None
Stipend: None

NORTHERN DIVISION

Mary McClellan Hospital, Cambridge, N.Y.

Affiliation: Deaconess Hospital
Directors: H.N. Boroson, M.D. and E.S. Rogert, R.T.
Entrance Requirements: High School
Length of Program: 24 months
Student Capacity: 7
Classes Begin: July
Tuition: \$250.
Stipend: Yes

Glens Falls Hospital, Glens Falls, N.Y.

Affiliation: None
Directors: E.C. Elsey, Sr., M.D. and C.J. Steele, R.T.
Entrance Requirements: High school
Length of Program: 24 months
Student Capacity: 12
Classes Begin: September
Tuition: None
Stipend: Yes

SOUTHERN DIVISION

None

EASTERN DIVISION

North Adams Hospital, North Adams, Mass.

Affiliation: None

Director: R.H. Cowing, M.D.

Entrance Requirements: High School

Length of Program: 24 months

Student Capacity: 4

Classes Begin: July

Tuition: None

Stipend: Yes

Scholarship: Yes

Berkshire Medical Center (Pittsfield General and St. Luke's Hospitals),
Pittsfield, Mass.

Affiliation: None

Director: J.F. Gowdey, M.D.

Entrance Requirements: High School

Length of Program: 24 months

Student Capacity: 8

Classes Begin: July

Tuition: \$200.

Stipend: Yes

WESTERN DIVISION

Aurelia Osborn Fox Memorial Hospital, Oneonta, N.Y.

Affiliation: None

Directors: P.I. Kearney, M.D. and E.L. Butler, R.T.

Entrance Requirements: High School

Length of Program: 24 months

Student Capacity: 8

Classes Begin: September

Tuition: \$50.

Stipend: No

St. Clare's Hospital, Schenectady, N.Y.

Affiliation: None

Director: H. P. Curran, M.D.

Entrance Requirements: High School

Length of Program: 24 months

Student Capacity: 10

Classes Begin: September

Tuition: \$150.

Stipend: Yes

INTERFACE DIVISION

Champlain Valley Physicians Hospital Medical Center, Plattsburgh, N.Y.

Affiliation: None

Directors: R.T. Buran, M.D. and J.P. Morgan, R.T.

Entrance Requirements: High School

Length of Program: 24 months

Student Capacity: 16

Classes Begin: July

Tuition: \$350.

Stipend: Yes

Putnam Memorial Hospital, Bennington, Vermont

Affiliation: University of Vermont

Director: H.T. Guare, M.D.

Entrance Requirements: High School

Length of Program: 24 months

Student Capacity: 6

Classes Begin: July

Tuition: \$100.

Stipend: Yes

SOCIAL WORKER

Programs in this field are accredited by the Council on Social Work Education, 345 East 46th Street, New York, N.Y. 10017.

No programs in Albany Region.

TECHNICAL MANPOWER in NEW YORK STATE

INTRODUCTION

In the mid-sixties, the New York State Department of Labor initiated a study of the technical occupation field, a group of occupations concerning which relatively little has been known in the past. The central focus of the survey was the technician and the technical specialist, persons who require some knowledge of science, engineering, or technology to perform their job. It was intended to exclude the professional engineer and scientist, as well as the traditional skilled crafts, and semi-skilled occupations that do not require significant technical-education background or training time. Inevitably, there were some borderline jobs; some were included in the survey.

It is of interest to note that, whereas technical education in the modern sense has been carried on for some forty years in New York State, no comprehensive survey of employment in technical occupations had been conducted before the present one.

Although the New York State Department of Labor Survey covered virtually all of the technical occupations, this section will concentrate mainly on those associated with the health and education industries, and will generalize on the remainder.

Scope of Technical Occupations

The term "technician" has been widely used in industry and government. It, and the term "engineering technician," is commonly applied to persons who combine some scientific or engineering knowledge with technical skill in assisting or supporting engineering or scientific activities, and who work in the area between the craftsman and the engineer or scientist.

In this section, technical occupations include the jobs of:

- A. Persons providing direct support to the engineer, scientist, mathematician, or architect in specialized areas of their work
- B. Technical specialists engaged directly in production, distribution, medical and dental services, and related processes and services
- C. Supervisors working in a non-professional capacity who perform technical functions for a substantial proportion of their time or who are immediately responsible for directing technical work

Distinguishing Technical from Non-technical

Technical occupations shade off into semi-skilled and craft occupations at one end of the spectrum and into engineering and scientific jobs at the other. To distinguish a technical occupation from a semi-skilled occupation, it must be an occupation that requires:

1. A mathematics course beyond elementary algebra, and
2. A science or technology course in any subject field beyond the beginning high school course in that field

OR

3. It must be an occupation involving the use of technical equipment or procedures that require more than three months of normal (not crash) on-job training to teach a person of average intelligence having no related training and no substantial technical or scientific education.

Borderline jobs included in the survey were the following, despite the fact that in some establishments, they have professional status:

- A. Data-processing programmers
- B. Data-processing systems analysts
- C. Medical record librarians
- D. Medical "technologists"
- E. Technical writers and illustrators
- F. Therapists

The following were also included, despite the fact that in some establishments, these jobs may have craft or lower status:

- A. Dental mechanics
- B. Sanitation inspectors

Finally, the following health jobs were completely excluded:

- A. Dietitians
- B. Psychology aides
- C. Registered nurses

Exclusion of Self-Employed Persons

Obviously, it is not feasible in a survey of this type to include self-employed persons having no employees. Thus, the number of persons

in technical occupations was to some degree underestimated. The degree of underestimation is believed to be of the following order:

1. Medical and dental technical workers - 7%
2. Electronic technical workers - 0.5%

Sampling Procedure Used

Data in this section have been derived from the results of a survey of 17,414 establishments in New York State, accounting for slightly more than one-half of the total employment of all business in the state, exclusive of agriculture and the military.

EMPLOYMENT IN TECHNICAL OCCUPATIONS

In 1962 there were 148,684 workers in approximately two hundred technical occupations in New York State, about 2.4 percent of all workers in the state. In comparison, engineers and scientists account for 2.3 percent of the total, whereas skilled craftsmen make up almost 14 percent of the total.

In only thirteen out of some sixty industry groups do 25 percent or more of the establishments employ persons in technical occupations or as engineers or scientists. The proportion exceeds 50 percent only in ordnance and in electrical-machinery manufacturing and in communication.

In limited segments of industry, however, almost all establishments employ workers in technical occupations and/or engineers or scientists. Such employees, for example, are found in 96 percent of all medical and dental laboratories, and in 94 percent of all non-government hospitals, and in all but a few government hospitals. In medical and other health services in New York State, workers in technical occupations account for 9 percent of the total state industrial employment.

About 48 percent of all establishments in the state that employ persons in technical occupations or as engineers or scientists are located in New York City. An additional 11 percent are on Long Island, and 7 percent are in Westchester. Thus, the New York Metropolitan area accounts for 66 percent of all these establishments. The greatest upstate concentration is in Buffalo (8 percent).

TYPES of TECHNICAL OCCUPATION, with SPECIAL REFERENCE
to HEALTH and EDUCATION INDUSTRIES

I. Biological, Medical, Dental, and Related Science Technicians

These constitute the second largest group of technical occupations (electro and mechanical engineering is first). The group numbers about 25,000 (17 percent of the total number of persons in the technical occupations).

The largest sub-group consists of technicians and technologists engaged in medical laboratory testing and analysis. Dental hygienists and dental assistants are the second largest sub-group. Specialists in operating X-ray machines and related equipment also form a sizeable segment. Dental laboratory ceramists and mechanics, therapists, technicians operating electrocardiographs, electro-encephalographs, and other medical equipment, medical assistants in physicians' offices, and medical record librarians are smaller sub-groups.

II. Technical Writing and Illustration Specialists

The total of some 3,000 persons in this group is composed of about 2,000 writers and 1,000 illustrations. Their function is to translate highly technical information into simple factual language and drawings. Most of this group are employed by publishers of books and periodicals.

III. Safety and Sanitation Inspectors

More than 75 percent of the 4,000 persons in this group are employed by government agencies to enforce fire, safety, health laws and codes. The remainder are mainly associated with industrial plant safety and health activities.

IV. Data-Processing Systems Analysis and Programming Specialists

Since the health field is expected to make increasing use of computers and computer processes, this type of technical occupation is included in this section. Although most personnel in this category are usually considered professionals because of their importance, reference will be made to their utilization in the health and education industries. In 1962 some 6,000 persons were employed in the data-processing field.

Employment of Women

Women constituted one-eighth of all employees in technical occupations in New York State in 1962, which is decidedly below the ratio for all occupations combined (one-third for the state as a whole). However, relatively large proportions of the biological, medical, dental, and related technicians and specialists are women. As a matter of fact, this group overshadows all others in its percentage of women: 80 percent of all women employed in all types of technical occupations were in this group in 1962.

The following table shows the industry breakdown for the employment of females in the biological-medical-dental group.

<u>INDUSTRY</u>	<u>% DISTRIBUTION</u>
Private medical services	53.2
Government	16.5
Manufacturing	13.4
Private colleges and schools	7.9
Research laboratories and engineering services	2.7
Transportation, communication, public utilities	1.1
Construction	Negligible
All other	5.2

Unionization

About 17 percent of all workers in technical occupations were specifically covered at the time of the survey by an agreement between a union and an employer. This contrasts with the figure of 30 percent for all workers in the state.

The broadcasting and related studio specialist groups were most fully unionized (77 percent). In contrast, only 3 percent of the biological-medical-dental group was unionized.

VACANCIES

At the time of the 1962 survey, 4,562 vacancies were reported, equal to 3 percent of all persons employed in technical occupations. However, this probably does not reflect all employment opportunities for highly qualified people, since a vacancy was reported only if an employer was actively seeking a qualified technical person at the time of the survey. Biological-

medical-dental technicians accounted for almost 23 percent of all vacancies, the "stand-out" group in this respect. Government agencies had the highest technical occupation vacancy rate of all employers (5.5 percent), with private medical services at 3.6 percent.

The highest vacancy rates were noted in the Binghamton area, and on Long Island. In Binghamton, technical writers and illustrators were in shortest supply; on Long Island, the highest vacancy rates were represented by therapists and dental assistants.

SOURCES of WORKERS

Employers have two methods of obtaining qualified workers in technical occupations. They can upgrade existing employees, or they can recruit workers, hiring them from outside the establishment. Taking data from the survey of all technical occupations, about 57 percent of technical employees were obtained by recruitment. Among the remainder, only a few had organized training either within or without the employer's establishment.

In the biological-medical-dental group, 81.5 percent of the employees were recruited from outside the firm; only 1.2 percent were upgraded with training, and 17.3 percent were upgraded without training. The private medical service industry hired 87 percent of their technical employees from outside the firm, with almost all of the others upgraded without training.

College and Technical Institute Graduates

For this purpose, "college" means a four year or more school; "technical institute" means a one, two, or three year post-high school technical instruction program, including a community college. In 1962 in New York State, it was estimated that 21 percent of the biological-medical-dental group of technical employees were "college" graduates; another 33 percent were "technical school" graduates.

Taking "college" graduates alone, private colleges and schools have the largest proportion by far (47 percent) of such graduates among the persons working for them in technical occupations. Of these "college" graduates working for private colleges and schools, 59 percent are biological or medical technicians and another 23 percent are working as physical science technicians.

About 60 percent of all persons employed in technical occupations in New York State in 1962 had some post-high school technical course work. No firm estimates are available for this parameter, but for the biological-

medical-dental field, the range is from 65 to 70 percent with the mid-point being 68 percent.

EDUCATION AND EXPERIENCE REQUIREMENTS

Virtually, all employers require at least high school graduation as a condition for employment in technical occupations. About half of the technical occupations require some formal post-high school education, and three-fourth of them require some related work experience.

Required and Preferred Education

Of the technical workers in jobs for which post-high school education is required, by far, the largest concentration work for employers whose minimum requirement is graduation from a technical institute or community college--it is required for 21 percent of all technical-level jobs. For 8 percent of all technical workers, the requirement is college graduation.

The requirement of or preference for post-high school education reflects not only a need for more intensive training than can be obtained at the typical high school but also, in some instances, the desire for older, more mature individuals.

In the biological-medical-dental group of technical occupations surveyed, 52 percent of the individuals were employed in firms requiring some post-high school education. This figure is approximately the average for all persons surveyed with the lowest percentage being in the air-way-tower-specialist group, and the highest in the group of mathematics technicians.

Taking the biological-medical-dental group, 18 percent were employed by firms requiring college graduation, and 25 percent in addition to those preferring college graduation. Actually, 21 percent had graduated from college.

Experience Requirements

The kind of work experience that is required in most cases is experience in a type of work that is related to the job under consideration. A general reason for the work-experience requirement is the evidence it affords concerning an applicant's capacity for work and his work habits.

A requirement of some experience as a condition of employment at the minimum acceptable level of educational attainment was reported for about two-thirds of the jobs, covering some 75 percent of all workers in the technical occupations.

For all technical jobs, the average number of years of experience required is 2.3 years. The greatest requirements are those of supervisory grades. Most of the workers in the biological-medical-dental field held positions where no job experience was required prior to employment. If such job experience was a prerequisite to employment, it averaged about one year.

Value of Post-High School Education

A young person looking forward to work in a technical occupation might well ask, why bother to pursue schooling beyond high school if employers on the average equate 1.5 to two years of work experience with post-high school education. By choosing to work, the individual may not only be earning an income, but may be saving the expense of going to school. Certainly this is a factor, but on the other side of the scale are the following considerations:

1. There is no assurance he will find the kind of job providing experience rated co-equal with post-high school education.
2. His chances of climbing the promotional ladder are better with post-high school education. In many technical occupations, such education is more important than work experience insofar as promotion is concerned.
3. The high school graduation requirement may be deceptive, particularly if the prospective employee must first pass a "qualifying" test.
4. When there are several applicants for the same job, the individual with more formal education stands a much better chance.
5. A broad education in science, mathematics, and other basics is less likely to be made obsolete by technological developments than work experience backed up by only a high school education.

Value of High School Technical Curricula

To some extent, the advantages of a good high school technical curriculum are similar to those of post-high school education. There is a substantial number of outstanding technical high schools in New York State offering excellent technical programs. Cities with such institutions include Brooklyn, Buffalo, Schenectady, Utica, Poughkeepsie, and others. In general, graduation from an outstanding technical high school lessens the work experience requirement of many employers.

TESTS AND LICENSES

A. Government License or Permit

A government-agency license, permit, or certificate is required to practice a number of technical occupations. In the health and education sections are the following:

1. Dental hygienists and physical therapists must hold licenses issued by the New York State Department of Education. However, under a grandfather clause, persons who do not qualify for a license but who were employed as physical therapists two years prior to 1950 may obtain a permit from the Education Department that allows them to administer physical therapy under the supervision of a licensed physical therapist or physician.

Dental hygienists and physical therapists in New York State account for almost all of the licenses required in the biological-medical-dental group. The remainder are for the most part X-ray technologists.

2. Persons who test milk and cream (bacterial counts, Babcock and Gerber tests, etc.) must have certificates from the New York State Department of Agriculture and Markets. Technicians requiring such certification are in the physical science, product testing, also safety and sanitation categories.
3. A government license for grading and inspecting farm products is issued by the United States Department of Agriculture and by its New York State counterpart.

B. Professional Accreditation

The cases in which registration or accreditation by a professional society is a condition of employment are all found in the medical field. They include:

1. Medical technologists - MT (ASCP) - are certified by the Registry of Medical Technologists of the American Society of Clinical Pathologists.
2. Inhalation therapists are registered by the American Registry of Inhalation Therapists.
3. Occupational therapists - OTR - are registered by the American Occupational Therapy Association.

4. X-ray technologists - RT (ARXT) - are registered by the American Registry of X-ray Technicians.
5. Physical therapists are registered by the American Registry of Physical Therapists.
6. Medical record librarians - RRL - are registered by the American Association of Medical Record Librarians.
7. Medical record technicians - ART - are registered by the American Association of Medical Record Librarians.

C. Formal Company Tests

These include mainly formal tests of achievement, aptitude, and personality. Although some tests are prepared by the company, there is a wide variety of formal intelligence tests, personality tests, achievement tests, tests for mechanical aptitude, vocational interests, and vocational skills. Some employers have prospective employees tested by General Aptitude Test Battery (GATB), given by the New York State Employment Service.

D. Education and Training Requirements by Subject-Knowledge Needs in Technical Occupations in the Fields of Health and Education

1. Dental hygienists: oral anatomy, bacteriology, general chemistry, dental science, histology, pathology, nutrition, oral hygiene, pharmacology
2. Occupational and Recreational therapists: anatomy, creative arts, health sciences, neurology, occupational skills, occupational therapy
3. Physical therapists: anatomy, general biology, neurology, physiology, psychology, general physics, basic electricity, physical therapy
4. X-Ray technicians: elementary anatomy, physiology, general physics, X-ray technology
5. Biological and Medical Laboratory technicians: general biology, bacteriology, general chemistry, inorganic chemistry, quantitative and qualitative analysis, medical laboratory technology.
6. General Medical Assistants, Physicians' office (Excluding Nurses and Secretaries): medical office procedures and practices, medical secretarial duties

7. Medical Record librarians: anatomy, general biology, physiology, medical jurisprudence, medical record science and procedures.
8. EEG technicians: anatomy of the brain, EEG technology
9. Inhalation Therapy technicians: inhalation therapy technology
10. ECG technicians: anatomy of the heart, ECG technology
11. Dental Laboratory technicians: oral anatomy, dental laboratory technology
12. Dental Assistants: dental assisting, bookkeeping, typing
13. Mathematics technicians: trigonometry, calculus, general physics, orientation in mechanical technology
14. Physics, Radiation, and Nuclear technicians: advanced algebra, general chemistry, general physics, technical drawing
15. Sanitation Inspectors: general chemistry, principles of sanitation and public health, government laws and regulations on sanitation and public health
16. Food and Agricultural Products technicians: general chemistry

CONTENT and REQUIREMENTS of INDIVIDUAL TECHNICAL OCCUPATIONS

This sub-section on technical manpower in New York State in the fields of health and education concerns to a large extent descriptions of the job content of the various technical occupations, not as given by the respective educational institutions, but as required by employers based upon their written job descriptions. The following descriptions attempt to reflect all the significant responsibilities and functions performed in jobs classified under the title. Because they are a composite, the job responsibilities and functions may well go beyond the content of a particular job as it exists in a particular establishment. Although some of the job descriptions may be well known to the reader, they are included for the sake of completeness.

BIOLOGICAL, MEDICAL, DENTAL, and RELATED TECHNICIANS,
TECHNOLOGISTS, and SPECIALISTS

The survey made by the New York State Department of Labor, Division of Research and Statistics, in cooperation with the State Education Department, covered all types of technical occupations in this field, ranging from operating room technician, central supply technician, and dental assistant, which require comparatively little technical training, to jobs such as medical record librarian and physical therapist, which are generally considered to be above the technician level. It also included dental mechanics, who are sometimes classified as craftsmen.

Some of the 9,898 technical workers employed in biological and medical laboratories in New York State in 1962 are technologists, who typically have had four years of college training and received a bachelor's degree, or else have had three years of college and one or more years at a hospital school of technology. Others are technicians, some with one to two years of training in a four year college, a community college, a hospital school, or a commercial school of medical technology, and some with a high school education.

Large institutions often hire biological and medical laboratory technicians and technologists for a particular specialty field. Smaller establishments generally employ "general" workers who are called upon to work in any field, as the need arises.

In some instances, the newly-hired workers are assigned to general duties for performing routine procedures. After they gain experience, they are advanced to work in a special field.

The largest number of technical jobs surveyed--41 percent-- were located in voluntary, proprietary, or government hospitals. An additional 43 percent

were employed in various other medical and health services, primarily in offices of physicians and dentists, and in medical and dental laboratories. About 10 percent were employed by schools and colleges. Some of the latter were engaged in research; some were technical assistants to instructors of laboratory subjects; and some, employed by medical schools, were engaged in clinical work in the school-connected hospital. The remaining 6 percent worked for non-profit educational and research organizations, in chemical and other plants, or in medical units operated by business establishments to provide health care for their employees.

Traditionally, women have filled the occupations in this group, except for the jobs of dental technicians and agricultural technicians. More recently, the largest influx of men has been into the X-ray field with smaller numbers going into physical therapy and medical technology. Many of the male workers going into these areas are members of minority groups.

Almost two technicians, technologists, and specialists out of every five work under the immediate supervision of other technical workers; 25 percent work under laboratory or research scientists (pathologists, radiologists, chemists, etc.); and 38 percent have "other" types of supervision.

Functions

Medical laboratory technicians and technologists perform the wide variety of laboratory tests and procedures that are used in the detection, diagnosis, and treatment of diseases, and in medical research. A separate description is given below for each of the main specialties in the clinical laboratory -- bacteriology (microbiology), bio-chemistry, histology (tissue), cytology, hematology, blood bank, and serology.

Essentially, the same basic training, technical skills, and special aptitudes are required for all branches of the clinical laboratory group, with the possible exceptions of histology and cytology. Manual dexterity and eye-hand coordination, for handling precision instruments and other equipment and for working with minute amounts of material, are important qualities in clinical laboratory technicians. Color discrimination is becoming less important since the trend in laboratories now is to make colorimetric determinations with photoelectric equipment rather than by visual comparisons.

Because these technicians and technologists frequently work directly with patients who may be ill or under stress, and because errors may have serious consequences, certain personality and temperament traits are important: these people should be able to work under pressure, and should have work habits that are precise in every procedure; they should have a sense of responsibility to the patient and an interest in working with people. For technicians and technologists engaged in research, an interest in science and in resourcefulness are essential.

The basic equipment for the group as a whole includes such precision instruments as microscopes, centrifuges, electronic counters, photoelectric colorimetric apparatus, automatic analyzers, autoclaves, balances, microtomes, etc.

A. Bacteriology Technicians and Technologists

These individuals cultivate, isolate, and help identify bacteria and other micro-organisms in body fluids, exudates, skin scrapings, autopsy, and surgical specimens, and other materials. They also determine the efficacy of antibiotics against various micro-organisms.

Specifically, they do as part of their functions the following:

1. Receive patient specimens such as blood, body fluids, tissue, excretions, etc., or collect directly swabs and smears from patients. They may take blood directly from patient by venipuncture.
2. Perform routine clerical duties necessary for proper labeling of specimens and recording of essential data.
3. Set up apparatus and equipment required for various procedures.
4. Prepare cultures from specimens, selecting appropriate media and following standard procedures.
5. Identify bacteria in cultures by microscopic examination and by determination of culture requirements and reaction to media.
6. Identify pathological organisms by microscopic examination of standard smears.
7. Prepare various culture media, stains, and re-agents.
8. Perform antibiotic sensitivity tests.
9. Make agglutination, precipitation, and other special tests such as antistreptolysin, heterophile, etc.
10. May inoculate animals with materials derived from patients to observe and identify disease produced in animals.
11. Maintenance of equipment.
12. Cultivate and identify fungi and viruses.

The technical skills desired of this specialty group include:

1. Skill in methods and procedures of collecting smears and other body specimens; in preparing cultures; in typing, grouping, and identifying micro-organisms
2. Technical proficiency in the use of the microscope and, in research, the electronic microscope and the fluorescent microscope
3. Proficiency in the use of other microbiology laboratory instruments and equipment

B. Biochemistry Technicians and Technologists

These individuals perform chemical analyses and tests of body fluids, exudates, and other materials to assist in the diagnosis and treatment of disease. Most tests are concerned with the analysis of blood and urine, but other materials such as spinal fluid, feces, and gastric contents also are analyzed. Analytic methods are generally divided into four basic groups: gravimetric, volumetric (titrimetric), gasometric (volumetric and manometric), and colorimetric (visual and photoelectric).

Newer methods have been introduced in recent years associated with the development of automated or electronic equipment. These include flame photometry, fluorimetric, electrophoretic, potentiometric, and chronographic.

A profound effect on methods and procedures in clinical chemistry has resulted from the introduction of the automatic analyzer. Attachments have been developed to increase the number of types of tests than can be performed and to increase the conversions that may be made to readouts.

The essential functions performed by biochemistry technicians and technologists include the following:

1. Take blood from patient by venipuncture.
2. Handle routine clerical duties re labeling of specimens, etc.
3. Set up apparatus and equipment to perform tests.
4. Monitor instrumentation used and make minor repairs.
5. Prepare re-agents.

6. Perform tests (complete analysis, in accordance with prescribed procedures), and record and report results.
7. In institutions having automatic analyzers, prepare biological fluid by centrifuging; subject specimen to analyzer; calculate results.

Technical skills necessary for these personnel include:

1. Skill in drawing blood by venipuncture.
2. Proficiency in use of necessary instruments such as automatic analyzer, balances, blood gas apparatus, electrophoresis apparatus, microscope, PH meter, potentiometer, respirometer, etc.

C. Histology Technicians

These personnel prepare tissue specimens for microscopic examination. They may also process autopsy specimens. As part of their functions, they:

1. Receive tissue specimens, label them, and record essential data.
2. Set up necessary apparatus and equipment for various procedures.
3. Routinely prepare specimens such as dehydration, fix, and infiltrate. If an autotechnicon is used, be knowledgeable concerning its use and maintenance.
4. Decalcify bones.
5. Use the microtome, stain sections, and mount on slides.
6. May prepare specimens by frozen section.
7. May prepare ophthalmological and bone sections by celloiden or other special methods.
8. May process bone marrow.
9. Maintain laboratory equipment, including sharpening of microtome blades.
10. In the absence of a cytotechnologist, process pap smears.

Technical skills required include proficiency in the use of equipment such as the autotechnicon, frozen section apparatus, microscope, microscope camera, polarizing screens, etc.

D. Cytotechnology Technicians and Cytotechnologists

These individuals prepare and examine microscopically body cell smears for the detection of cancer. Originally concerned primarily with cell diagnosis for uterine cancer, more recently these personnel have applied the techniques of cytotechnology to the respiratory tract, urinary tract, digestive system, and other body systems.

The essential functions of cytotechnology personnel include:

1. Prepare smears, and centrifuge fluid specimens.
2. Prepare slides for microscopic examination.
3. Prepare filter discs from fluids, using millipore apparatus.
4. Microscopically examine slides for presence of abnormal cells, and mark areas of detected abnormal cells for evaluation by professional personnel.
5. Prepare reports and, if findings of abnormality are positive, check files for previous slides and records for comparison.

The technical skills required are:

1. Proficiency in use of necessary instrumentation such as centrifuge, microscope, millipore filtration apparatus, cytoviewer, and cytoanalyzer
2. Meticulousness in cleanliness of all equipment

E. Hematology Technicians and Technologists

These people examine the cellular constituents of blood, their number and concentration, the relative distribution of various types of cells, and the presence of abnormal cells.

Among their functions are:

1. Receive patient specimens or collect venous or capillary blood directly from the patient.
2. Set up necessary apparatus and prepare materials used in examining specimens.
3. Perform all steps of a variety of blood tests and morphological studies such as complete blood counts, leukocyte differentials, platelet counts, hemoglobin estimations, sedimentation rate, coagulation and bleeding times, clot retraction time, reticulocyte counts, sickle cell preparations, L.E. preparations, fragility tests, etc.

4. Calculate various indices such as color index, volume index, hematocrits, mean corpuscular volume, etc.
5. Make spinal fluid counts.
6. Prepare smears from pleural and abdominal fluids.
7. May examine slides of bone marrow specimens.
8. Prepare and examine blood slides for malarial parasites.

In some institutions, hematology technicians rotate with serology and/or blood bank.

The technical skills required are:

1. Proficiency in venipuncture and fingerstick.
2. Proficiency in use of necessary instrumentation such as microscope, autocytometer, blood cell calculator, hemacytometer, centrifuge, hematocrit centrifuge, electronic micro-hematocrit, colorimeter, etc.

F. Blood Bank Technicians and Technologists

These personnel perform necessary procedures and tests for collecting, banking, and dispensing blood for transfusion, and make tests to ensure compatibility of blood donor and recipient. Their functions include:

1. Make preliminary examination of pulse, temperature, blood pressure, and medical history of blood donor; make hemoglobin determination; and perform serologic tests on donor's blood.
2. Perform tests to determine blood group, Rh factor, Du factor, etc. on blood from donor and recipient, and on cord blood.
3. Crossmatch blood.
4. Collect blood from donor by venipuncture.
5. Label pilot tubes and blood container.
6. Perform coombs tests, prothrombin tests, tests for typical antibodies, and antibody titers.

7. Process whole blood by centrifuging to separate plasma and cells.
8. Test plasma for bacteria by culture and microscopic examination.
9. Assume responsibility for blood refrigerator.
10. Prepare records of donor and recipient, transfusion reactions, disposition of plasma, etc.
11. At higher levels, they may be responsible for recommending specific blood for a specific patient.

The technical skills for this job include proficiency in drawing blood by venipuncture, and in the use of equipment such as microscope, centrifuge, water baths, blood collection apparatus, transfusion equipment, etc.

G. Serology Technicians and Technologists

They perform serodiagnostic tests for syphilis and other diseases, prepare sera and vaccines used for diagnosis and treatment of disease and used to confer immunity against infectious diseases. Their functions include:

1. Collect venous blood from patients.
2. Perform standard tests for syphilis which are of three types: A) flocculation tests, B) complement fixation tests, and c) treponemal tests. Among the tests are Boerner-Jones-Lukens, Eagle, Hinton, Kohn, Kline, Kolmer, Mazzini, Rein-Bossak, Reiter protein, and VDRL.
3. Performing serodiagnostic tests for diseases other than syphilis such as widal reaction for typhoid and paratyphoid, agglutination tests for brucellosis and tularemia, Weil-Felix reaction in Rickettsial diseases, cold agglutinins, serologic tests for rheumatoid arthritis, colloidal gold tests, etc.
4. Prepare sera by injecting antigens of immune agents into laboratory animals, bleeding animals, and obtaining sera.
5. Prepare autogenous and other vaccines.
6. May perform immunology tests.
7. May perform pregnancy tests.

The technical skills required include proficiency in drawing blood by venipuncture and in the use of instruments and equipment such as serological water baths, rotator, shaking machine, centrifuge, centrifuge tachometer, automatic pipetting machine, microscope, etc.

H. General Medical Assistants, Physicians' Office (Other than Nurse or Secretary)

Medical assistants are persons who do both technical and clerical work in physicians' offices. Employees in such offices who spend all or almost all of their time as laboratory or X-ray technicians are classified under these specialties and not as general medical assistants. Employees spending two-thirds of their time on office work, and registered nurses performing nursing duties are excluded from this category.

Medical assistants may perform some or all of the following functions:

1. Prepare patients for examination; take pulse, temperature, respiration, etc.
2. Do medical laboratory tests such as blood counts and urines, blood chemistries, gastric analyses, pregnancy tests, basal metabolisms, etc.
3. Take and develop electrocardiograms; operate X-ray equipment and develop films.
4. Manage office and keep records.
5. Maintain and sterilize instruments, keep equipment ready for use, etc.

Required technical skills include the ability to use equipment such as basal metabolic machine, ECG, X-ray machine, microscope, sterilizer, typewriter, etc.

I. X-Ray Technicians and Radioisotope Technicians

X-ray technicians operate radiant-energy equipment for diagnostic and therapeutic purposes; they also assist radiologists in the handling of radium, radioisotopes, and other radioactive materials. They may perform some or all of the following functions:

1. Operate X-ray equipment for making diagnostic films, and assist in performing examinations such as bronchography, cholangiography, GI series, chest laminography, pneumoarthrography, kymography, angiography, etc.
2. Prepare and position patients for correct radiologic exposure.

3. Operate therapeutic X-ray equipment and observe patients during treatment; watch control panels for current fluctuations.
4. Maintain photofluographic equipment in a mobile unit for mass surveys.
5. Develop and process X-ray film.
6. Prepare opaque media.
7. Keep records on individual patients; compile daily report of radiation or radioisotopes for each patient.

In addition, radioisotope technicians may be required to dilute and assay radioactive material for injection, and calculate the amount of radioactivity in the solution; assist in administering radioactive materials to the patient and carry out various measurements with complex electronic instruments; obtain blood specimens and perform analyses of blood which has been treated with radioisotopes.

The technical skills which are essential for these individuals include:

1. Ability to operate and use all diagnostic, superficial therapy, and deep therapy equipment, image intensifier, cobalt apparatus, Geiger counter, scintillator, isotope scanner, X-omat processing units, timers, etc.
2. Ability to use accessories such as X-ray tubes of various types, cassettes, sand bags, bolus bags, lead shields, barium, etc.

J. Electrocardiograph Technicians

These individuals take ECG's for use in the diagnosis of cardiac conditions. In small establishments, technicians who take ECG's may also take X-rays, EEG's, basal metabolisms, etc.

The essential functions of ECG technicians are to:

1. Operate ECG or other specialized amplification equipment; prepare patient for test; apply electrodes; calibrate recording equipment; move electrodes over thorax to obtain various leads; observe patient and apparatus to prevent occurrence of artifacts.
2. Assist with difficult or special tests as during surgery, esophageal lead tests, master two-step tests, carotid and sinus stimulation tests, phonocardiograms, ballistocardiograms, etc.

3. Prepare filmed recordings and mount them for physician's interpretation.
4. Maintain equipment.
5. Duplicate tracings on duplicating machine.
6. File tracings.
7. May also be required to take dictation and type.

The technical skills required are to use ECG apparatus, polygraphs, cardioscopes, ballistocardiographs, vectorcardiographs, pulse recorders, electromanometers, band pass filters, etc.

K. Electroencephalograph Technicians

These technicians measure with an electroencephalograph impulse frequency and electrical potential between various areas of the brain for diagnostic purposes. They may perform some or all of the following functions:

1. Operate EEG equipment; calibrate equipment so that all channels are set to record symmetrically.
2. Prepare patient for test; attach electrodes and remove them afterwards; rotate switches on machine for recording various channels; observe patient and apparatus to prevent artifacts; observe and record clinical symptoms of patient during test (seizures, etc.); mark on tracings, time of occurrence of all abnormalities; prepare tracings for physician's interpretation.
3. Work as member of team in performing special EEG tests such as activated studies requiring the use of controlled stimuli. In such instances, the technician aids with audio-photo stimulation to evoke abnormal patterns; helps with sleep-producing stimuli to obtain complete wake-sleep tracings; aids with metrazol, photometrazol, and other drug studies, and in subjecting patients to hyperventilation.
4. Assist with electrocortigraphy, including special procedures to obtain tracings during brain surgery.
5. Assist with electroretinography under the direction of an ophthalmologist.
6. Assist in research studies.

Technical skills required include ability to use all necessary equipment such as the electroencephalograph, photic stimulator, cortical electrodes, fetal EEG electrodes, voltmeter, ammeter, oscilloscope, surface needles, and tools such as the soldering iron.

L. Inhalation Therapy Technicians

Inhalation therapists administer oxygen and other designated gases and aerosols in order to restore to normal a pathophysiologic alteration of gas exchange in the cardiopulmonary system, or to attain adequate oxygenation as well as proper elimination of carbon dioxide, either for diagnostic or therapeutic purposes.

The functions of these technicians consist of:

1. Administration to patient of medicinal gases by catheter, tent, hoods, etc.
2. Application of expiratory pressure masks, respirators, and pressure devices for IPPB, resuscitation, etc.
3. Administration of aerosol therapy by various methods.
4. Pulmonary function evaluations.
5. Maintaining and repairing equipment.

Technical skills required include the use of such equipment as oxygen tents, oxygen tanks, face masks, tracheotomy masks, reducing valves, flowmeters, humidifiers, aerosol apparatus, nasal catheters and cannulae, suction equipment, pressure breaking apparatus, anesthetizing apparatus, exsufflators, airways, Y-tubes, incubators, croupettes, and central oxygen manifolds.

M. Other Medical Technicians

This group consists of six types of technicians:

1. Central supply technicians are responsible for the distribution of supplies in a hospital (linens, drugs, instruments, etc.) including sterilizing, preparing, processing, and packaging; checking on electrical medical equipment; and keeping an inventory of supplies.
2. Orthopedic technicians do plaster cast and traction work for patients; make molds for braces; assist the surgeon in application of casts and traction; and maintaining supplies and equipment for these purposes.

3. Cardiopulmonary technicians mainly perform specialized analyses of blood and gas samples from patients having pulmonary function tests and cardiac catheterizations; determine tensions of CO₂ and O₂ in arterial blood and other fluids; do spirometry; help set up and calibrate instruments; and assist during catheterization procedures.
4. Operating room technicians perform and/or assist in carrying out specifically detailed duties before, during, and after surgery, being careful to observe aseptic techniques. They may prepare the O.R. with the necessary sterile instrument table; pass instruments and other supplies to the surgeon during the operation; maintain supply of sponges and take sponge count; and clean and sterilize equipment after surgery.
5. Orthoptic technicians teach strabismic (cross-eyed) patients, usually children, to use their eyes together correctly and comfortably. They may perform orthoptic and pleoptic evaluation, diagnosis, and treatment of patients having real or suspected extraocular muscle anomalies; teach patient orthoptic theory and practical application; prepare reference classifications of strabismic patients, etc.
6. Medical illustrators illustrate graphically in black-and-white or in color medical and surgical procedures and findings, surgical and technical instruments, for publications, exhibits, etc. They may make plaster and wax castings; take photographs, construct scientific exhibits; lay out charts and tables; etc.

THERAPISTS

Therapists are engaged in the physical and mental rehabilitation of patients. They are included in the group of technical manpower by the New York State Department of Labor even though they are generally considered to be above the technician level.

A particular course of therapy, usually prescribed by a physician, integrates a specialized knowledge with the whole rehabilitation plan for the patient. The therapist is usually a member of the rehabilitation team, which is directed by a physician. It may include one or more nurses, a clinical social worker, a psychologist, a vocational counselor, and/or other specialists.

Physical therapists are the most numerous. There are also occupational therapists (the second largest group), and recreational, manual arts, corrective, and speech-and-hearing therapists.

These therapists differ somewhat in their functions and purposes, as well as in their activities, devices and procedures used, and therefore in the knowledge they require.

A. Physical Therapists

In aiding patients with an injury or disease involving muscles, joints, or bones, physical therapists use various physical agents. Their responsibilities include diagnostic testing in addition to treatment and prevention. Their rehabilitation activities assist the patient on the path to physical independence by developing strength and dexterity; in some cases they include training in self-care.

Treatments and tests may be given by these therapists in hospitals to out- or in-patients, in physicians' offices, in health centers, and in the patient's home. Some physical therapists treat all types of patients, while others specialize in working with children, with amputees, with paraplegics, or with victims of cerebral palsy, arthritis, muscular dystrophy, or other diseases.

Functions of physical therapists include:

1. Administration of thermotherapy (infra-red, paraffin baths, etc.)
2. Administration of ultraviolet radiation
3. Administration of electrotherapy and diagnosis (diathermy, microwave, ultrasound, electrical stimulation, chronaxie, strength duration curve, medical galvanism, ion transfer, etc.)
4. Administration of hydrotherapy (whirlpool, contrast or thermal baths, hot or cold packs, Hubbard tank, sprays, hydrogalvanic baths, therapeutic pool, brine tank, etc.)
5. Administration of massage
6. Administration of therapeutic exercises (muscle re-education, progressive resistance, gait training, relaxation, breathing, posture, facilitation, coordination, A.D.L., etc.)
7. Performance of tests and measurements (manual muscle and nerve tests; electrodiagnostic, skin temperature and resistance tests; posture, oscillometric, and reflex heat tests; strength, volumetric, and daily activities tests; chest girth; and measurement of joint range of motion)
8. Administration of prosthetic training and supportive therapy (compression bandaging of stumps of limbs of amputees; application of slings, splints, braces, and other prosthetic or orthotic appliances)

9. Teaching patients how to perform exercises and use and care of braces, crutches, and artificial limbs.
10. Demonstration to members of patients' families how to continue treatments at home

Technical skills include the ability to use the various types of equipment -- electrical, mechanical, gymnastic, and similar devices. Physical therapists usually require considerable physical stamina.

B. Occupational, Recreational, and Other Therapists

Occupational therapists assist in the treatment and rehabilitation of patients in order to restore them to the fullest mental and physical capacity compatible with their abilities and disabilities.

Working under the direction of physicians, their functions may include plan, deliver, and administer treatment by utilizing educational, vocational, and recreational activities and activities of daily living designed to meet the specific needs of the patient.

To achieve this, occupational therapists utilize various activities, such as the teaching of manual and creative arts (arts, ceramics, book-binding, leather working, printing, woodworking, and also business and industrial skills as typing, operating business machines, etc.).

Recreational therapists may perform some of the functions of the occupational therapist, but they are more usually engaged in helping to plan, organize, and direct recreational activities to provide the patient with physical and mental stimulation, help them overcome specific disabilities, and provide a socially normal atmosphere. These therapists provide and participate with patients in activities such as games (checkers, dominoes, card games, etc.), sports (badminton, ping pong, shuffleboard, etc.), crafts, dances, dramatics, and music.

MEDICAL RECORD LIBRARIANS

Medical record librarians are responsible for the preparation, maintenance, and analysis of records on diseases and treatments of patients admitted to hospitals and other medical facilities.

A small institution may employ only one medical record librarian, performing her duties alone with or without some clerical assistance. Larger institutions may have a medical record department with numerous librarians, code clerks, typists, etc.

The medical record librarian category includes both record technicians, a relatively new occupation, and record librarians, who are usually considered professional workers rather than technicians. Medical record technicians do technical medical record work, but have less responsibility than medical record librarians, and perform no management functions.

Medical record librarians may be engaged in some or all of the following functions:

1. Maintain files of original clinical records of patients.
2. In cooperation with the hospital medical staff, determine (A) what continuous secondary records should be kept, such as patient's name index, disease index, operations index, tumor follow-up registry, etc., and (B) what special indexes should be developed for which there is a temporary need.
3. Be responsible for the coding, indexing, and cross-referencing of medical records in accordance with standardized nomenclature and classification systems.
4. Make decisions on how to code or cross-reference new diagnostic terms, treatments, drugs, and therapies, and make certain that interpretations are in keeping with common usage.
5. Review and analyze clinical records to determine if they are complete, if the terminology used by the physician conforms to accepted nomenclature, and if the contents appear to be accurate and internally consistent. Call any apparent omissions and inconsistencies to the attention of the physician, who makes the final determination.
6. Prepare periodic reports on vital statistics, hospital bed utilization, etc. for the Guidance of Administrators. Have responsibility for handling birth and death certificates.
7. Prepare statistical reports on types of cases treated, etc., which are needed by the medical and nursing staffs and others to evaluate the quality of medical and nursing care.
8. Abstract data from case histories for research, insurance, medicolegal purposes, and for other special reports. Assist the medical and nursing staffs in research involving clinical records.
9. Be responsible for the release of information on patient's records to the hospital medical staff and accounting office, outside physicians, insurance companies, lawyers, and other hospitals and agencies in accordance with hospital policies and statutes on privileged communications. Represent the hospital in court involving the subpoena of clinical records.

10. Participate in staff meetings and serve on committees, such as the medical record committee.
11. Related duties may include aiding in the design of new methods of clinical record preservation, preparing old records for microfilming, keeping abreast of the latest medical techniques, orienting incoming house staff on medical record room procedures, etc.

The technical skills required by medical record librarians include:

1. Ability to understand medical terminology, procedures, and diagnoses, and to classify and analyze medical record data.
2. Ability to see possible legal implications of record contents, and to exercise discretion in the release of information.
3. Ability to operate microfilm projection equipment.
4. Ability to type and use other common office equipment (more important for the medical record technician than the librarian).

DENTAL TECHNICIANS

Dental technicians typically construct or repair full or partial dentures, bridges, crowns, inlays, and prosthetic appliances. Most of them are employed in dental laboratories. They do not generally deal directly with patients, but receive prescriptions from dentists, often accompanied by impressions of patients' mouths.

In larger establishments, the dental technician may work on only one process. Those with limited experience may be plastermen, who mix and pour plaster into casts and molds. Others may be gold men who prepare partial plates, steel men who work with non-precious metals instead of with gold alloys, ceramists who put porcelain covers on the gold bases, denture men who work with acrylic plastics and may be concerned only with full sets of teeth. In some establishments, specialization is by process, such as casing or polishing.

Dental technicians may perform some or all of these functions:

1. Do duplication in connection with rugae reproduction, refractory casts used in casting metal dental appliances, or other processes.
2. Cast metals, such as gold alloys or cobalt-chromium alloys, and process metal framework such as bars, clasps, rests, space retainers, bite raisers, etc.
3. Block out master casts for partial dentures.

4. Mount models, casts, and process dentures on articulator.
5. Set up teeth by selecting those of proper shade, size, and shape to achieve proper articulation and bite, and attach them to dentures.
6. Process acrylic dentures, bridges, and crowns, including carving the wax, investing, casting, flasking, packing, curing, fitting, finishing, and polishing.
7. Make veneer porcelain crowns, inlays, facings, and teeth, including firing and glazing.
8. Polish dentures and other prosthetic appliances with abrasive and polishing materials such as pumice, tripoli, rouge, tin oxide, cuttle fish, garnet, silicon carbide, etc.
9. Design, fabricate, or repair special prosthetic appliances, such as obturators, implants to restore portions of mandibles, splints, and protective devices.

Dental technicians may require such technical skills as:

1. High degree of manual dexterity and motor coordination to handle and manipulate tools, equipment, dentures, etc. Ability to work to close tolerances and to read and follow detailed specifications.
2. Visual acuity and spatial and form perception. Good color perception to match teeth.
3. Ability and judgment in mixing, molding, and heating materials such as wax, plaster, gold, chrome, silver, platinum, acrylic resins, and porcelain. Skill in carving wax teeth.

DENTAL HYGIENISTS

Dental hygienists contribute to oral health by helping to prevent tooth decay and promoting better mouth care. Most dental hygienists are employed in private dentists' offices.

A dental hygienist is concerned with the following functions:

1. Giving dental prophylactic treatment, which includes scaling calcareous deposits, accretions, and stains from natural and restored surfaces of teeth; mixing cleansing compounds and polishing teeth; charting cavities and recording irritations and infections for final diagnosis by the dentist; advising

patients on proper diet and home care of teeth.

2. Taking caries-preventive measures such as applying fluoride solution to children's teeth.
3. Under the supervision of the dentist, treating abnormal gum conditions by the administration of medicaments.
4. Teaching principles of dental hygiene or promoting dental health through educational activities in schools, clinics, and institutions.

Dental hygienists require technical skills such as:

1. High degree of finger dexterity and eye-hand coordination to manipulate dental instruments within the confines of the mouth.
2. Ability to use tools and instruments such as dental scalers, mouth mirrors, air syringes, brushes, rubber cups, blow-back guns, dampen dishes, curettes, post-polisher explorers, dental mixing instruments, dental spatula, and mixing slab.

DENTAL ASSISTANTS

Dental assistants are persons employed in dental offices who do some of the technical work in combination with office work. They may perform one or more of the following functions:

1. Assist dentist at chairside during examination by anticipating dentist's needs for particular instruments or materials; prepare syringe for administration of local anesthetic; determine pulse, respiration, facial coloration, and pupillary reflex of patient; operate suction equipment; mix amalgam, cements, silicates, and other materials.
2. Operate X-ray machine and develop and mount films.
3. May assist dentist in prosthetic work by mixing impression material; making artificial stone models from impressions; assisting in construction and repair of dentures, inlays, bridges, or crowns according to dentist's prescription.
4. Do office management and record keeping.
5. Prepare and sterilize instruments.

Dental assistants need technical skills such as:

1. Ability to operate X-ray machine and develop films.
2. Ability to operate common office machines.
3. Familiarity with equipment and tools, such as autoclave and sterilizer; centrifugal casting machine; film illuminator, etc.

TECHNICAL WRITING AND ILLUSTRATION SPECIALISTS

In 1962 there were 3,034 technical writing and illustration specialists in New York State. Slightly more than half of these were writers and editors, 8 percent were specification writers, and most of the remainder were illustrators. Most of this group was employed in the manufacturing industries, especially in the production of books and periodicals, although a few were based in colleges and schools.

Technical writers and editors present technical information in a simple, clear, and factual manner so that it can be readily understood by readers having little or no technical background. Most of these individuals specialize in a particular subject matter field. Their functions include:

1. To compile, write, rewrite, or edit technical material, keeping in mind such critical factors as accuracy, adequacy, consistency, spelling, punctuation, grammar, and format; and to be certain that the level of concepts, expression, and vocabulary is appropriate to the audience to which the written material is directed.
2. To obtain the information for their write-ups from (A) observing operations, processes, tests, and procedures; (B) interviewing professionals concerned with the subject; (C) interpreting illustrations, etc.; (D) becoming familiar with the professional literature on the subject in question.

Technical illustrators lay out and execute technical illustrations. Generally, they specialize. Their functions include the preparation of technical and scientific illustrations for reproduction in manuals, booklets, filmstrips, exhibits, etc.; preparation of statistical charts, graphs and tables, etc.

In both occupations, it is important that the individuals have knowledge of the educational level of their audience.

SANITATION INSPECTORS

The great majority of sanitation inspectors are employed by state or local governments, although some work for insurance carriers or manufacturing establishments. About half of them are supervised by inspectors or specialists of a higher grade. In 1962 there were approximately 1,800 sanitation inspectors in New York State, almost half employed by the city of New York.

Most sanitation inspection is for the purpose of enforcing compliance with public health and sanitation laws, regulations, and codes. The group includes general sanitation inspectors, air pollution inspectors, water supply inspectors, dairy and farm inspectors (many of the general sanitation inspectors also do work in this latter area), and inspectors of eating places, hotels, and motels. Miscellaneous inspectors include:

- A. State inspectors of food and milk products, livestock feeds, and fertilizers.
- B. Federal food and drug inspectors.
- C. State surplus food distribution inspectors.
- D. State inspectors whose primary responsibility is to make certain that certain requirements are observed in preparing and handling kosher foods.
- E. State inspectors who enforce the sanitary code with respect to the practice of embalming and funeral direction.

General Sanitation Inspectors

These inspectors are concerned with improving food, drug, and environmental sanitation, and with enforcing laws, regulations, and codes in respect to these matters. Individuals in this category function to inspect a wide variety of establishments and installations, including:

1. Food and drug establishments engaged in the manufacture and distribution of these products, dairy farms, milk pasteurizing and distribution centers, warehouses, slaughterhouses, etc.
2. Multiple dwellings, institutions, schools, day camps, nurseries, swimming pools, bathing beaches, etc. for inspection for defective plumbing, inadequate water supply, overflowing cesspools, sewer defects, sufficiency of heat, condition of gas-heating equipment, insect or rodent infestation, or noxious odors.
3. X-ray fluoroscopic, and other installations to safeguard against radiation hazards.
4. Premises of purveyors of inhalation therapy and exterminating and fumigating equipment.
5. Freight cars, houses, lofts, and boats that have been fumigated.
6. May instruct manufacturers, processors, purveyors, and food handlers in the principles of sanitary operation; investigate outbreaks of food poisoning and complaints concerning unsanitary

conditions and impure food and water.

Air Pollution Inspectors

These inspectors are employed by large cities to obtain compliance with legislation designed to reduce or eliminate conditions contributing to air pollution. Their functions include the investigation of complaints of smoke, cinders, fly-ash, coal gas fumes, odors, and other undesirable emissions into the atmosphere; inspect installations of equipment capable of emitting pollutants into the air for conformance to specifications and check on the operation of their combustion chambers; inspect coalyards, docks, and other unloading areas, and marine craft and similar equipment for conditions contributing to air pollution; collect samples to determine fuel characteristics, etc.

Water Supply Inspectors

These personnel are usually local government employees and are responsible for maintaining the purity of water supplies, and for regulating the metering, sale, and use of water. They perform some or all of the following functions:

1. Inspect sanitary features on or adjacent to the watershed: take water and sewage samples from reservoirs, streams, gate houses, and sewage disposal plants; inspect garbage disposal and incinerator sites of communities in the watershed; check to see that no sanitary nuisances are committed by the public.
2. Inspect water facilities at the point of use: read and test water meters; inspect for possible hazards within a structure; investigate complaints of insufficient supply, poor pressure, piping noises, water hammer, etc.; examine and test roof tanks for waste and overflow; inspect and pass on work done by plumbers to ensure compliance with water supply regulations; inspect installations of commercial refrigeration and air-conditioning systems, heat exchangers, water-cooling towers, evaporative condensers, etc. They may also test for water purity and chlorine content.

Dairy and Farm Inspectors

These persons are usually employed by government agencies or private industry to inspect dairy products, dairy farms, milk-receiving stations, and milk pasteurizing plants. Their functions include many things.

1. Sampling and testing producers' milk delivered to milk plants to determine accuracy of plant tests; testing milk and cream for butterfat content and adulteration; inspecting dairy product manufacturing and storage plants for sanitation; checking for misrepresentation in labeling, advertising, use of substitutes, etc.; checking complaints of short weights.
2. Inspection of dairy farms for sanitary practices; milk cooling practices; cleanliness of cattle and stables; water supply and sewage facilities.
3. Complete inspection of milk processing plants.

In general, sanitation inspectors must have a thorough knowledge of the principles of sanitation and public health; of government laws, regulations, and codes; and of general chemistry. Special sanitation inspectors must have knowledge of subject matter specialized in their respective fields.

At least 25 percent of sanitation inspector positions require formal education beyond high school, and almost 10 percent of the jobs require a college education.

Almost all sanitation inspectors are required to take a test or obtain a license in order to qualify for a job. Licensing is required in New York State for all inspections who make bacterial counts on milk and cream.

DATA PROCESSING SYSTEMS ANALYSIS AND PROGRAMMING SPECIALS

In 1962, slightly over 6,100 individuals were engaged in this type of occupation. About one-third were systems analysts, one-half were programmers, and the remainder were a combination of both. Most systems analysts were engaged in wholesale trade. The very small number of project planners (135) were associated either with business and management consulting services or with accounting services.

Project Planners

A project planner plans and directs the systematic review of processing requirements that commonly precede and provide a basis for a decision whether or not a computer system should be installed or modified, and what operations should be put on the computer. He may guide, direct, coordinate, and review the efforts of a special task force or supervise the activities of a planning unit investigating the design, installation, and initial operation of an electronic data-processing system.

Project planners concerned with the installation of new systems may plan, conduct, and supervise to determine (1) the feasibility of using various electronic processing systems to replace some or all of the existing tabulating system, and (2) the possibility of extending computer processing to additional operations. As part of their functions, they may:

1. Analyze the data-processing requirements of an organization in terms of what it does or should process to carry out its functions and provide a sound basis for management decisions.
2. Devise and test a new system for processing the data, including the designing of organizational, procedural, and work flow plans; the estimating of man and machine hours and of costs, etc.; give consideration to alternative possibilities; evaluate the benefits that would be realized from the new system, etc.
3. Propose a processing plan to management, including budget estimates and a recommendation on the specific equipment that would be needed.
4. Develop plans for and direct the installation of and initial operation of the new equipment, including the transition from existing procedures to any new procedures that may be required by scheduling work flow, developing program techniques, etc.
5. May assist in making decisions on personnel to staff new or revised electronic data-processing unit.

The skills required of a project planner include:

1. Ability to do highly analytical and creative thinking, including the ability to obtain, classify, and analyze a large and complete variety of facts and conditions.
2. Verbal ability to analyze and present complex business and technical problems clearly and effectively.
3. Spatial ability to visualize the total computer system when planning machine modifications and designing work flow plans.
4. Ability to work with technical handbooks and to read schematics.
5. Numerical ability to understand mathematical principles involved in machine computations.
6. Ability to operate electronic data-processing systems and peripheral equipment.

Systems Analysts

Systems analysts study data requirements and operating methods. They form logical statements of business on scientific problems, and devise

procedures for solutions of these problems using electronic data-processing systems. They develop block diagrams and general flow charts; design forms; and devise data verification methods and controls. Ordinarily, they do not work out detailed machine logic and program steps, which are done by programmers.

System analysts may be classified into two broad groups: (A) those employed by large organizations who continually evaluate existing operating procedures to determine whether automatic data processing should be applied to any given operation or whether existing systems designs can be made more efficient and economical, and (B) those who design a plan for a specific application.

Systems analysts perform some or all of the following functions:

1. Study the structure and techniques of existing systems and procedures, and evaluate them against the objective of the operation by:
 - A. Developing and analyzing alternative systems; select the best one for the objective, considering costs, efficiency, and improved service; prepare detailed reports on new proposals for management approval. Involved in such operations are various types of surveys; preparation of time studies; manpower comparisons; work flow charts; cost estimates; analysis of forms, records, and reports; and space and layout surveys.
 - B. Install and follow up on new methods.
 - C. Train personnel in new methodology.
2. Design complete processing plans for one or more applications such as payroll, inventory, cost accounting, etc. by:
 - A. Determining the problems, types of data to be processed, and systems objectives from management.
 - B. Gathering facts concerning the problem by observing present procedures, and analyzing the problems in terms of capabilities of equipment. Formulate the most feasible system for processing the data, determine techniques to be used and the specific computer requirements, prepare flow charts and block diagrams to establish the sequence of computer operations, etc.

Systems analysts may also:

- A. Supervise the programming and develop programming techniques.
- B. Prepare flow charts for training employees on new systems.
- C. Schedule data-processing activities.

Systems analysts require the following skills:

1. High degree of numerical ability to understand mathematical principles involved in machine computations.
2. Ability to comprehend and define engineering, scientific, and technical problems, and to outline procedures for their solution.
3. Ability to visualize the total computer system and the inter-relationship of various components when devising computer systems requirements.
4. Ability to use technical handbooks and to read schematics, blueprints, and technical drawings.
5. Ability to operate electronic data-processing equipment.

Programmers

Programmers take the generalized plans, diagrams, and flow charts prepared by the systems analysts and convert them into the machine language necessary to give the computer minute and precise instructions on each step in the data-processing operation. Functions of these personnel may include:

1. Breaking down the statement of the problem into steps for solution.
2. Design detailed programs, diagrams, and flow charts indicating sequence of machine operations necessary to carry out compilation and computation of data to solve problem. Translating flow charts and mathematical formulas into machine language.
3. Check on whether the instructions to the computer have been correctly written and will produce the desired information by taking a sample of the data to be processed and reviewing step by step what happens as the computer follows the series of instructions in the program.
4. Revising the instructions or altering the sequence of operations to take care of any difficulties that have appeared; making a trial run on the computer; etc. May perform test case calculations with a desk calculator.
5. Prepare an instruction sheet for the console operator to follow when the program is run on the computer.
6. Evaluating and modifying existing programs to take into account changes in procedures on types of reports desired.
7. Translating mathematical formulas into machine language, including specialized languages such as ALGOL or FORTRAN.

Programmers require essentially the same type of skills as the systems analysts, plus the ability to use specialized machine languages.

N E W Y O R K S T A T E H O S P I T A L M A N P O W E R S U R-
V E Y: 1 9 6 9

INTRODUCTION

In 1969 a survey of manpower in all hospitals in New York State was made as a cooperative venture of the New York State Department of Health, the Hospital Association of New York State, and the New York State Health Planning Commission. Survey questionnaires were sent to all hospitals in April 1969, with follow-ups to nonresponding institutions several months later. Validation in questionable instances was made by telephone or personal interview. The final rate of response was 94 percent.

Previously, a national survey had been conducted on a sample basis by HEW and the American Hospital Association (1966). Approximately 85 New York State hospitals were included. Since the survey was to be repeated in 1969, the various agencies involved agreed to a cooperative survey, utilizing the identical form. The findings on the following pages thus represent information collected in early (April-June) 1969 from the National Survey, supplemented by the State Survey findings.

The tables in this section (arranged on a county and divisional basis to conform to A.R.M.F. areas) indicate 1969 hospital staffing and needs as estimated by each hospital's administration. It is important to note the latter, since the data represent the hospital administrator's own opinion as to the number of "additional full-time personnel needed to provide optimum care for present patient-load".

All figures in the tables represent individual persons whether employed full-time or part-time. A full-time employee is defined as one who works 35 or more hours per week; a part-time employee is defined as one who works less than 35 hours per week. The term "house staff" is defined as meaning interns and residents.

So as to make the data uniform, all hospitals were requested to indicate employment figures as of Friday, May 2, 1969.

All categories of health personnel surveyed are listed for "Central Division - Albany County". In instances where the hospitals in other counties have NO personnel in certain categories, those

categories do not appear in the listing.

It should be noted that the county count of hospitals in the following tables may vary slightly in some instances from that given in Volume I of this series. The reason for this is that the counts given in Volume I were derived from the official American Hospital Association listings (August 1969); those in the following tables were derived from listings of the New York State Department of Health.

CENTRAL DIVISION - ALBANY COUNTY

Number of hospitals in county - 8
 Number of beds - 2,855
 Data based on reports from all 8 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	5,722	4,484	1,238	576	421	155
All. Prof. & Tech. Personnel	3,546	2,658	888	431	282	149
<u>Physicians</u>						
House staff	223	221	2	14	14	0
Other physicians	95	65	30	4	2	2
<u>Dental Services</u>						
House staff	4	4	0	0	0	0
Other dentists	6	6	0	0	0	0
Dental hygienists	2	2	0	0	0	0
Dental assistants	6	6	0	0	0	0
Dental Lab. Technicians	3	3	0	0	0	0
<u>Clinical Lab. Services</u>						
Clin. Lab. Scientists	10	10	0	0	0	0
Clin. Lab. Technologists	55	44	11	13	13	0
Cytotechnologists - Technicians	2	2	0	0	0	0
Histologic Tech. & Aides	20	20	0	0	0	0
Other Clinical Laboratory Personnel	196	131	65	6	6	0
<u>Dietary Services</u>						
Dieticians	21	15	6	1	1	0
Dietary Technicians	40	39	1	3	3	0

CENTRAL DIVISION - ALBANY COUNTY (CONTINUED)

Category of Personnel	Current Staff		Part-time	Total	Additional Full-time personnel Needed	
	Total	Full-Time			Budgeted	Non-Budgeted
<u>Medical Record Services</u>						
Med. Rec. Librarians	8	8	0	1	1	0
Med. Rec. Technicians	14	12	2	2	2	0
Med. Rec. Clerks	64	57	7	1	1	0
<u>Nursing Services</u>						
R.N.	1,093	700	393	113	55	58
L.P.N.	254	214	40	92	74	18
Aides and Orderlies	681	530	151	112	59	53
Ward Clerks	89	78	11	18	18	0
<u>Pharmacy</u>						
Pharmacists	26	20	6	5	4	1
Assistants and Aides	30	23	7	0	0	0
<u>Radiologic Technology</u>						
Technologists & Technicians	89	82	7	4	4	0
Nuclear Med. & Rad. Therapy Tech. Assistants	7	7	0	1	0	1
	44	39	5	0	0	0
<u>Therapeutic Services</u>						
Occupational therapists	10	7	3	1	1	0
O.T. Aides	5	4	1	1	1	0
Physical therapists	22	19	3	3	3	0
P.T. aides	19	15	4	0	0	0
Speech Path. & Audiologists	6	4	2	0	0	0
Recreation ther. & Aides	7	6	1	0	0	0
Inhalation ther. & Aides	14	9	5	0	0	0
Social Workers	33	25	8	6	1	5
S.W. Aides	4	4	0	2	0	2

CENTRAL DIVISION - ALBANY COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time personnel	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hosp. Administrators & Assistants	26	0	0	0
Medical secretaries	55	3	8	4
Surgical aides	39	0	6	0
Obs., Ped., & Other M.D. Aides	30	4	5	0
ECG technicians	22	2	4	2
EEG & Other Med. machine tech.	10	0	3	1
Ambulance Drivers & Attendants	0	0	0	0
Personnel in other health occupations	39	3	2	2
Trainees	123	105	0	0
<u>Other Hospital Personnel</u>				
Food service	526	109	14	0
Laundry	141	6	8	0
Housekeeping	458	49	27	6
Maintenance	240	3	3	0
Business management	233	42	10	0
Clerical & secretarial services	308	67	19	0
All other hospital personnel	270	74	64	0

NORTHERN DIVISION - RENSSELAER COUNTY

Number of Hospitals in County - 4
 Number of Beds - 756
 Data based on reports from 3 of the 4 hospitals

Category of Personnel	Current Staff			Additional Full-time Personnel Needed		
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All categories	1,919	1,282	637	59	59	0
All Prof. & Tech. Personnel	1,339	880	459	48	48	0
<u>Physicians</u>						
House Staff	6	4	2	0	0	0
Other physicians	33	20	13	0	0	0
<u>Dental Services</u>						
			NONE			
<u>Clinical Laboratory Services</u>						
Clin. Lab. Technologists	36	23	13	0	0	0
Histologic Technicians & Aides	16	10	6	1	1	0
Other personnel	15	8	7	0	0	0
<u>Dietary Services</u>						
Dieticians	9	5	4	0	0	0
Dietary technicians	8	8	0	0	0	0
<u>Medical Record Services</u>						
Med. Rec. Librarians	3	3	0	0	0	0
Med. Rec. Technicians	2	2	0	0	0	0
Med. Rec. Clerks	19	13	6	0	0	0

NORTHERN DIVISION - RENNELAER COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	468	192	17	17
L.P.N.	173	57	15	15
Aides & Orderlies	338	106	11	11
Ward Clerks	43	15	1	1
<u>Pharmacy</u>				
Pharmacists	13	4	0	0
Assistants & Aides	14	8	0	0
<u>Radiologic Technology</u>				
Technologists & technicians	27	6	2	2
Nuclear Med. & Rad. therapy tech. Assistants	1	0	0	0
	10	1	0	0
<u>Therapeutic Services</u>				
Physical therapists	3	0	0	0
P.T. Aides	6	1	0	0
Inhalation Ther. & Aides	21	2	0	0
Social Workers	5	1	1	1
S.W. Aides	1	0	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hosp. Administrators & Assistants	16	1	0	0
Med. Secretaries	20	5	0	0
Surgical Aides	12	1	0	0
Obs., Ped., & Other M.D. aides	9	5	0	0
ECG technicians	10	2	0	0
EEG & other Med. machine tech.	1	1	0	0
Personnel in other health occupations	1	0	0	0

NORTHERN DIVISION - RENSSELAER COUNTY (CONTINUED)

<u>Category of Personnel</u>	<u>Current Staff</u>		<u>Additional Full-time Personnel Needed</u>	
	<u>Total</u>	<u>Full-Time</u>	<u>Part-time</u>	<u>Non-Budgeted</u>
<u>Other Hospital Personnel</u>				
Food Service	169	98	71	1
Laundry	37	36	1	0
Housekeeping	81	43	38	0
Maintenance	77	67	10	2
Business management	55	42	13	2
Clerical & secretarial services	79	63	16	0
All other hosp. personnel	82	53	29	6

NORTHERN DIVISION - SARATOGA COUNTY

Number of hospitals in county - 4
 Number of beds - 803
 Data based on reports from all 4 hospitals

Category of Personnel	Current Staff		Additional Full-time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All categories	785	167	15	15	0
All Prof. & Tech. personnel	535	126	12	12	0
<u>Physicians</u>					
House staff	1	0	0	0	0
Other physicians	10	4	1	1	0
<u>Dental Services</u>					
Dentists (not house staff)	1	0	0	0	0
Dental hygienists	0	0	1	1	0
Dental assistants	1	0	0	0	0
<u>Clinical Laboratory Services</u>					
NONE					
<u>Dietary Services</u>					
Dietitians	4	2	0	0	0
Dietary technicians	8	4	0	0	0
<u>Medical Record Services</u>					
Medical Record Librarians	3	1	0	0	0
Medical Record Technicians	4	0	0	0	0
Medical Record Clerks	5	1	0	0	0

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9

NORTHERN DIVISION - SARATOGA COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	130	57	1	0
L.P.N.	52	11	0	0
Aides and Orderlies	271	36	4	0
Ward Clerks	3	0	0	0
<u>Pharmacy</u>				
Pharmacists	4	2	0	0
<u>Radiologic Technology Technologists and Technicians</u>	7	1	0	0
<u>Therapeutic Services</u>				
Occupational Therapists	1	0	2	0
O.T. aides	2	0	0	0
Physical Therapists	2	1	2	0
P.T. aides	3	0	0	0
Speech Pathologists & Audiologists	3	2	0	0
Recreation Therapists and aides	4	0	0	0
Social Workers	1	0	0	0
S.W. aides	1	0	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & assistants	7	0	0	0
Medical secretaries	1	1	1	0
Surgical aides	2	0	0	0
ECG technicians	4	1	0	0

NORTHERN DIVISION SARATOGA COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Hospital Personnel</u>				
Food Service	77	19	2	0
Laundry	11	0	0	0
Housekeeping	42	12	0	0
Maintenance	51	0	0	0
Business management	22	4	1	0
Clerical & secretarial services	22	2	0	0
All other hospital personnel	25	4	0	0

NORTHERN DIVISION - WASHINGTON COUNTY

Number of hospitals in county - 2
 Number of beds - 122
 Data based on reports from both hospitals

Category of Personnel	Current Staff		Additional Full-time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	321	197	2	0	2
All Prof. & Tech. Personnel	215	130	2	0	2
<u>Physicians</u>					
Physicians (not house staff)	2	2	0	0	0
<u>Dental Services</u>					
<u>Clinical Laboratory Services</u>					
Other clin. lab. personnel (Not technologists or technicians)	9	8	1	0	0
<u>Dietary Services</u>					
Dieticians	2	0	2	0	0
Dietary technicians	3	2	1	0	0
<u>Medical Record Services</u>					
Medical Record Librarians	3	2	1	0	0
Medical Record Technicians	2	2	0	0	0
Medical Record Clerks	4	2	2	0	0
<u>Nursing Services</u>					
R.N.	67	40	27	2	2
L.P.N.	48	29	19	0	0
Aides and Orderlies	39	20	19	0	0
Ward Clerks	17	9	8	0	0

NORTHERN DIVISION - WASHINGTON COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Pharmacy</u>				
Pharmacists	2	0	2	0
<u>Radiologic Technology</u>				
Technologists and Technicians	4	4	0	0
Nuclear Med. & Rad. Ther. Tech.	1	0	1	0
<u>Therapeutic Services</u>		NONE		
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	2	2	0	0
Medical secretaries	1	1	0	0
Surgical aides	3	1	2	0
Trainees	6	6	0	0
<u>Other Hospital Personnel</u>				
Food Service	22	10	12	0
Laundry	11	9	2	0
Housekeeping	29	18	11	0
Maintenance	15	11	4	0
Business management	15	11	4	0
Clerical & secretarial services	14	8	6	0

NORTHERN DIVISION - WARREN COUNTY

Number of hospitals in county - 1
 Number of beds - 410
 Data based on report from single hospital

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total	Part-time	Total	Non-Budgeted
All Categories	940	700	61	61
All Prof. & Tech. Personnel	597	440	60	60
<u>Physicians</u>	5	5	0	0
Physicians (Not house staff)				
<u>Dental Services</u>		NONE		
<u>Clinical Laboratory Services</u>				
Clinical Laboratory Scientists	1	1	0	0
Clinical Laboratory Technologists	9	9	4	4
Cytotechnologists - Technicians	3	2	1	1
Histologic Technicians & Aides	3	3	0	0
Other personnel	35	33	1	1
<u>Dietary Services</u>				
Dieticians	2	2	4	4
Dietary Technicians	7	7	4	4
<u>Medical Record Services</u>				
Medical Record Librarians	0	0	1	1
Medical Record Technicians	1	1	0	0
Medical Record Clerks	17	16	0	0

NORTHERN DIVISION - WARREN COUNTY (CONTINUED)

Category of Personnel	Current Staff		Total	Additional Full-time Personnel Needed	
	Full-time	Part-time		Budgeted	Non-Budgeted
<u>Nursing Services</u>					
R.N.	248	108	30	30	0
L.P.N.	110	25	0	0	0
Aides & Orderlies	71	11	11	11	0
Ward Clerks	14	2	0	0	0
<u>Pharmacy</u>					
Pharmacists	2	0	1	1	0
Assistants and Aides	5	2	0	0	0
<u>Radiologic Technology</u>					
Technologists and Technicians	21	0	0	0	0
Nuclear Med. & Rad. Ther. Tech. Assistants	1	1	1	1	0
	4	0	0	0	0
<u>Therapeutic Services</u>					
Physical Therapists	1	0	1	1	0
P.T. Aides	6	0	0	0	0
Inhalation Therapists and Aides	4	0	1	1	0
Social Workers	1	0	0	0	0
S.W. Assistants	2	0	0	0	0
<u>Other Prof. & Tech. Personnel</u>					
Hospital Administrators & Assistants	2	0	0	0	0
Medical Secretaries	8	0	0	0	0
Obs., Ped., & Other M.D. aides	8	3	0	0	0
ECG Technicians	6	5	0	0	0

NORTHERN DIVISION - WARREN COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Hospital Personnel</u>				
Food Service	117	41	0	0
Laundry	19	0	0	0
Housekeeping	70	10	1	0
Maintenance	26	2	0	0
Business management	6	0	0	0
Clerical & Secretarial Services	91	29	0	0
All other hospital personnel	14	1	0	0

SUMMARY - NORTHERN DIVISION

Number of Hospitals in Division - 11
 Number of Beds - 2,091
 Data based on reports from 10 of 11 hospitals

Category of Personnel	Current Staff		Additional Full-time Personnel Needed		
	Total	Full-Time	Part-time	Total Budgeted	Non-Budgeted
All Categories	3,965	2,537	1,085	137	2
All Prof. & Tech. Personnel	2,686	1,859	827	122	2
<u>Physicians</u>					
House Staff	7	5	2	0	0
Other physicians	50	33	17	1	0
<u>Dental Services</u>					
Dentists (not house staff)	1	1	0	0	0
Dental Hygienists	0	0	0	1	0
Dental Assistants	1	1	0	0	0
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Scientists	1	1	0	0	0
Clinical Laboratory Technologists	45	32	13	1	0
Cytotechnologists - technicians	3	2	1	1	0
Histologic Technicians & Aides	19	13	6	1	0
Other personnel	59	49	10	1	0
<u>Dietary Services</u>					
Dietitians	17	9	8	4	0
Dietary Technicians	26	21	5	4	0

SUMMARY - NORTHERN DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Medical Record Services</u>				
Medical Record Librarians	9	7	2	0
Medical Record Technicians	9	9	0	0
Medical Record Clerks	45	35	10	0
<u>Nursing Services</u>				
R.N.	913	529	384	2
L.P.N.	383	271	112	0
Aides & Orderlies	719	547	172	0
Ward Clerks	79	52	17	0
<u>Pharmacy</u>				
Pharmacists	21	13	8	0
Assistants and aides	19	9	10	0
<u>Radiologic Technology</u>				
Technologists & Technicians	58	52	6	0
Nuclear Med. & Rad. Ther. Tech. Assistants	3	1	2	0
	14	13	1	0
<u>Therapeutic Services</u>				
Occupational Therapists	1	1	0	0
O.T. Aides	2	2	0	0
Physical Therapists	6	5	1	0
P.T. Aides	15	14	1	0
Speech Pathologists & Audiologists	3	1	2	0
Recreation Therapists & Aides	4	4	0	0
Inhalation Therapists & Aides	25	23	2	0
Social Workers	7	6	1	0
S.W. Aides	5	5	0	0

SUMMARY - NORTHERN DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	30	29	1	0
Medical Secretaries	30	24	6	1
Surgical Aides	17	14	3	0
Obs., Ped., & Other M.D. Aides	17	9	8	0
EKG Technicians	20	14	6	0
EEG & Other Med. Machine Tech.	1	1	0	0
Personnel in Other Health Occupations	1	0	1	0
Trainees	6	6	0	0
<u>Other Hospital Personnel</u>				
Food Service	385	242	143	3
Laundry	78	75	3	0
Housekeeping	222	151	71	1
Maintenance	169	153	16	2
Business Management	98	77	21	3
Clerical and Secretarial Services	206	153	53	0
All other hospital personnel	121	87	34	6

SOUTHERN DIVISION - DUTCHESS COUNTY

Number of hospitals in county - 12
 Number of beds - 11,330
 Data based on reports from 10 of 12 hospitals

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total	Budgeted Non-Budgeted
All Categories	6,317	740	652	0
All Prof. & Tech. Personnel	4,229	557	529	0
<u>Physicians</u>				
House Staff	21	0	9	0
Other physicians	131	21	32	0
<u>Dental Services</u>				
House Staff	3	0	0	0
Other dentists	11	0	0	0
Dental Hygienists	3	0	2	0
Dental Assistants	13	1	2	0
Dental Laboratory Technicians	4	0	0	0
<u>Clinical Laboratory Services</u>				
Clinical Laboratory Scientists	3	0	4	0
Clinical Laboratory Technologists	26	11	5	0
Cytotechnologists - Technicians	10	2	0	0
Histologic Technicians & Aides	5	0	1	0
Other Clinical Laboratory Personnel	43	7	1	0
<u>Dietary Services</u>				
Dietitians	17	3	0	0
Dietary Technicians	20	4	1	0

SOUTHERN DIVISION - DUTCHESS COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Medical Record Services</u>				
Medical Record Librarians	5	0	2	0
Medical Record Technicians	3	0	2	0
Medical Record Clerks	30	11	2	0
<u>Nursing Services</u>				
R.N.	854	328	123	0
L.P.N.	224	55	24	0
Aides and Orderlies	2,333	70	237	0
Ward Clerks	42	0	4	0
<u>Pharmacy</u>				
Pharmacists	16	4	0	0
Assistants and Aides	13	1	0	0
<u>Radiologic Technology</u>				
Technologists and Technicians	30	5	1	0
Nuclear Med. & Rad. Therapy Tech. Assistants	2	0	0	0
	5	0	0	0
<u>Therapeutic Services</u>				
Occupational Therapists	29	2	18	0
O.T. Aides	47	0	6	0
Physical Therapists	12	2	8	0
P.T. Aides	16	2	0	0
Speech Pathologists & Audiologists	6	1	0	0
Recreation Therapists & Aides	36	3	3	0
Inhalation Therapists & Aides	20	8	0	0
Social Workers	31	3	20	0
S.W. Aides	24	1	10	0

SOUTHERN DIVISION - DUTCHESS COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	21	0	1	0
Medical Secretaries	58	0	11	0
Surgical Aides	13	2	0	0
Obs., Ped., & Other Physicians' Aides	9	2	0	0
EKG Technicians	5	0	0	0
EEG & Other Med. Machine Tech.	5	1	0	0
Ambulance Drivers & Attendants	1	0	0	0
Personnel in Other Health Occupations	25	7	0	0
Trainees	4	0	0	0
<u>Other Hospital Personnel</u>				
Food Service	506	51	38	0
Laundry	179	2	21	0
Housekeeping	261	30	13	0
Maintenance	512	6	20	0
Business management	93	1	2	0
Clerical & Secretarial Services	284	34	12	0
All other hospital personnel	253	59	17	0

SOUTHERN DIVISION - ULSTER COUNTY

Number of hospitals in county - 5
 Number of beds - 631
 Data based on reports from 4 of the 5 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	1,128	750	378	56	56	0
All Prof. & Tech. Personnel	688	434	254	56	56	0
<u>Physicians</u>						
House Staff	4	2	2	0	0	0
Other physicians	3	1	2	0	0	0
<u>Dental Services</u>						
Dentists (not house staff)	1	1	0	0	0	0
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Technologists	3	2	1	2	2	0
<u>Dietary Services</u>						
Dieticians	9	6	3	1	1	0
Dietary Technicians	4	4	0	0	0	0
<u>Medical Record Services</u>						
Medical Record Librarians	2	1	1	1	1	0
Medical Record Technicians	4	4	0	0	0	0
Medical Record Clerks	9	7	2	0	0	0
<u>Nursing Services</u>						
R.N.	271	134	137	22	22	0
L.P.N.	90	64	26	26	26	0
Aides and Orderlies	174	127	47	0	0	0
Ward Clerks	31	13	18	0	0	0

SOUTHERN DIVISION - ULSTER COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Pharmacy</u>				
Pharmacists	5	3	0	0
Asistants & Aides	3	3	0	0
<u>Radiologic Technology</u>				
Technologists - Technicians	14	13	3	3
Assistants	4	4	0	0
<u>Therapeutic Services</u>				
Physical Therapists	5	3	0	0
P.T. Aides	6	5	0	0
Inhalation Therapists & Aides	2	2	1	1
Social Workers	1	1	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	7	7	0	0
Medical Secretaries	4	4	0	0
Surgical Aides	9	8	0	0
Obs., Ped., & Other Physicians' Aides	1	1	0	0
ECG Technicians	4	3	0	0
Personnel in Other Health Occupations	9	5	0	0
Trainees	9	6	0	0
<u>Other Hospital Personnel</u>				
Food Service	118	70	0	0
Laundry	23	22	0	0
Housekeeping	81	71	0	0
Maintenance	44	40	0	0
Business management	5	5	0	0
Clerical & Secretarial Services	135	80	0	0
All Other Hospital Personnel	34	28	0	0

SOUTHERN DIVISION - SULLIVAN COUNTY

Number of hospitals in county - 5
 Number of beds - 322
 Data based on reports from all 5 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	691	540	151	36	21	15
All Prof. & Tech. Personnel	460	353	107	36	21	15
<u>Physicians</u>						
Physicians (not house staff)	5	4	1	2	0	2
<u>Dental Services</u>		NONE				
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Scientists	1	1	0	0	0	0
Clinical Laboratory Technologists	13	13	0	0	0	0
Cytotechnologists - technicians	1	1	0	0	0	0
Histologic Technicians & Aides	6	6	0	0	0	0
Other Clinical Laboratory Personnel	11	9	2	0	0	0
<u>Dietary Services</u>						
Dietitians	4	1	3	0	0	0
Dietary Technicians	9	9	0	0	0	0
<u>Medical Record Services</u>						
Medical Record Librarians	4	4	0	0	0	0
Medical Record Technicians	3	3	0	0	0	0
Medical Record Clerks	10	9	1	0	0	0

SOUTHERN DIVISION - SULLIVAN COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	126	45	10	5
L.P.N.	57	24	10	5
Aides & Orderlies	153	20	10	0
Ward Clerks	20	1	0	0
<u>Pharmacy</u>				
Pharmacists	4	3	1	0
<u>Radiological Technology</u>				
Technologists - technicians	12	2	1	0
Assistants	3	1	0	0
<u>Therapeutic Services</u>				
NONE				
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	5	0	2	0
Surgical Aides	1	0	0	0
Obs., Ped., & Other Physicians' Aides	5	0	0	0
ECG Technicians	6	4	0	0
Personnel in Other Health Occupations	1	0	0	0
<u>Other Hospital Personnel</u>				
Food Service	73	20	0	0
Laundry	22	6	0	0
Housekeeping	52	2	0	0
Maintenance	11	3	0	0
Business Management	14	4	0	0
Clerical & Secretarial Services	35	4	0	0
All other hospital personnel	24	5	0	0

SOUTHERN DIVISION - DELAWARE COUNTY

Number of hospitals in county - 7
 Number of beds - 329
 Data based on reports from 6 of the 7 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	505	336	169	13	11	2
All Prof. & Tech. Personnel	369	232	137	13	11	2
<u>Physicians</u>						
Physicians (not house staff)	6	0	6	0	0	0
<u>Dental Services</u>						
Dentists (not house staff)	2	0	2	0	0	0
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Technologists	10	6	4	0	0	0
Histologic Technicians & Aides	1	1	0	0	0	0
Other Clinical Laboratory Personnel	8	2	6	0	0	0
<u>Dietary Services</u>						
Dieticians	8	2	6	0	0	0
Dietary Technicians	4	3	1	0	0	0
<u>Medical Record Services</u>						
Medical Record Librarians	4	4	0	0	0	0
Medical Record Technicians	4	2	2	0	0	0
Medical Record Clerks	7	6	1	0	0	0

SOUTHERN DIVISION - DELAWARE COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	102	48	4	1
L.P.N.	43	13	6	1
Aides & Orderlies	117	32	0	0
Ward Clerks	8	3	2	0
<u>Pharmacy</u>				
Pharmacists	3	2	0	0
Assistants & Aides	1	1	0	0
<u>Radiologic Technology</u>				
Technologists - technicians	12	1	0	0
<u>Therapeutic Services</u>				
Physical Therapists	4	4	0	0
Recreation Therapists & Aides	1	1	0	0
Inhalation Therapists & Aides	4	1	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	7	0	0	0
Medical Secretaries	4	2	0	0
Surgical Aides	6	0	0	0
ECG Technicians	3	1	0	0
<u>Other Hospital Personnel</u>				
Food Service	49	12	0	0
Laundry	8	2	0	0
Housekeeping	39	13	0	0
Maintenance	8	3	0	0
Business Management	8	0	0	0
Clerical & Secretarial Services	23	2	0	0
All other hospital personnel	1	0	0	0

SOUTHERN DIVISION - GREENE COUNTY

Number of hospitals in county - 1
 Number of beds - 106
 Data based on report from one hospital

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	202	45	4	4	0
All Prof. & Tech. Personnel	146	38	1	1	0
<u>Physicians</u>	1	0	0	0	0
Physicians (not house staff)					
<u>Dental Services</u>					
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Technologists	6	2	0	0	0
<u>Dietary Services</u>					
Dieticians	1	0	0	0	0
<u>Medical Record Services</u>					
Medical Record Librarians	1	1	0	0	0
Medical Record Clerks	3	0	0	0	0
<u>Nursing Services</u>					
R.N.	59	25	0	0	0
L.P.N.	23	2	0	0	0
Aides & Orderlies	38	4	0	0	0
Ward Clerks	4	0	0	0	0
<u>Pharmacy</u>					
Pharmacists	1	1	0	0	0

SOUTHERN DIVISION - GREENE COUNTY (CONTINUED)

<u>Category of Personnel</u>	<u>Current Staff</u>		<u>Additional Full-Time Personnel Needed</u>	
	<u>Total Full-Time</u>	<u>Part-time</u>	<u>Total Budgeted</u>	<u>Non-Budgeted</u>
<u>Radiologic Technology</u>				
Technologists - technicians	5	2	1	0
<u>Therapeutic Services</u>				
Physical Therapists	2	2	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	1	0	0	0
Surgical Aides	1	0	0	0
<u>Other Hospital Personnel</u>				
Food Service	18	3	2	0
Laundry	3	0	1	0
Housekeeping	16	2	0	0
Maintenance	4	0	0	0
Business management	1	0	0	0
Clerical & Secretarial Services	14	2	0	0

SOUTHERN DIVISION - COLUMBIA COUNTY

Number of hospitals in county - 1
 Number of beds - 206
 Data based on report from one hospital

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	446	319	127	27	27	0
All Prof. & Tech. Personnel	303	216	87	27	27	0
<u>Physicians</u>	5	0	5	0	0	0
Physicians (not house staff)						
<u>Dental Services</u>		NONE				
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Technologists	4	3	1	0	0	0
Other Clinical Laboratory Personnel	5	4	1	0	0	0
<u>Dietary Services</u>						
Dietician	1	1	0	0	0	0
Dietary Technicians	6	6	0	0	0	0
<u>Medical Record Services</u>						
Medical Record Librarians	1	1	0	0	0	0
Medical Record Technicians	1	1	0	0	0	0
Medical Record Clerks	10	10	0	0	0	0
<u>Nursing Services</u>						
R.N.	122	70	52	5	5	0
L.P.N.	25	20	5	10	10	0
Aides & Orderlies	73	56	17	12	12	0
Ward Clerks	12	10	2	0	0	0

SOUTHERN DIVISION - COLUMBIA COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Pharmacy</u>						
Pharmacists	2	1	1	0	0	0
Assistants	1	1	0	0	0	0
<u>Radiologic Technology</u>						
Technologists - technicians	8	8	0	0	0	0
<u>Therapeutic Services</u>						
Physical Therapists	1	1	0	0	0	0
Inhalation Therapists & Aides	1	0	1	0	0	0
<u>Other Prof. & Tech. Personnel</u>						
Hospital Administrators & Assistants	2	2	0	0	0	0
Surgical Aides	1	1	0	0	0	0
Obs., Ped., & Other Physicians' Aides	3	2	1	0	0	0
Personnel in Other Health Occupations	19	18	1	0	0	0
<u>Other Hospital Personnel</u>						
Food Service	40	21	20	0	0	0
Laundry	11	10	1	0	0	0
Housekeeping	35	26	9	0	0	0
Maintenance	15	14	1	0	0	0
Business management	28	22	6	0	0	0
Clerical & Secretarial Services	7	6	1	0	0	0
All other hospital personnel	6	4	2	0	0	0

SUMMARY - SOUTHERN DIVISION

Number of hospitals in Division - 31
 Number of beds - 12,924
 Data based on reports from 27 of 31 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	9,289	1,610	788	786	2
All Prof. & Tech. Personnel	6,195	1,180	645	643	2
<u>Physicians</u>					
House Staff	25	23	9	9	0
Other physicians	151	116	34	32	2
<u>Dental Services</u>					
House Staff	3	3	0	0	0
Other Dentists	14	12	0	0	0
Dental Hygienists	3	3	2	2	0
Dental Assistants	13	12	2	2	0
Dental Laboratory Technicians	4	4	0	0	0
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Scientists	4	4	4	4	0
Clinical Laboratory Technologists	52	41	7	7	0
Cytotechnologists - technicians	11	9	0	0	0
Histologic Technicians & Aides	12	12	1	1	0
Other Clinical Laboratory Personnel	67	51	1	1	0
<u>Dietary Services</u>					
Dietitians	40	25	1	1	0
Dietary Technicians	43	38	1	1	0

SUMMARY - SOUTHERN DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Medical Record Services</u>					
Medical Record Librarians	17	15	2	3	0
Medical Record Technicians	15	13	2	2	0
Medical Record Clerks	69	54	15	2	0
<u>Nursing Services</u>					
R.N.	1,532	899	633	164	158
L.P.N.	462	337	125	76	71
Aides & Orderlies	2,888	2,698	190	259	259
Ward Clerks	117	83	34	6	6
<u>Pharmacy</u>					
Pharmacists	31	18	13	1	0
Assistants & Aides	22	19	2	0	0
<u>Radiologic Technology</u>					
Technologists - technicians	81	70	11	6	6
Nuclear Med. & Rad. Ther. Tech. Assistants	2	2	0	0	0
	12	11	1	0	0
<u>Therapeutic Services</u>					
Occupational Therapists	29	27	2	18	18
O.T. Aides	47	47	0	6	6
Physical Therapists	24	14	10	8	8
P.T. Aides	22	19	3	0	0
Speech Pathologists & Audiologists	6	5	1	0	0
Recreation Therapists & Aides	37	33	4	3	3
Inhalation Therapists & Aides	27	17	10	1	1
Social Workers	31	28	3	20	20
S.W. Aides	24	23	1	10	10

SUMMARY - SOUTHERN DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	43	0	1	0
Medical Secretaries	66	2	11	0
Surgical Aides	31	3	0	0
Obs., Ped., & Other Physicians' Aides	18	3	0	0
ECG Technicians	18	6	0	0
EEG & Other Med. Machine Tech.	5	1	0	0
Ambulance Drivers & Attendants	1	0	0	0
Personnel in Other Health Occupations	54	12	0	0
Trainees	13	3	0	0
<u>Other Hospital Personnel</u>				
Food Service	804	153	40	0
Laundry	246	12	22	0
Housekeeping	484	66	13	0
Maintenance	596	17	20	0
Business Management	149	11	2	0
Clerical & Secretarial Services	498	98	12	0
All Other Hospital Personnel	319	72	17	0

INTERFACE DIVISION - ESSEX COUNTY

Number of hospitals in county - 7
 Number of beds - 439
 Data based on reports from all 7 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	637	507	130	24	24	0
All Prof. & Tech. Personnel	372	277	95	17	17	0
<u>Physicians</u>						
Physicians (not house staff)	8	6	2	0	0	0
<u>Dental Services</u>						
Dentists (not house staff)	1	0	1	0	0	0
Dental hygienists	1	1	0	0	0	0
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Scientists	1	1	0	1	1	0
Clinical Laboratory Technologists	5	5	0	0	0	0
Other Clinical Laboratory Personnel	19	13	6	0	0	0
<u>Dietary Services</u>						
Dieticians	2	2	0	1	1	0
Dietary Technicians	8	6	2	0	0	0
<u>Medical Record Services</u>						
Medical Record Librarians	6	5	1	0	0	0
Medical Record Technicians	2	1	1	0	0	0
Medical Record Clerks	1	0	1	0	0	0

INTERFACE DIVISION - ESSEX COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total	Full-Time	Part-time	Total	Budgeted Non-Budgeted
<u>Nursing Services</u>					
R.N.	114	70	44	5	5
L.P.N.	59	50	9	3	3
Aides and Orderlies	101	83	18	5	5
Ward Clerks	3	1	2	0	0
<u>Pharmacy</u>					
Pharmacists	4	2	2	0	0
Assistants and Aides	1	0	1	0	0
<u>Radiologic Technology</u>					
Technologists and Technicians	11	10	1	0	0
<u>Therapeutic Services</u>					
Occupational Therapists	2	0	2	2	2
Physical Therapists	2	1	1	0	0
P.T. Aides	2	1	1	0	0
Recreation Therapists and Aides	1	1	0	0	0
Social Workers	2	2	0	0	0
<u>Other Prof. & Tech. Personnel</u>					
Hospital Administrators & Assistants	8	8	0	0	0
Medical Secretaries	7	7	0	0	0
Surgical Aides	1	1	0	0	0

INTERFACE DIVISION - ESSEX COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Other Hospital Personnel</u>					
Food Service	77	11	3	3	0
Laundry	20	10	0	0	0
Housekeeping	49	6	1	1	0
Maintenance	56	3	0	0	0
Business Management	12	0	0	0	0
Clerical and Secretarial Services	35	1	0	0	0
All Other Hospital Personnel	16	4	3	3	0

INTERFACE DIVISION - FRANKLIN COUNTY

Number of hospitals in county - 4
 Number of beds - 803
 Data based on reports from all 4 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted	
All Categories	980	138	91	50	41
All Prof. & Tech. Personnel	630	116	52	32	20
<u>Physicians</u>					
Physicians (not house staff)	5	1	1	1	0
<u>Dental Services</u>					
Dentists (not house staff)	1	0	0	0	0
Dental Hygienists	1	0	0	0	0
Dental Assistants	1	0	0	0	0
Dental Laboratory Assistants	1	0	0	0	0
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Scientists	1	0	0	0	0
Clinical Laboratory Technologists	6	0	2	2	0
Cytotechnologists - technicians	6	0	1	1	0
Histologic Technicians & Aides	10	0	0	0	0
Other Clinical Laboratory Personnel	6	0	0	0	0
<u>Dietary Services</u>					
Dieticians	4	0	0	0	0
Dietary Technicians	5	0	0	0	0

INTERFACE DIVISION - FRANKLIN COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Medical Record Services</u>				
Medical Record Librarians	2	0	1	0
Medical Record Technicians	5	0	0	0
Medical Record Clerks	8	0	0	0
<u>Nursing Services</u>				
R.N.	134	43	15	15
L.P.N.	89	22	1	1
Aides and Orderlies	271	34	5	5
Ward Clerks	7	1	3	0
<u>Pharmacy</u>				
Pharmacists	4	3	0	0
Assistants & Aides	2	2	0	0
<u>Radiologic Technology</u>				
Technologists - Technicians	12	3	0	0
Nuclear Med. & Rad. Ther. Tech. Assistants	1	0	0	0
	7	3	0	0
<u>Therapeutic Services</u>				
Occupational Therapists	0	0	1	1
O.T. Aides	4	0	2	2
Physical Therapists	4	2	0	0
P.T. Aides	3	1	0	0
Speech Pathologists & Audiologists	1	0	0	0
Recreation Therapists & Aides	6	0	0	0
Inhalation Therapists & Aides	1	0	1	1
Social Workers	2	0	2	1
S.W. Aides	1	0	1	0

INTERFACE DIVISION - FRANKLIN COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	11	0	0	0
Medical Secretaries	2	0	0	0
Surgical Aides	2	0	0	0
ECG Technicians	1	0	3	1
Amulance Drivers & Attendants	1	1	0	0
Personnel in Other Health Occupations	2	0	0	0
<u>Other Hospital Personnel</u>				
Food Service	74	2	1	0
Laundry	26	1	17	10
Housekeeping	50	3	10	4
Maintenance	75	2	4	4
Business Management	11	2	4	3
Clerical and Secretarial	86	7	2	0
All other Hospital Personnel	28	5	1	0

INTERFACE DIVISION - CLINTON COUNTY

Number of hospitals in county - 2
 Number of beds - 1,238
 Data based on reports from both hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	1,305	1,123	182	75	46	29
All Prof. & Tech. Personnel	563	427	136	51	26	25
<u>Physicians</u>						
Physicians (not house staff)	9	6	3	1	1	0
<u>Dental Services</u>						
Dentists (not house staff)	1	1	0	0	0	0
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Scientists	1	1	0	0	0	0
Clinical Laboratory Technologists	5	4	1	0	0	0
Other Clinical Laboratory Personnel	12	11	1	0	0	0
<u>Dietary Services</u>						
Dietitians	2	2	0	1	1	0
Dietary Technicians	12	7	5	4	4	0
<u>Medical Record Services</u>						
Medical Record Librarians	2	2	0	0	0	0
Medical Record Technicians	1	1	0	0	0	0
Medical Record Clerks	11	9	2	0	0	0

INTERFACE DIVISION - CLINTON COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	178	77	21	5
L.P.N.	81	12	2	2
Aides and Orderlies	122	21	5	3
Ward Clerks	34	1	3	3
<u>Pharmacy</u>				
Pharmacists	8	3	0	0
Assistants and Aides	3	2	0	0
<u>Radiologic Technology</u>				
Technologists - Technicians	7	0	0	0
Nuclear Med. & Rad. Ther. Tech. Assistants	1	0	0	0
	1	0	0	0
<u>Therapeutic Services</u>				
Occupational Therapists	1	0	2	1
O.T. Aides	5	0	1	1
Physical Therapists	3	1	0	0
P.T. Aides	8	0	0	0
Recreation Therapists & Aides	1	0	1	1
Inhalation Therapists & Aides	10	8	0	0
Social Workers	1	1	3	2

INTERFACE DIVISION - CLINTON COUNTY (CONTINUED)

<u>Category of Personnel</u>	<u>Current Staff</u>		<u>Additional Full-Time Personnel</u>	
	<u>Total Full-Time</u>	<u>Part-time</u>	<u>Total Budgeted</u>	<u>Non-Budgeted</u>
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	7	0	0	0
Medical Secretaries	10	0	0	0
Surgical Aides	7	1	0	0
ECG Technicians	4	1	0	0
EEG & other Med. Machine Tech.	1	0	0	0
Ambulance Drivers & Attendants	4	0	0	0
Personnel in other Health Occupations	10	1	7	4
<u>Other Hospital Personnel</u>				
Food Service	79	7	3	1
Laundry	15	1	0	0
Housekeeping	78	6	5	1
Maintenance	58	1	2	0
Business Management	82	9	3	0
Clerical & Secretarial	30	0	3	2
All other hospital personnel	400	22	8	0

SUMMARY - INTERFACE DIVISION (NEW YORK COUNTIES ONLY)

Number of hospitals in New York subdivision - 13
 Number of beds - 2,480
 Data based on reports from all 13 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	2,922	2,112	810	190	120
All Prof. & Tech. Personnel	1,565	1,218	347	120	75
<u>Physicians</u>					
Physicians (not house staff)	22	16	6	2	2
<u>Dental Services</u>					
Dentists (not house staff)	3	2	1	0	0
Dental Hygienists	2	2	0	0	0
Dental Assistants	1	1	0	0	0
Dental Laboratory Assistants	1	1	0	0	0
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Scientists	3	3	0	1	1
Clinical Laboratory Technologists	16	15	1	2	2
Cytotechnologists - technicians	6	6	0	1	1
Histologic Technicians & Aides	10	10	0	0	0
Other Clinical Laboratory Personnel	37	30	7	0	0
<u>Dietary Services</u>					
Dietitians	8	8	0	2	2
Dietary Technicians	25	18	7	4	4

SUMMARY - INTERFACE DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Medical Record Services</u>						
Medical Record Librarians	10	9	1	1	0	1
Medical Record Technicians	8	7	1	0	0	0
Medical Record Clerks	20	17	3	0	0	0
<u>Nursing Services</u>						
R.N.	426	262	164	41	25	16
L.P.N.	229	186	43	18	6	12
Aides and Orderlies	494	421	73	15	13	2
Ward Clerks	44	40	4	6	3	3
<u>Pharmacy</u>						
Pharmacists	16	6	10	0	0	0
Assistants and Aides	6	2	4	0	0	0
<u>Radiologic Technology</u>						
Technologists - technicians	30	26	4	0	0	0
Nuclear Med & Rad. Ther. Tech. Assistants	2	2	0	0	0	0
	8	5	3	0	0	0
<u>Therapeutic Services</u>						
Occupational Therapists	3	1	2	5	4	1
O.T. Aides	9	9	0	3	3	0
Physical Therapists	9	5	4	0	0	0
P.T. Aides	13	11	2	0	0	0
Speech Pathologists & Audiologists	1	1	0	0	0	0
Recreation Therapists & Aides	8	8	0	2	1	1
Inhalation Therapists & Aides	11	9	2	1	0	1
Social Workers	5	4	1	4	2	2
S.W. Aides	1	1	0	1	0	1

SUMMARY - INTERFACE DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total	Part-time	Total	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	26	0	0	0
Medical Secretaries	19	0	0	0
Surgical Aides	10	1	0	0
EKG Technicians	5	1	3	1
EEG & other Med. Machine Technicians	1	0	0	0
Ambulance Drivers & Attendants	5	1	0	0
Personnel in Other Health Occupations	12	1	7	4
<u>Other Hospital Personnel</u>				
Food Service	230	20	7	1
Laundry	61	12	17	10
Housekeeping	177	15	16	5
Maintenance	189	6	6	4
Business Management	105	11	7	3
Clerical and Secretarial	151	8	5	2
All other hospital personnel	444	31	12	0

WESTERN DIVISION - SCHENECTADY COUNTY

Number of hospitals in county - 5
 Number of beds - 1,056
 Data based on reports from all 5 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total	Full-Time	Part-time	Total Budgeted	Non-Budgeted
All Categories	2,376	1,749	627	213	209
All Prof. & Tech. Personnel	1,444	1,008	436	184	180
<u>Physicians</u>					
House Staff	67	67	0	7	7
Other Physicians	27	15	12	3	3
<u>Dental Services</u>					
Dentists (not house staff)	1	0	1	0	0
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Scientists	3	2	1	0	0
Clinical Laboratory Technologists	16	13	3	2	2
Cytotechnologists - technicians	1	1	0	0	0
Histologic Technicians & Aides	3	3	0	0	0
Other Clinical Lab. Personnel	70	57	13	3	3
<u>Dietary Services</u>					
Dieticians	6	4	2	1	1
Dietary Technicians	22	19	3	1	1
<u>Medical Record Services</u>					
Medical Record Librarians	5	4	1	3	1
Medical Record Technicians	9	9	0	1	1
Medical Record Clerks	21	18	3	0	0

WESTERN DIVISION - SCHENECTADY COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	471	225	48	0
L.P.N.	263	88	42	0
Aides & Orderlies	189	44	53	0
Ward Clerks	55	14	7	0
<u>Pharmacy</u>				
Pharmacists	9	2	1	0
Assistants & Aides	5	1	1	0
<u>Radiologic Technology</u>				
Technologists - Technicians	33	11	0	0
Nuclear Med. & Rad. Ther. Tech. Assistants	2	0	0	0
	5	1	1	0
<u>Therapeutic Services</u>				
Occupational Therapists	5	0	0	0
O.T. Aides	2	0	1	0
Physical Therapists	15	1	1	0
P.T. Aides	12	0	1	0
Speech Pathologists and Audiologists	4	0	0	0
Inhalation Therapists and Aides	7	0	2	0
Social Workers	8	2	2	1
S.W. Aides	4	0	0	0

WESTERN DIVISION - SCHENECTADY COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	15	0	1	1
Medical Secretaries	15	2	1	0
Surgical Aides	22	2	0	0
Obs., Ped., & Other Physicians' Aides	16	0	0	0
ECG Technicians	12	2	0	0
EEG & other Med. Machine Tech.	6	1	0	0
Personnel in other Health Occupations	6	1	0	0
Trainees	12	0	0	0
<u>Other Hospital Personnel</u>				
Food Service	203	65	11	0
Laundry	47	1	0	0
Housekeeping	189	33	2	0
Maintenance	91	15	6	0
Business Management	128	17	8	0
Clerical and Secretarial	119	19	2	0
All other hospital personnel	155	41	0	0

WESTERN DIVISION - MONTGOMERY COUNTY

Number of hospitals in county - 2
 Number of beds - 311
 Data based on reports from both hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel		
	Total	Part-time	Total	Budgeted	Non-Budgeted
All Categories	682	187	48	34	14
All Prof. & Tech. Personnel	418	139	40	28	12
<u>Physicians</u>					
Physicians (not house staff)	3	2	0	0	0
<u>Dental Services</u>					
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Technologists	6	1	1	1	0
Cytotechnologists - technicians	1	0	0	0	0
Histologic Technicians & Aides	1	0	0	0	0
Other Clinical Laboratory Personnel	10	2	0	0	0
<u>Dietary Services</u>					
Dietitians	4	1	0	0	0
Dietary Technicians	3	0	2	0	2
<u>Medical Record Services</u>					
Medical Record Librarians	3	1	1	0	1
Medical Record Technicians	4	1	0	0	0
Medical Record Clerks	6	1	2	2	0

WESTERN DIVISION - MONTGOMERY COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	148	63	7	5
L.P.N.	72	12	0	0
Aides and Orderlies	94	41	11	11
Ward Clerks	12	0	0	0
<u>Pharmacy</u>				
Pharmacists	5	4	1	1
Assistants and Aides	3	2	0	0
<u>Radiological Technology</u>				
Technologists and Technicians	7	2	2	2
Assistants	2	0	0	0
<u>Therapeutic Services</u>				
Physical Therapists	3	2	2	1
P.T. Aides	6	4	2	2
Speech Pathologists & Audiologists	1	0	1	0
Inhalation Therapists & Aides	6	6	0	0
Social Workers	1	1	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	4	4	1	0
Medical Secretaries	5	4	1	0
ECG Technicians	3	2	1	1
Personnel in other health occupations	5	4	1	0

WESTERN DIVISION - MONTGOMERY COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Hospital Personnel</u>				
Food Service	81	29	3	1
Laundry	24	0	0	0
Housekeeping	56	2	2	0
Maintenance	27	3	1	0
Business Management	44	7	2	1
Clerical and Secretarial	19	6	0	0
All other hospital personnel	13	1	0	0

WESTERN DIVISION - SCHOHARIE COUNTY

Number of hospitals in county - 1
 Number of beds - 82
 Data based on report from one hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total	Part-time	Total	Non-Budgeted
All Categories	180	47	0	0
All Prof. & Tech. Personnel	134	39	0	0
<u>Physicians</u>				
<u>Dental Services</u>				
<u>Clinical Laboratory Services</u>				
Clinical Laboratory Technologists	1	0	0	0
Other Clinical Lab. Personnel	6	0	0	0
<u>Dietary Services</u>				
Dietary Technicians	2	0	0	0
<u>Medical Record Services</u>				
Medical Record Technicians	1	0	0	0
Medical Record Clerks	3	1	0	0
<u>Nursing Services</u>				
R.N.	40	17	0	0
L.P.N.	17	9	0	0
Aides and Orderlies	45	44	0	0
Ward Clerks	8	3	0	0

WESTERN DIVISION - SCHOHARIE COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Pharmacy</u>				
Pharmacists	1	0	1	0
<u>Radiologic Technology</u>				
Technologists - Technicians	3	3	0	0
<u>Therapeutic Services</u>				
Physical Therapists	1	1	0	0
Inhalation Therapists & Aides	2	2	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	1	1	0	0
Surgical Aides	3	3	0	0
<u>Other Hospital Personnel</u>				
Food Service	13	9	4	0
Housekeeping	16	13	3	0
Maintenance	4	3	1	0
Business Management	2	2	0	0
Clerical and Secretarial	11	11	0	0

WESTERN DIVISION - OTSEGO COUNTY

Number of hospitals in county - 3
 Number of beds - 504
 Data based on reports from all 3 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	1,028	890	138	95	95	0
All Prof & Tech. Personnel	666	564	102	91	91	0
<u>Physicians</u>						
House Staff	20	19	1	0	0	0
Other physicians	43	42	1	2	2	0
<u>Dental Services</u>						
Dentists (not house staff)	0	0	0	1	1	0
Dental Hygienists	0	0	0	1	1	0
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Technologists	15	14	1	0	0	0
Cytotechnologists - technicians	25	19	6	0	0	0
Histologic Technicians & Aides	4	4	0	0	0	0
Other Clinical Lab. Personnel	12	8	4	1	1	0
<u>Dietary Services</u>						
Dieticians	2	1	1	1	1	0
Dietary Technicians	5	5	0	0	0	0
<u>Medical Record Services</u>						
Medical Record Librarians	3	3	0	0	0	0
Medical Record Technicians	7	7	0	1	1	0
Medical Record Clerks	16	11	5	0	0	0

WESTERN DIVISION - OTSEGO COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Nursing Services</u>					
R.N.	164	29	23	23	0
L.P.N.	80	16	29	29	0
Aides & Orderlies	145	26	15	15	0
Ward Clerks	23	0	8	8	0
<u>Pharmacy</u>					
Pharmacists	3	1	2	2	0
<u>Radiologic Technology</u>					
Technologists - Technicians	15	0	3	3	0
Nuclear Med. & Rad. Ther. Tech. Assistants	1	0	0	0	0
	3	0	0	0	0
<u>Therapeutic Services</u>					
Occupational Therapists	0	0	2	2	0
Physical Therapists	3	1	0	0	0
P.T. Aides	3	0	0	0	0
Recreation Therapists & Aides	2	1	0	0	0
Inhalation Therapists & Aides	14	2	0	0	0
Social Workers	3	0	0	0	0
<u>Other Prof. & Tech. Personnel</u>					
Hospital Administrators & Assistants	7	0	0	0	0
Medical Secretaries	36	6	0	0	0
Surgical Aides	4	0	0	0	0
EKG Technicians	3	0	0	0	0
EKG & other Med Machine Tech.	1	0	0	0	0
Ambulance Drivers & Attendants	4	1	0	0	0

WESTERN DIVISION - OTSEGO COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Other Hospital Personnel</u>					
Food Service	74	0	0	0	0
Laundry	19	1	0	0	0
Housekeeping	86	6	2	2	0
Maintenance	73	6	2	2	0
Business Management	10	0	0	0	0
Clerical and Secretarial	86	19	0	0	0
All other hospital personnel	14	4	0	0	0

WESTERN DIVISION - HERKIMER COUNTY

Number of hospitals in county - 3
 Number of beds - 313
 Data based on reports from all 3 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	613	222	11	11	0
All Prof. & Tech. Personnel	423	162	9	9	0
<u>Physicians</u>					
Physicians (not house staff)	4	4	0	0	0
<u>Dental Services</u>					
			NONE		
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Technologists	6	2	0	0	0
Cytotechnologists - technicians	7	1	0	0	0
Other Clinical Lab. Personnel	7	2	0	0	0
<u>Dietary Services</u>					
Dieticians	1	0	0	0	0
Dietary Technicians	5	0	0	0	0
<u>Medical Record Services</u>					
Medical Record Librarians	3	1	0	0	0
Medical Record Technicians	1	0	0	0	0
Medical Record Clerks	5	4	0	0	0

WESTERN DIVISION - HERKIMER COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Nursing Services</u>				
R.N.	144	69	6	0
L.P.N.	75	17	2	0
Aides and Orderlies	123	49	0	0
Ward Clerks	9	2	0	0
<u>Pharmacy</u>				
Pharmacists	3	2	0	0
Assistants and Aides	1	1	0	0
<u>Radiologic Technology</u>				
Technologists - technicians	11	5	0	0
Assistants	6	3	0	0
<u>Therapeutic Services</u>				
Physical Therapists	1	1	0	0
P.T. Aides	0	0	1	1
Social Workers	1	0	0	0
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	3	0	0	0
Medical Secretaries	3	1	0	0
Obs., Ped., & other Physicians' Aides	4	1	0	0
<u>Other Hospital Personnel</u>				
Food Service	59	26	0	0
Laundry	10	1	0	0
Housekeeping	44	17	0	0
Maintenance	20	2	2	0
Business Management	5	2	0	0
Clerical and Secretarial	46	9	0	0
All other hospital personnel	6	3	0	0

WESTERN DIVISION - HAMILTON COUNTY

No Hospitals in County

WESTERN DIVISION - FULTON COUNTY

Number of hospitals in county - 2
 Number of beds - 198
 Data based on reports from both hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	382	298	84	3	3	0
All Prof. & Tech. Personnel	267	202	65	3	3	0
<u>Physicians</u>		NONE				
<u>Dental Services</u>		NONE				
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Scientists	1	1	0	0	0	0
Clinical Laboratory Technologists	1	1	0	0	0	0
Other Clinical Laboratory Personnel	8	8	0	0	0	0
<u>Dietary Services</u>						
Dietitians	1	0	1	0	0	0
Dietary Technicians	3	3	0	0	0	0
<u>Medical Record Services</u>						
Medical Record Librarians	2	2	0	1	1	0
Medical Record Technicians	5	5	0	1	1	0
Medical Record Clerks	1	1	0	1	1	0
<u>Nursing Services</u>						
R.N.	112	75	37	0	0	0
L.P.N.	29	26	3	0	0	0
Aides and Orderlies	60	39	21	0	0	0
Ward Clerks	13	12	1	0	0	0

WESTERN DIVISION - FULTON COUNTY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Pharmacy</u>					
Pharmacists	2	1	0	0	0
Assistants and Aides	1	0	0	0	0
<u>Radiologic Technology</u>					
Technologists - Technicians	7	0	0	0	0
Nuclear Med. & Rad. Ther. Tech.	1	0	0	0	0
<u>Therapeutic Services</u>					
Physical Therapists	2	1	0	0	0
P.T. Aides	1	0	0	0	0
Inhalation Therapists & Aides	2	0	0	0	0
<u>Other Prof. & Tech. Personnel</u>					
Hospital Administrators & Assistants	3	0	0	0	0
Surgical Aides	4	0	0	0	0
Personnel in other health occupations	4	0	0	0	0
Trainees	4	0	0	0	0
<u>Other Hospital Personnel</u>					
Food Service	32	21	0	0	0
Laundry	12	12	0	0	0
Housekeeping	20	20	0	0	0
Maintenance	17	16	0	0	0
Business Management	1	1	0	0	0
Clerical and Secretarial	24	21	0	0	0
All other hospital personnel	9	5	0	0	0

SUMMARY - WESTERN DIVISION

Number of hospitals in division - 16
 Number of beds - 2,464

Data based on reports from all 16 hospitals

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed		
	Total Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	5,261	1,305	370	352	18
All Prof. & Tech. Personnel	3,352	943	327	311	16
<u>Physicians'</u>					
House Staff	87	1	7	7	0
Other physicians	77	19	5	5	0
<u>Dental Services</u>					
Dentists (not house staff)	1	1	1	1	0
Dental Hygienists	0	0	1	1	0
<u>Clinical Laboratory Services</u>					
Clinical Laboratory Scientists	4	1	0	0	0
Clinical Laboratory Technologists	45	7	3	3	0
Cytotechnologists - Technicians	34	7	0	0	0
Histologic Technicians & Aides	8	0	0	0	0
Other Clinical Lab. Personnel	113	21	0	0	0
<u>Dietary Services</u>					
Dietitians	14	9	2	2	0
Dietary Technicians	40	37	3	1	2
<u>Medical Record Services</u>					
Medical Record Librarians	16	3	5	2	3
Medical Record Technicians	27	1	3	3	0
Medical Record Clerks	52	11	3	3	0

SUMMARY - WESTERN DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed			
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
<u>Nursing Services</u>						
R.N.	1,079	633	446	84	82	2
L.P.N.	536	392	144	73	73	0
Aides and Orderlies	656	474	182	79	79	0
Ward Clerks	120	98	22	15	15	0
<u>Pharmacy</u>						
Pharmacists	23	15	8	4	4	0
Assistants and Aides	10	6	4	2	2	0
<u>Radiologic Technology</u>						
Technologists - Technicians	76	58	18	5	5	0
Nuclear Med. & Rad. Ther. Tech. Assistants	4	4	0	0	0	0
	16	13	3	1	1	0
<u>Therapeutic Services</u>						
Occupations Therapists	5	5	0	2	2	0
O.T. Aides	2	2	0	1	1	0
Physical Therapists	25	20	5	3	2	1
P.T. Aides	22	20	2	4	4	0
Speech Pathologists and Audiologists	5	4	1	1	0	1
Inhalation Therapists & Aides	31	29	2	2	2	0
Social Workers	13	11	2	2	1	1
S.W. Aides	4	4	0	0	0	0

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65

SUMMARY - WESTERN DIVISION (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total	Part-time	Total	Non-Budgeted
	Full-Time		Budgeted	
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	33	0	2	2
Medical Secretaries	59	10	2	1
Surgical Aides	33	2	0	0
Obs., Ped., & Other Physicians' Aides	20	1	0	0
ECG Technicians	18	3	1	0
EEG & other Med. Machine Tech.	7	1	0	0
Ambulance Drivers & Attendants	4	1	0	0
<u>Other Hospital Personnel</u>				
Food Service	462	135	14	1
Laundry	112	3	0	0
Housekeeping	411	61	6	0
Maintenance	232	28	11	0
Business Management	190	26	10	1
Clerical and Secretarial	305	56	2	0
All other hospital personnel	188	44	0	0

SUMMARY - ALBANY REGION (NEW YORK STATE COUNTIES ONLY)

Number of hospitals in region - 79
 Number of beds - 22,814
 Data based on reports from 74 of 79 hospitals

Category of Personnel	Current Staff			Additional Full-Time Personnel Needed		
	Total	Full-Time	Part-time	Total	Budgeted	Non-Budgeted
All Categories	27,159	20,768	6,391	2,061	1,814	247
All Prof. & Tech. Personnel	17,344	13,159	4,185	1,645	1,431	214
<u>Physicians</u>						
House Staff	335	330	5	30	30	0
Other Physicians	395	288	107	46	42	4
<u>Dental Services</u>						
House Staff	7	7	0	0	0	0
Other Dentists	25	21	4	1	1	0
Dental Hygienists	7	7	0	2	2	0
Dental Assistants	21	20	1	2	2	0
Dental Laboratory Technicians	8	8	0	0	0	0
<u>Clinical Laboratory Services</u>						
Clinical Laboratory Scientists	22	21	1	7	7	0
Clinical Laboratory Technologists	213	182	31	26	26	0
Cytotechnologists - Technicians	56	46	10	2	2	0
Histologic Technicians and Aides	69	63	6	2	2	0
Other Clinical Laboratory Personnel	472	353	119	8	8	0
<u>Dietary Services</u>						
Dietitians	100	66	34	10	10	0
Dietary Technicians	174	153	21	15	13	2

SUMMARY - ALBANY REGION - NEW YORK COUNTIES ONLY (CONTINUED)

Category of Personnel	Current Staff			Additional Full-Time Personnel Needed		
	Total	Full-Time	Part-Time	Total	Budgeted	Non-Budgeted
<u>Medical Record Services</u>						
Medical Record Librarians	60	52	8	11	7	4
Medical Record Technicians	73	67	6	7	7	0
Medical Record Clerks	250	204	46	6	6	0
<u>Nursing Services</u>						
R.N.	5,043	3,023	2,020	452	368	84
L.P.N.	1,864	1,400	464	274	239	35
Aides and Orderlies	5,438	4,670	768	491	436	55
Ward Clerks	449	351	98	46	43	3
<u>Pharmacy</u>						
Pharmacists	117	72	45	11	9	2
Assistants and Aides	87	59	28	2	2	0
<u>Radiologic Technology</u>						
Technologists and Technicians	334	288	46	17	17	0
Nuclear Med. & Rad. Ther. Tech. Assistants	18	17	1	2	1	1
	94	81	13	3	2	1
<u>Therapeutic Services</u>						
Occupational Therapists	48	41	7	28	27	1
O.T. Aides	65	64	1	11	11	0
Physical Therapists	86	63	23	17	16	1
P.T. Aides	91	79	12	4	4	0
Speech Pathologists and Audiologists	21	15	6	1	0	1
Recreation Therapists and Aides	56	51	5	5	4	1
Inhalation Therapists and Aides	108	87	21	5	4	1
Social Workers	89	74	15	33	26	7
S.W. Aides	38	37	1	13	10	3

SUMMARY - ALBANY REGION - NEW YORK COUNTIES ONLY (CONTINUED)

Category of Personnel	Current Staff		Additional Full-Time Personnel Needed	
	Total Full-Time	Part-time	Total Budgeted	Non-Budgeted
<u>Other Prof. & Tech. Personnel</u>				
Hospital Administrators & Assistants	157	1	3	2
Medical Secretaries	208	21	22	17
Surgical Aides	121	9	6	6
Obs., Ped., & other Physicians' Aides	69	16	5	5
ECG Technicians	65	18	8	5
EEG & other Med. Machine Tech.	22	2	3	2
Ambulance Drivers & Attendants	5	5	0	0
Personnel in Other Health Occupations	89	17	9	3
Trainees	34	108	0	0
	158			
	229			
	130			
	85			
	83			
	24			
	10			
	106			
	142			
<u>Other Hospital Personnel</u>				
Food Service	1,847	560	78	76
Laundry	602	36	47	37
Housekeeping	1,490	262	63	52
Maintenance	1,356	70	42	38
Business Management	664	111	32	28
Clerical and Secretarial Services	1,186	282	38	36
All other hospital personnel	1,087	255	99	99
	2,407			
	638			
	1,752			
	1,426			
	775			
	1,468			
	1,342			

NATIONAL HEALTH MANPOWER NEEDS: 1970 - 1980

As an addendum to this section on existing manpower as of 1969 in New York State Hospitals, a Public Health Service projection of health manpower needs in the coming decade is of interest for purposes of comparison. The following statistics were cited as evidence of increased health manpower needs by the National Institutes of Health Bureau of Health Professions Education and Manpower Training in its testimony on fiscal year 1971 program before a subcommittee of the House of Representatives Committee on Appropriations (part 3, page 1034).

<u>Discipline and Year</u>	<u>Supply</u>	<u>Need</u>	<u>Estimated Shortage</u>
Physicians - 1970	325,000	373,000	48,000
" - 1980	412,000	438,000	26,000
Dentists - 1970	102,200	120,000	17,800
" - 1980	119,400	176,000	56,600
Nurses - 1970	700,000	850,000	150,000
" - 1980	890,000	1,100,000	210,000
Allied Health - 1970	925,000	1,191,000	266,000
" " - 1980	1,344,000	1,776,000	432,000

ALLIED HEALTH MANPOWER - BACCALAUREATE OR HIGHER

<u>Field</u>	<u>Supply</u>	<u>Need</u>	<u>Estimated Shortage</u>
Medical Allied Manpower - 1970	210,000	271,000	61,000
" " " - 1980	320,000	413,000	93,000
Environmental Health Manpower - 1970	64,000	124,000	60,000
" " " - 1980	90,000	155,000	65,000

ALLIED HEALTH MANPOWER - LESS THAN BACCALAUREATE

<u>Field</u>	<u>Supply</u>	<u>Need</u>	<u>Estimated Shortage</u>
Medical Allied Manpower - 1970	325,000	396,000	71,000
" " " - 1980	475,000	580,000	105,000
Dental Allied Manpower - 1970	138,000	167,000	29,000
" " " - 1980	151,000	246,000	95,000
Environmental Health Manpower - 1970	188,000	233,000	45,000
" " " - 1980	308,000	382,000	74,000

In reviewing the three tables above, it should be kept in mind that the problem of health manpower shortages is not only one of gross numbers, but also relates to the disparity in the geographic distribution of health manpower within the states and metropolitan areas.

INTERNSHIP AND RESIDENCY PROGRAMS IN

ALBANY REGION

The source of material in this section is "Directory of Approved Internships and Residencies, 1969-1970, published by American Medical Association (1969) and released in January 1970.

Specific information on hospitals in the Albany Region having approved graduate training programs is presented as of June 30, 1969.

The letters "M" or "L" in parentheses after a hospital's name indicate that the hospital so designated participates in the clinical clerkship program of a medical school. The letter "M" signifies that the hospital is a major unit in the undergraduate teaching program of the medical school; the letter "L" indicates that the hospital is used to a limited extent in the school's teaching program. The letter "G" after a hospital's name indicates that the hospital is used by a medical school for graduate training programs only.

It is important to be aware of the exact meaning of the letter "G" after a hospital's name. The letter "G" is added only if the Dean of the medical school involved states that one or more of the following arrangements is in effect:

1. The house staff of the hospital is selected by officials of a specific medical school department, or by a joint committee of the hospital teaching staff and the medical school faculty.
2. There is some degree of actual exchange of residents between the G-designated hospital and the principal medical school teaching hospital.
3. There is regularly scheduled participation of medical school faculty (other than the hospital's own attending staff) in teaching programs at the G-designated hospital.
4. There is a contractual agreement (with or without financial commitment) for assistance in the organization and supervision of the graduate program in the G-designated hospital.

The use of a hospital for undergraduate clerkship teaching, or if faculty participation is as tenuous as an occasional lecture or consultation visit, or if the hospital's interns or residents are permitted to attend medical school teaching conferences only as visitors -- any of these stipulations does NOT entitle a hospital to a "G" designation.

3. Albany Medical College Affiliated Hospitals (M) (includes Albany Medical Center Hospital, Child's Hospital, and Veterans Administration Hospital)
 - Medical School Affiliation: Albany Medical College of Union University
 - Control: Miscellaneous
 - Approved Program: 95 residencies (Surgery, Medicine, Neurosurgery, Neurology, Ophthalmology, Otolaryngology, Pathology, Urology).
 - House Staff on Duty as of September 1, 1968: 14 foreign and 40 non-foreign graduates (residents).

4. Child's Hospital (G); 25 Hackett Boulevard
 - Medical School Affiliation: Albany Medical College of Union University
 - Control: Church
 - Number of beds: 82
 - Average length of stay: 6 days
 - Necropsy percentage: not available
 - Approved Program: Residencies in Ophthalmology and Plastic Surgery
 - House Staff on Duty as of September 1, 1968: ---
 - Note: Graduates of foreign medical schools are not eligible for appointment.

5. Memorial Hospital; Northern Boulevard
 - Medical School Affiliation: None
 - Control: Nonprofit corporation
 - Number of beds: 233
 - Average length of stay: 9 days
 - Necropsy percentage: 29%
 - Approved Program: 14 internships (rotating) and 3 residencies (Surgery and Plastic Surgery)
 - House Staff on Duty as of September 1, 1968: 8 foreign graduates (interns) and 3 foreign graduates (residents).

6. St. Peter's Hospital (L); 315 South Manning Boulevard
 - Medical School Affiliation: Albany Medical College of Union University
 - Control: Church
 - Number of beds: 405
 - Average length of stay: 9 days
 - Necropsy percentage: 37%
 - Approved Program: 20 internships (rotating) and 33 residencies (Surgery, Medicine, Obstetrics and Gynecology, Pathology, Pediatrics, Plastic Surgery).
 - House Staff on Duty as of July 1, 1968: 19 foreign graduates (interns) and 21 foreign graduates (residents).

7. State of New York Department of Health; 84 Holland Avenue
 - Medical School Affiliation: None
 - Control: State
 - Approved Program: 3 residencies (Pathology, General Preventive Medicine, Public Health).
 - House Staff on Duty as of September 1, 1968: ---

8. Veterans Administration Hospital (M); 113 Holland Avenue
 Medical School Affiliation: Albany Medical College of Union University
 Although the Albany Medical College does not own the hospital,
 it has exclusive right to appoint or nominate all members of the
 hospital staff assigned to services used by the school for
 teaching.
 Control: Veterans Administration
 Number of beds: 1005
 Average length of stay: 47 days
 Necropsy percentage: 66%
 Approved Program: Residencies (Surgery, Medicine, Neurosurgery,
 Neurology, Ophthalmology, Orthopedics, Otolaryngology,
 Pathology, Plastic Surgery, Psychiatry, Radiology, Thoracic
 Surgery, and Urology).
 House Staff on Duty as of September 1, 1968: ---
Note: Dental internships are available

CASTLE POINT

1. Veterans Administration Hospital
 Medical School Affiliation: none
 Control: Veterans Administration
 Number of beds: 258
 Average length of stay: Not available
 Necropsy percentage: Not available
 Approved Program: Residencies (Surgery)
 House Staff on Duty as of September 1, 1968: ---
Note: Graduates of foreign medical schools are not
 eligible for appointment.

COOPERSTOWN

1. Mary Imogene Bassett Hospital (M, L); Atwell Road
 Medical School Affiliation: Columbia University College of
 Physicians and Surgeons (Major); State University of New
 York Upstate Medical Center (limited)..
 Control: Nonprofit corporation
 Number of beds: 96
 Average length of stay: 10 days
 Necropsy percentage: 72%
 Approved Program: 13 internships (Rotating, Straight Medicine,
 Straight Surgery), and 14 residencies (Surgery, Medicine,
 Obstetrics and Gynecology, Pathology, Pediatrics, Psychiatry).
 House Staff on Duty as of September 1, 1968: 10 non-foreign graduates
 (interns) and 12 non-foreign graduates (residents)
Note: Graduates of foreign medical schools are not eligible
 for appointment.

KINGSTON

1. Benedictine Hospital; 105 Marys Avenue
 Medical School Affiliation: none
 Control: Church
 Number of beds: 213
 Average length of stay: Not available
 Necropsy percentage: 16%
 Approved Program: Residencies (Pathology)
 House Staff on Duty as of September 1, 1968: ---
Note: Graduates of foreign medical schools are not eligible for appointment.

2. Kingston Hospital; 400 Broadway
 Medical School Affiliation: none
 Control: Nonprofit corporation
 Number of beds: Not available
 Average length of stay: Not available
 Necropsy percentage: Not available
 Approved Program: Residencies (Pathology)
 House Staff on Duty as of September 1, 1968: ---
Note: Graduates of foreign medical schools are not eligible for appointment

3. Kingston Laboratory Hospitals; 400 Broadway
 Medical School Affiliation: None
 Control: Miscellaneous
 Number of beds: 433
 Average length of stay: 9 days
 Necropsy percentage: 23%
 Approved Program: 2 residencies (Pathology)
 House Staff on Duty as of September 1, 1968: ---

POUGHKEEPSIE

1. Hudson River State Hospital; Branch B.
 Medical School Affiliation: None
 Control: State
 Number of beds: 3,848
 Average length of stay: 50 days
 Necropsy percentage: 16%
 Approved Program: 12 residencies (Psychiatry)
 House Staff on Duty as of September 1, 1968: 9 foreign and
 1 non-foreign graduates (residents).

POUGHKEEPSIE
(continued)

2. St. Francis Hospital; North Road
 Medical School Affiliation: none
 Control: Church
 Number of beds: 253
 Average length of stay: 9 days
 Necropsy percentage: 34%
 Approved Program: 10 internships (Rotating) and 1 residency
 (Pathology)
 House Staff on Duty as of September 1, 1968: 2 foreign graduates
 (interns)

3. Vassar Brothers Hospital; Reade Place
 Medical School Affiliation: none
 Control: Nonprofit corporation
 Number of beds: 252
 Average length of stay: 8 days
 Necropsy percentage: 37%
 Approved Program: 12 internships (Rotating) and 4 residencies
 (Pathology)
 House Staff on Duty as of September 1, 1968: 8 foreign and
 1 non-foreign graduates (interns); 1 foreign graduate (resident).

RHINEBECK

1. Astor Home for Children; 36 Mill Street
 Medical School Affiliation: None
 Control: Church
 Number of beds: 74
 Average length of stay: not available
 Necropsy percentage: not available
 Approved Program: 2 residencies (Child Psychiatry)
 House Staff on Duty as of September 1, 1968: 1 foreign graduate
 (resident).

SCHEENECTADY

1. Ellis Hospital (G); 1101 Nott Street
 Medical School Affiliation: Albany Medical College of Union University
 Control: Nonprofit corporation
 Number of beds: 464
 Average length of stay: 10 days
 Necropsy percentage: 49%
 Approved Program: 25 internships (Rotating), and 16 residencies
 (Surgery, Obstetrics and Gynecology, Orthopedics, Pathology).
 House Staff on Duty as of September 1, 1968: 28 foreign graduates
 (interns); 15 foreign and 1 non-foreign graduates (residents).

SCHENECTADY
(continued)

2. Ellis Hospital - Sunnyview Rehabilitation Center
 Medical School Affiliation: none
 Control: Miscellaneous
 Number of beds: Not available
 Average length of stay: Not available
 Necropsy percentage: Not available
 Approved Program: 4 residencies (Orthopedics)
 House Staff on Duty as of September 1, 1968: 4 foreign graduates
 (residents).

3. St. Clare's Hospital; 600 McClellan Street
 Medical School Affiliation: None
 Control: Church
 Number of beds: 235
 Average length of stay: 9 days
 Necropsy percentage: 32%
 Approved Program: 15 internships (Rotating) and residencies
 (Obstetrics and Gynecology)
 House Staff on Duty as of September 1, 1968: 12 foreign graduates
 (interns).

4. Schenectady Affiliated Program
 Medical School Affiliation: none
 Control: Miscellaneous
 Number of beds: Not available
 Average length of stay: Not available
 Necropsy percentage: Not available
 Approved Program: 4 residencies (Obstetrics and Gynecology)
 House Staff on Duty as of September 1, 1968: ---
Note: Graduates of foreign medical schools are not eligible
 for appointment.

5. Schenectady County Child Guidance Center; Union Street & Seward Place
 Medical School Affiliation: None
 Control: Nonprofit Corporation
 Number of beds: 0
 Approved Program: 4 residencies (Child psychiatry)
 House Staff on Duty as of September 1, 1968: ---

6. Sunnyview Rehabilitation Center; 1270 Belmont Avenue
 Medical School Affiliation: none
 Control: Nonprofit corporation
 Number of beds: 77
 Average length of stay: 42 days
 Necropsy percentage: Not available
 Approved Program: Residencies (Orthopedics)
 House Staff on Duty as of September 1, 1968: ---

TROY

1. Samaritan Hospital; Peoples and Burdett Avenues
Medical School Affiliation: none
Control: Nonprofit corporation
Number of beds: 232
Average length of stay: 9 days
Necropsy percentage: 23%
Approved Program: 16 internships (Rotating); 3 residencies
(Pathology).
House Staff on Duty as of September 1, 1968: 9 foreign graduates
(interns).

WINGDALE

1. Harlem Valley State Hospital
Medical School Affiliation: none
Control: State
Number of beds: 4,235
Average length of stay: Not available
Necropsy percentage: 22%
Approved Program: 12 residencies (psychiatry)
House Staff on Duty as of September 1, 1968: 2 foreign graduates
(residents)

M A S S A C H U S E T T S

PITTSFIELD

1. Berkshire Medical Center Hospitals (G); 725 North Street
Medical School Affiliation: Albany Medical College of Union University
Control: Nonprofit corporation
Number of beds: 412
Average length of stay: 8 days
Necropsy percentage: 56%
Approved Program: 18 internships (Rotating); 31 residencies
(Anesthesiology, Surgery, Medicine, Obstetrics and Gynecology,
Pathology, Pediatrics).
House Staff on Duty as of September 1, 1968; 14 foreign and
2 non-foreign graduates (interns); 26 foreign graduates
(residents)

STOCKBRIDGE

1. Austen Riggs Center; Main Street
Medical School Affiliation: None
Control: Nonprofit corporation
Number of beds: 42
Average length of stay: 300 days
Necropsy percentage: 0%
Approved Program: 3 residencies (Psychiatry)
House Staff on Duty as of September 1, 1968: 1 foreign
graduate (resident).

VERMONT

None

APPROVED INTERNSHIPS IN ALBANY REGION
(as of July 30, 1969)

Intern training programs in the following hospitals located within the Albany Region have been reviewed by the A.M.A. Council on Medical Education and Internship Review Committee, and have been approved as furnishing acceptable intern training in accordance with A.M.A. standards.

Two types of internship - Rotating and Straight - are approved by the Council. Descriptions are given below.

The average daily census permits a calculation of the occupancy in relation to the total beds.

The salary data supplied by the hospital may be out of date; current information may be obtained directly from the hospital.

The authorized complement of interns indicates the number requested by the hospital and approved by the Council.

All internships in the following list are of 12 months' duration.

The number and types of internships as listed represent appointments offered for the intern year 1970-1971, while the data describing the various hospitals represent a 12-month period ending generally September 30, 1968.

REQUIREMENTS FOR ROTATING INTERNSHIPS

As of 1966, all rotating internships must contain a mandatory assignment of not less than 4, nor more than 6, months to the internal medicine service, plus an assignment to at least one other service. (see further description below under "Listings of Rotating Internships").

Each hospital staff must make a firm decision and must publicize clearly the limits of the rotational possibilities to be offered to prospective interns.

LISTINGS OF ROTATING INTERNSHIPS

Hospitals that prefer to offer a rotating internship that is limited to the 4 major clinical services of internal medicine, surgery, obstetrics-gynecology, and pediatrics, and without a specific "major" may use the designation Rotating "O" for such programs, in addition to programs that follow the pattern listed below for Rotating "O".

The meanings of the various types of rotating internships, with their accompanying designations, are as follows:

Rotating "O" - A mandatory assignment of at least 4 months, but not more than 5 months, to internal medicine, plus other

assignments of less than 4 months, but of not less than 2 months' duration. Possible combinations for months of assignment are:

Medicine 4, Electives 3, 3, 2
 Medicine 4, Electives 2, 2, 2, 2
 Medicine 5, Electives 3, 2, 2

Rotating "1" - A mandatory assignment of not less than 6, but of not more than 8, months to internal medicine, plus an elective assignment of not less than 2 months to at least one other service. Examples:

Medicine 8, Electives 4
 Medicine 8, Electives 2, 2
 Medicine 7, Electives 5
 Medicine 7, Electives 3, 2
 Medicine 6, Electives 4, 2
 Medicine 6, Electives 3, 3
 Medicine 6, Electives 2, 2, 2

Rotating "2" - A mandatory assignment of 4 to 6 months on internal medicine, plus at least 4 months of major emphasis on surgery, but not more than 2 other assignments of at least 2 months each. Examples:

Medicine 4, Surgery 8
 Medicine 4, Surgery 6, Elective 2
 Medicine 4, Surgery 5, Elective 3
 Medicine 4, Surgery 4, Elective 4
 Medicine 4, Surgery 4, Electives 2, 2
 Medicine 5, Surgery 7
 Medicine 5, Surgery 5, Elective 2
 Medicine 5, Surgery 4, Elective 3
 Medicine 6, Surgery 6
 Medicine 6, Surgery 4, Elective 2

Rotating "3" - A mandatory assignment of 4 to 6 months on internal medicine, plus at least 4 months of major emphasis on obstetrics-gynecology, but not more than two other assignments of at least 2 months each. Examples:

Medicine 4, Obstetrics-gynecology 8
 Medicine 4, Obstetrics-gynecology 6, Elective 2
 Medicine 4, Obstetrics-gynecology 5, Elective 3
 Medicine 4, Obstetrics-gynecology 4, Elective 4
 Medicine 4, Obstetrics-gynecology 4, Electives 2, 2
 Medicine 5, Obstetrics-gynecology 7
 Medicine 5, Obstetrics-gynecology 5, Elective 2
 Medicine 5, Obstetrics-gynecology 4, Elective 3
 Medicine 6, Obstetrics-gynecology 6
 Medicine 6, Obstetrics-gynecology 4, Elective 2

Rotating "4" - A mandatory assignment of 4 to 6 months on internal medicine, plus at least 4 months of major emphasis on pediatrics, but not more than two other assignments of at least 2 months each. Examples:

Medicine 4, Pediatrics 8
 Medicine 4, Pediatrics 6, Elective 2
 Medicine 4, Pediatrics 5, Elective 3
 Medicine 4, Pediatrics 4, Elective 4
 Medicine 4, Pediatrics 4, Electives 2, 2
 Medicine 5, Pediatrics 7
 Medicine 5, Pediatrics 5, Elective 2
 Medicine 5, Pediatrics 4, Elective 3
 Medicine 6, Pediatrics 6
 Medicine 6, Pediatrics 4, Elective 2

Rotating "5" - A mandatory assignment of 4 to 6 months on internal medicine, plus at least 4 months of major emphasis on pathology, but not more than two other assignments of at least 2 months each. Examples:

Medicine 4, Pathology 8
 Medicine 4, Pathology 6, Elective 2
 Medicine 4, Pathology 5, Elective 3
 Medicine 4, Pathology 4, Elective 4
 Medicine 4, Pathology 4, Electives 2, 2
 Medicine 5, Pathology 7
 Medicine 5, Pathology 5, Elective 2
 Medicine 5, Pathology 4, Elective 3
 Medicine 6, Pathology 6
 Medicine 6, Pathology 4, Elective 2

Rotating "6" - A mandatory assignment of 4 to 6 months on internal medicine, plus at least 4 months of major emphasis on psychiatry, but not more than two other assignments of at least 2 months each. Examples:

Medicine 4, Psychiatry 8
 Medicine 4, Psychiatry 6, Elective 2
 Medicine 4, Psychiatry 5, Elective 3
 Medicine 4, Psychiatry 4, Elective 4
 Medicine 4, Psychiatry 4, Electives 2, 2
 Medicine 5, Psychiatry 5, Elective 2
 Medicine 5, Psychiatry 4, Elective 3
 Medicine 5, Psychiatry 7
 Medicine 6, Psychiatry 6
 Medicine 6, Psychiatry 4, Elective 2

Rotating "7" - A mandatory assignment of 4 to 6 months on internal medicine, plus at least 4 months of major emphasis on radiology, but not more than two other assignments of at least 2 months each. Examples:

Medicine 4, Radiology 8
Medicine 4, Radiology 6, Elective 2
Medicine 4, Radiology 5, Elective 3
Medicine 4, Radiology 4, Elective 4
Medicine 4, Radiology 4, Electives 2, 2
Medicine 5, Radiology 7
Medicine 5, Radiology 5, Elective 2
Medicine 5, Radiology 4, Elective 3
Medicine 6, Radiology 6
Medicine 6, Radiology 4, Elective 2

Rotating "8" - A mandatory assignment of 4 to 6 months on internal medicine, plus at least 4 months of major emphasis on anesthesiology, but not more than two other assignments of at least 2 months each. Examples:

Medicine 4, Anesthesiology 8
Medicine 4, Anesthesiology 6, Elective 2
Medicine 4, Anesthesiology 5, Elective 3
Medicine 4, Anesthesiology 4, Elective 4
Medicine 4, Anesthesiology 4, Electives 2, 2
Medicine 5, Anesthesiology 7
Medicine 5, Anesthesiology 5, Elective 2
Medicine 5, Anesthesiology 4, Elective 3
Medicine 6, Anesthesiology 6
Medicine 6, Anesthesiology 4, Elective 2

Rotating "9" - This listing indicates that the hospital offers all types of rotating internships (Rotating "0" through Rotating "8").

REQUIREMENTS FOR A STRAIGHT INTERNSHIP

A straight internship is one that provides experience on a single service, although one or more subspecialties may be included. Straight internships are approved in internal medicine, surgery, pediatrics, obstetrics-gynecology, and pathology. The straight internship requires that the hospital have a concurrent, fully approved residency in the specialty.

NEW YORK

ALBANY

1. ALBANY MEDICAL CENTER HOSPITAL

- A. Program Director: William V. Kinnard, M.D.
Average daily census: 708
Total admissions: 23,171
Total number of deaths: 941
Outpatient clinic visits: 55,640
Emergency room visits: 40,720
Referred visits: 35,982
Beginning salary: \$7,500 annually plus partial maintenance
Authorized complement: 10
Type: Rotating "0"
Total number sought through NIRMP*: 10

- B. Program Director: Stuart Bondurant, M.D.
Authorized complement: 8
Type: Rotating "1"
Total number sought through NIRMP: 8

- C. Program Director: Jules S. Golden, M.D.
Authorized complement: 6
Type: Rotating "6"
Total number sought through NIRMP: 6

- D. Program Director: Stuart Bondurant, M.D.
Authorized complement: 14
Type: Straight medicine
Total number sought through NIRMP: 14

- E. Program Director: Charles Leonard Eckert, M.D.
Authorized complement: 11
Type: Straight surgery
Total number sought through NIRMP: 11

- F. Program Director: Ian H. Porter, M.B.B.S.
Authorized complement: 3
Type: Straight pediatrics
Total number sought through NIRMP: 3

* The abbreviation "NIRMP" refers to National Intern and Resident Matching Program.

G. Program Director: Wilbur A. Thomas, Jr., M.D.
 Authorized complement: 2
 Type: Straight pathology
 Total number sought through NIRMP: 2

2. MEMORIAL HOSPITAL

Program Director: Martin Lester Ryan, M.D.
 Average daily census: 216
 Total admissions: 7,793
 Total number of deaths: 291
 Outpatient clinic visits: 4,893
 Emergency room visits: 24,393
 Referred visits: 12,384
 Beginning salary: \$8,000 annually with partial maintenance
 Authorized complement: 14
 Type: Rotating "0" and "2"
 Total number sought through NIRMP: 14

3. ST. PETER'S HOSPITAL

Program Director: William Henry O'Brien, M.D.
 Average daily census: 347
 Total admissions: 13,662
 Total number of deaths: 430
 Outpatient clinic visits: 7,559
 Emergency room visits: 26,507
 Referred visits: 27,438
 Beginning salary: \$7,500 with no maintenance furnished
 Authorized complement: 20
 Type: Rotating "0"
 Total number sought through NIRMP: 20

COOPERSTOWN

MARY IMOGENE BASSETT HOSPITAL (internship begins in June)

A. Program Director: Charles Allen Ashley, M.D.
 Average daily census: 77
 Total admissions: 3,071
 Total number of deaths: 132
 Outpatient clinic visits: 47,833
 Emergency room visits: 9,142
 Referred visits: 609
 Beginning salary: \$6,500 with partial maintenance
 Authorized complement: 6
 Type: Rotating "0"
 Total number sought through NIRMP: 6

- B. Program Director: Charles Allen Ashley, M.D.
Authorized complement: 1
Type: Rotating "6"
Total number sought through NIRMP: 1

- C. Program Director: Charles Allen Ashley, M.D.
Authorized complement: 3
Type: Straight medicine
Total number sought through NIRMP: 3

- D. Program Director: Charles Allen Ashley, M.D.
Authorized complement: 3
Type: Straight surgery
Total number sought through NIRMP: 3

POUGHKEEPSIE

1. ST. FRANCIS HOSPITAL

- A. Program Director: Richard D. H. Flaherty, M.D.
Average daily census: 212
Total admissions: 9,771
Total number of deaths: 301
Outpatient clinic visits: 2,144
Emergency room visits: 19,163
Referred visits: 69,973
Beginning salary: \$4,800 with full maintenance
Authorized complement: 5
Type: Rotating "0"
Total number sought through NIRMP: 5

- B. Program Director: Richard D. H. Flaherty, M.D.
Authorized complement: 5
Type: Rotating "2"
Total number sought through NIRMP: 5

2. VASSAR BROTHERS HOSPITAL

Program Director: Not available
Average daily census: 265
Total admissions: 11,056
Total number of deaths: 406
Outpatient clinic visits: 3,344
Emergency room visits: 25,968
Referred visits: 50,304
Beginning salary: \$4,800 with full, partial, or no maintenance
Authorized complement: 12
Type: Rotating "0", "1", "2", "3", and "8"
Total number sought through NIRMP: 12

SCHENECTADY1. ELLIS HOSPITAL

Program Director: George D. Vlahides, M.D.
 Average daily census: 373
 Total admissions: 16,928
 Total number of deaths: 559
 Outpatient clinic visits: 12,549
 Emergency room visits: 25,233
 Referred visits: 18,476
 Beginning salary: \$6,300 with full maintenance
 Authorized complement: 25
 Type: Rotating "0"
 Total number sought through NIRMP: 25

2. ST. CLARE'S HOSPITAL

Program Director: Philip Parillo, M.D.
 Average daily census: 204
 Total admissions: 8,511
 Total number of deaths: 327
 Outpatient clinic visits: 41,186
 Emergency room visits: 15,480
 Referred visits: not available
 Beginning salary: \$6,000 with full or partial maintenance
 (variation in salary or maintenance for
 married intern).
 Authorized complement: 15
 Type: Rotating "0", "1", and "2"
 Total number sought through NIRMP: 15

TROYSAMARITAN HOSPITAL

Program Director: Gilbert Arden Clark, M.D.
 Average daily census: 218
 Total admissions: 9,908
 Total number of deaths: 271
 Outpatient clinic visits: 1,373
 Emergency room visits: 15,036
 Referred visits: 28,375
 Beginning salary: \$8,000 with partial maintenance
 Authorized complement: 16
 Type: Rotating "0", "1", "2", "3", "4", and "7"
 Total number sought through NIRMP: 16

M A S S A S H U S E T T S

PITTSFIELD

BERKSHIRE MEDICAL CENTER HOSPITALS

Program Director: Not available
Average daily census: 329
Total admissions: 14,358
Total number of deaths: 365
Outpatient clinic visits: 16,602
Emergency room visits: 21,205
Referred visits: 5,206
Beginning salary: \$6,200 with partial maintenance
Authorized complement: 18
Type: Rotating "0", "1", "2", "3", "4", "5", and "6"
Total number sought through NIRMP: 18

APPROVED RESIDENCIES IN ALBANY REGION

Residency training programs in the Albany Region are listed by specialty. All have been approved by the Council on Medical Education.

The average daily census for each specialty service usually reflects a 12-month period ending September 30, 1968.

Total admissions include transfers from other services. Average daily census multiplied by 365 gives total inpatient days; this divided by admissions gives average length of stay.

The total number of deaths and the necropsy percentage are shown for each specialty so that one can calculate the actual number of necropsies performed for the particular service, and can further calculate mortality rates as an index of the severity of illness admitted to the particular service.

Outpatient visits may include emergency room visits as well.

The salary ranges lists the beginning minimum salary for a single resident and the maximum salary in the final year of the approved program. Full maintenance is provided for single residents, and additional benefits (including additional salary) are paid to married residents, then the term "full or partial maintenance" is used. The term "full maintenance" by itself means full maintenance for both single and married. The term "no maintenance" indicates that the hospital pays salary only. Salary data may be out of date; current information may be obtained directly from the hospital.

ANESTHESIOLOGY

Special requirements for residency training in anesthesiology include the ruling by the Council on Medical Education that after July 1, 1973 only those programs will be approved which are adjudged to have the educational resources to provide three years of training in this specialty. Institutions presently offering two-year programs which are approved must expand the scope of education to include a more thorough preparation in the pertinent basic sciences and related fields of general medicine. The only hospital in the Albany Region which presently offers an approved two-year residence in Anesthesiology is Albany Medical Center Hospital.

ALBANY, NEW YORK

ALBANY MEDICAL CENTER HOSPITAL

Program Director: Kurt F. Schmidt, M.D.
Total number of anesthetics: 11,000 per year
Consultations on non-surgical patients: 50 per year
Length of approved program: 2 years
Residencies offered (1970-1971):
 1st year - 5
 2nd year - 5
 Total (all years) - 10
Salary per year: Minimum \$8,100; maximum \$8,800 - with partial maintenance

DERMATOLOGY

The practice of dermatology is concerned largely with ambulatory patients, so that it is essential that an active outpatient service be available to furnish sufficient clinical material. Opportunity to observe the dermatologic manifestations of acute contagious diseases is highly desirable.

ALBANY, NEW YORK

ALBANY MEDICAL CENTER HOSPITAL

Program Director: Not available
Average daily census: 5
Admissions (including transfers): 119
Deaths: 1
Necropsy percentage: 100%
Outpatient visits: 956
Length of approved program: 3 years
Residencies offered (1970-1971):
 1st year - 2
 2nd year - 2
 3rd year - 2
 Total (all years) - 6
Salary per year: Minimum \$8,100; maximum \$9,600 with partial maintenance.

INTERNAL MEDICINE

An approved residency program in internal medicine should not be limited entirely to internal medicine and its subdivisions, but might well include a reasonable amount of training in psychiatry, neurology, dermatology, and pediatrics.

ALBANY, NEW YORK1. ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital and Veterans Administration Hospital)

Program Director: Stuart Bonduant, M.D.

Average daily census: AMCH - 184 and VAH - 352

Admissions (includes transfers): AMCH - 6,469 and VAH - 4057

Deaths: AMCH - 515 with 64% necropsy and
VAH - 371 with 67% necropsy

Outpatient visits: AMCH - 6,509 and VAH - 5,056

Residencies offered (1970-1971):

1st year - 12

2nd year - 12

3rd year - 4

4th year - 2

Total (all years) - 30

Salary per year:

AMCH - Minimum \$8,100 and maximum \$10,500 with partial maintenance

VAH - Minimum \$8,400 and maximum \$11,800 - information on maintenance not available

2. ST. PETER'S HOSPITAL

Program Director: William Henry O'Brien, M.D.

Average daily census: 146

Admissions (including transfers): 3,637

Deaths: 324 with 38% necropsy

Outpatient visits: 3,470

Residencies offered (1970-1971):

1st year - 6

2nd year - 3

3rd year - 3

Total (all years) - 12

Salary per year: Minimum \$8,500 and maximum \$11,500. No information available on maintenance.

COOPERSTOWN, NEW YORK

MARY IMOGENE BASSETT HOSPITAL

Program director: Malcolm Irving Page, M.D.
Average daily census: 27
Admissions (includes transfers): 964
Deaths: 72 with 64% necropsy
Outpatient visits: 11,138
Residencies offered (1970-1971):
 1st year - 3
 2nd year - 1
 3rd year - 1
 Total (all years) - 5
Salary per year: Minimum \$7,500 and maximum \$9,000 with partial maintenance

PITTSFIELD, MASSACHUSETTS

BERKSHIRE MEDICAL CENTER HOSPITALS

Program Director: Ellis Mark Fribush, M.D.
Average daily census: 130
Admissions (including transfers): 4,221
Deaths: 136 with 59% necropsy
Outpatient visits: 12,507
Residencies offered (1970-1971):
 1st year - 3
 2nd year - 3
 3rd year - 2
 Total (all years) - 8
Salary per year: Minimum \$6,800 and maximum \$8,900 with partial maintenance

NEUROLOGICAL SURGERY

Well rounded training must be provided with adequate clinical material. The minimal requirement is 200 major procedures including at least 25 verified intracranial neoplasms, for each resident completing his training each year.

The period of training consists of four years and must be preceded by at least one year of approved internship, preferably in

Surgery. If the neurosurgical training is begun after a rotating internship, additional training of at least six months in Surgery must be arranged by the Chief of the Neurosurgical Service.

ALBANY, NEW YORK

ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital and Veterans Administration Hospital)

Program Director: Richard A. Lende, M.D.
Average daily census: AMCH - 37 and VAH - 9
Admissions (including transfers): AMCH - 1,230 and VAH - 196
Deaths: AMCH - 69 with 85% necropsy; VAH - 16 with 63% necropsy
Outpatient visits: AMCH - 93 and VAH - 390
Residencies offered (1970-1971)
1st year - 1
2nd year - 1
3rd year - 1
4th year - 1
Total (all years) - 4
Salary per year: AMCH - Minimum \$8,800 and maximum \$11,500 with partial maintenance; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

NEUROLOGY

The goal in an approved program in neurology is to train medical neurologists. Important is adequate instruction in the techniques and interpretations of various diagnostic procedures, including roentgenologic studies, electroencephalography, electromyography, psychological testing, biochemical methods, and ophthalmological and otological procedures especially pertinent to clinical neurology.

Experience in child neurology, including the neurological examination of newborns and infants, is essential. A working knowledge of the content and procedures of physical medicine and rehabilitation services is an important ingredient of an approved program.

ALBANY, NEW YORK

ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital and Veterans Administration Hospital)

Program Directors: Kevin D. Barron, M.D. (for affiliated hospitals and for AMCH)

Stanley M. Ball, M.D. (for VAH)

Average daily census: AMCH - 24 and VAH - 23

Admissions (includes transfers): AMCH - 915 and VAH - 319

Deaths: AMCH - 18 with 50% necropsy;

VAH - 9 with 56% necropsy

Outpatient visits: AMCH - 476 and VAH - 568

Residencies offered (1970-1971): Affiliated hospitals -

1st year - 4

2nd year - 3

3rd year - 3

4th year - 3

Total (all years) - 13

Salary per year: AMCH - Minimum \$8,100 and maximum \$9,600 with partial maintenance.

VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

OBSTETRICS - GYNECOLOGY

A good residency program in obstetrics-gynecology can be given in large or in small hospitals. In general, the hospital should have about 300 obstetrical admissions and 100 gynecological admissions per resident per year.

Since July 1, 1962 no residency program in this specialty of less than 3 years' duration has been approved. A minimum of 18 months of obstetrics and 18 months of gynecology is required.

Exchange of residents between approved programs within the specialty is acceptable -- e.g., the approved program of Ellis Hospital and St. Clare's Hospital, both in Schenectady, N.Y.

ALBANY, NEW YORK1. ALBANY MEDICAL CENTER HOSPITAL

Program Director: Theodore M. King, M.D., Ph.D.
 Average daily census: 63
 Admissions (includes transfers): 4,151
 Deaths: 10 with 20% necropsy
 Outpatient visits: 4,202
 Length of approved program: 3 years
 Residencies offered (1970-1971):
 1st year - 4
 2nd year - 4
 3rd year - 4
 Total (all years) - 12
 Salary per year: Minimum \$8,100 and maximum \$9,600 with partial maintenance

2. ST. PETER'S HOSPITAL

Program Director: James Joseph Cassidy, M.D.
 Average daily census: 65
 Admissions (includes transfers): 4,691
 Deaths: 2 with 0% necropsy
 Outpatient visits: 1,432
 Length of approved program: Not given
 Residencies offered (1970-1971): No information available
 Salary per year: Minimum \$8,500 and maximum \$11,500. No information on maintenance available.

COOPERSTOWN, NEW YORKMARY IMOGENE BASSETT HOSPITAL

Program Director: Olaf Juell Severud, M.D.
 Average daily census: 6
 Admissions (includes transfers): 457
 Deaths: 0
 Outpatient visits: 5,000
 Length of approved program: 3 years
 Residencies offered (1970-1971):
 1st year - 1
 Total (all years) - 1
 Salary per year: Minimum \$7,500 and maximum \$9,000 with partial maintenance

SCHENECTADY, NEW YORK

SCHENECTADY AFFILIATED PROGRAM (Ellis Hospital and St. Clare's Hospital)

Program Director: William Henry Brown, M.D.
Average daily census: Ellis - 33 and St. Clare's - 6
Admissions (includes transfers): Ellis - 2,405 and St. Clare's - 1,081*
Deaths: Ellis - 7 with 71% necropsy;
 St. Clare's - 3 with 0% necropsy.
Outpatient visits: Ellis - 897 and St. Clare's - 423
Length of approved program: 4 years
Residencies offered (1970-1971):
 1st year - 1
 2nd year - 1
 3rd year - 1
 4th year - 1
 Total (all years) - 4
Salary per year: Ellis - Minimum \$6,930 and maximum \$8,520;
 St. Clare's - Minimum \$8,760 with no maximum reported.
 In both hospitals, full or partial maintenance is provided.

PITTSFIELD, MASSACHUSETTS

BERKSHIRE MEDICAL CENTER HOSPITALS

Program director: Jason Allan Reder, M.D.
Average daily census: 41
Admissions (includes transfers): 2,431
Deaths: None
Outpatient visits: 1,212
Length of approved program: 4 years
Residencies offered (1970-1971):
 1st year - 2
 2nd year - 1
 3rd year - 1
 4th year - 1
 Total (all years) - 5
Salary per year: Minimum \$6,200 and maximum \$9,200 with partial maintenance

* indicates discharges instead of admissions

OPHTHALMOLOGY

In addition to one year of internship, the candidate for certification by the American Board of Ophthalmology must have had 3 years of progressive residency training. Residencies of 5 years' duration, including training in both ophthalmology and otolaryngology, may be approved provided the training in ophthalmology is at least 36 months in duration.

Instruction in surgical technique should be sufficient to enable residents to undertake operative work under supervision.

A well organized and supervised active outpatient service supervised daily by an attending ophthalmologist is essential.

ALBANY, NEW YORK

ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital, Child's Hospital and Veterans Administration Hospital).

Program Director: Robert D. Reinecke, M.D.

Average daily census: AMCH - 10, Child's - 13, VAH - 11

Admissions (includes transfers): AMCH - 524, Child's - 745, VAH - 166

Deaths: AMCH - 1 with 0% necropsy, Child's - not available,
VAH - none

Outpatient visits: AMCH - 4,584, Child's - 41, VAH - 470

Residencies offered (1970-1971):

1st year - 4

2nd year - 4

3rd year - 4

Total (all years) - 12

Salary per year: AMCH - Minimum \$8,100 and maximum \$9,600 with partial maintenance; Child's - not available; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

ORTHOPEDIC SURGERY

Surgical and orthopedic facilities must be satisfactory and clinical material adequate to afford residents sufficient experience in the correction of congenital and acquired deformities, and in the treatment of fractures and other acute and chronic disorders interfering with proper function of the skeletal system.

One year of general surgical training in addition to one year of internship is recommended prior to the 3-year residency in orthopedics.

ALBANY, NEW YORK

ALBANY MEDICAL CENTER HOSPITAL - VETERANS ADMINISTRATION HOSPITAL

Program Director: Crawford J. Campbell, M.D.
Type of Training: AMCH - Adult orthopedics, Children's orthopedics, and fractures; VAH - Adult orthopedics.
Average daily census: AMCH - 61 and VAH - 9
Admissions (includes transfer): AMCH - 1,611* and VAH - 304
Deaths: AMCH - 5 with 80% necropsy; VAH - 4 with 50% necropsy
Outpatient visits: AMCH - 1,387 and VAH - 598
Residencies offered (1970 - 1971):
1st year - 4
2nd year - 4
3rd year - 4
4th year - 3
Total (all years) - 15
Salary per year: AMCH - Minimum \$8,100 and maximum \$11,500 with partial maintenance; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

SCHENECTADY, NEW YORK

ELLIS HOSPITAL - SUNNYVIEW REHABILITATION CENTER

Program Directors: Wyllys A. Dunham, Jr., M.D. and William Edwin Gazeley, M.D.
Type of training: Adult orthopedics, Children's orthopedics, and fractures..
Average daily census: EH - 54 and SRC - 53
Admissions (includes transfers): EH - 1,677 and SRC - 543
Deaths: EH - 19 with 53% necropsy; SRC - 3 with 0% necropsy
Outpatient visits: EH - 475 and SRC - 26,183
Residencies offered (1970-1971):
1st year - 2
2nd year - 1
3rd year - 1
Total (all years) - 4
Salary per year: Minimum \$7,260 and maximum \$8,520 with full or partial maintenance.

* indicates discharges instead of admissions

OTOLARYNGOLOGY

Prior to July 1, 1960 an approved residency in otolaryngology was of 3 years' duration; since that date, 4 years of training (in addition to one year of internship) has been required. One of the 4 years should be spent in an approved residency in general surgery.

ALBANY, NEW YORK

ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital and Veterans Administration Hospital)

Program Director: Floyd Barry Goffin, M.D.
Average daily census: AMCH - 13 and VAH - 9
Admissions (includes transfers): AMCH - 813 and VAH - 219
Deaths: AMCH - 7 with 71% necropsy; VAH - 4 with 50% necropsy
Outpatient visits: AMCH - 2,034 and VAH - 975
Residencies offered (1970-1971):
 1st year - 2
 2nd year - 2
 3rd year - 2
 Total (all years) - 6
Salary per year: AMCH - Minimum \$8,800 and maximum \$10,500 with partial maintenance; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

PATHOLOGY

Correlative experience in anatomic pathology and clinical pathology, in addition to relating these experiences to the patient, is essential in an approved residency in pathology. Institutions with a necropsy percentage of less than 25 will not ordinarily be approved; those with percentages between 25 and 40 will be given special scrutiny.

Approval is granted for residency training in pathology in the following categories:

1. Both anatomic and clinical pathology for a total of 4 years.
2. Both anatomic and clinical pathology for a total of 2 years.
3. Anatomic pathology alone for 3 or more years.
4. Anatomic pathology for one year.
5. Clinical pathology for 3 or more years.
6. Clinical pathology for one year.
7. Special pathology alone for one year (includes forensic pathology, and neuropathology research).

ALBANY, NEW YORK

1. ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital and Veterans Administration Hospital).

Program Director: Wilbur A. Thomas, Jr., M.D.
Number of necropsies: AMCH - 599 and VAH - 334
Total number of laboratory examinations: AMCH - Not available
VAH - 473,000
Number of surgical specimens: AMCH - 9,066* and VAH - 1773*
Length of approved program: 4 years (anatomic pathology and clinical pathology).
Residencies offered (1970-1971):
1st year - 3
2nd year - 3
3rd year - 2
4th year - 2
Total (all years) - 10
Salary per year: AMCH - Minimum \$7,500 and maximum \$10,500 with partial maintenance; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

2. ST. PETER'S HOSPITAL

Program Director: Theodore Smith Beecher, M.D.
Number of necropsies: 193
Total number of laboratory examinations: 383,772
Number of surgical specimens: 6,266
Number of surgical specimens examined microscopically: 5,954
Length of approved program: 4 years (anatomic pathology and clinical pathology).
Residencies offered (1970-1971):
1st year - 1
2nd year - 1
3rd year - 1
4th year - 1
Total (all years) - 4
Salary per year: Minimum \$8,500 and maximum \$11,500 with no maintenance

3. STATE OF NEW YORK DEPARTMENT OF HEALTH

Program Director: Albert Hall Harris, II, M.D.
Length of approved program: 1 year (clinical pathology).
No additional information available.

* Same number of surgical specimens examined microscopically

COOPERSTOWN, NEW YORK

MARY IMOGENE BASSETT HOSPITAL

Program Director: Clinton VanZandt Hawn, M.D.
Number of necropsies: 111
Total number of laboratory examinations: 197,267
Number of surgical specimens: 1,783
Number of surgical specimens examined microscopically: 1,767
Length of approved program: 1 year (anatomic pathology)
Residencies offered (1970-1971):
 1st year - 1
 Total (all years) - 1
Salary per year: Minimum \$7,500 and maximum \$9,000 with partial maintenance

KINGSTON, NEW YORK

KINGSTON LABORATORY HOSPITALS (includes Kingston Hospital and Benedictine Hospital).

Program Director: Herbert Derman, M.D.
Number of necropsies: 186
Total number of laboratory examinations: 448,681
Number of surgical specimens: 18,205
Number of surgical specimens examined microscopically: 17,446
Length of approved program: 4 years (anatomic pathology and clinical pathology).
Residencies offered (1970-1971):
 1st year - 0
 2nd year - 1
 3rd year - 1
 4th year - 0
 Total (all years) - 2
Salary per year: Minimum \$8,500 and maximum \$11,000 with no maintenance

POUGHKEEPSIE, NEW YORK

1. ST. FRANCIS HOSPITAL

Program Director: Joseph Daniel Gioia, M.D.
Number of necropsies: 103
Total number of laboratory examinations: 448,008
Number of surgical specimens: 7,946
Number of surgical specimens examined microscopically: 7,194
Length of approved program: 1 year (anatomic pathology)
Residencies offered (1970-1971):
 1st year - 1
 Total (all years) 1
Salary per year: Minimum \$6,000 - no maximum given - with full maintenance

2. VASSAR BROTHERS HOSPITAL

Program Director: Francis James McMahon, M.D.
 Number of necropsies: 196
 Total number of laboratory examinations: 384,812
 Number of surgical specimens: 6,336
 Number of surgical specimens examined microscopically: 4,173
 Length of approved program: 4 years (anatomic pathology and clinical pathology)
 Residencies offered (1970-1971):

1st year	- 1	3rd year	- 1
2nd year	- 1	4th year	- 1
Total (all years)		- 4	

Salary per year: Minimum \$5,400 and maximum \$7,200 with full or partial maintenance.

SCHENECTADY, NEW YORKELLIS HOSPITAL

Program Director: Gerald F. Parkhurst, M.D.
 Number of necropsies: 457
 Total number of laboratory examinations: 395,631
 Number of surgical specimens: 8,103
 Number of surgical specimens examined microscopically: 7,060
 Length of approved program: 4 years (anatomic pathology and clinical pathology)
 Residencies offered (1970-1971):

1st year	- 3	3rd year	- 1
2nd year	- 1	4th year	- 1
Total (all years)		- 6	

Salary per year: Minimum \$6,930 and maximum \$8,520 with full maintenance.

TROY, NEW YORKSAMARITAN HOSPITAL

Program Director: Orazio Robert Zumbo, M.D.
 Number of necropsies: 124
 Total number of laboratory examinations: 162,078
 Number of surgical specimens: 3,976
 Number of surgical specimens examined microscopically: 2,838
 Length of approved program: 4 years (anatomic pathology and clinical pathology)
 Residencies offered (1970-1971):

1st year	- 1
2nd year	- 1
3rd year	- 1
Total (all years)	3

Salary per year: Minimum \$7,100 and maximum \$9,500 with partial maintenance

PITTSFIELD, MASSACHUSETTSBERKSHIRE MEDICAL CENTER HOSPITALS

Program Director: William Beautyman, M.D.
 Number of necropsies: 208
 Total number of laboratory examinations: 639,272
 Number of surgical specimens: 9,763
 Number of surgical specimens examined microscopically: 6,775
 Length of approved program: 4 years (anatomic pathology and clinical pathology)
 Residencies offered (1970-1971):

1st year	- 1	3rd year	- 1
2nd year	- 1	4th year	- 1
Total (all years)		- 4	

Salary per year: Minimum \$6,800 and maximum \$10,200 with partial maintenance

PEDIATRICS

An approved residency in pediatrics should include clinical training in general medical pediatrics, nutritional pediatrics, care of the newborn infant, preventive pediatrics, and general outpatient pediatrics.

ALBANY, NEW YORK1. ALBANY MEDICAL CENTER HOSPITAL

Program Director: Ian H. Porter, M.B.B.S.
 Average daily census: 54
 Newborn and premature average daily census: 23
 Admissions (includes transfers): 1,254*
 Deaths: 46 with 78% necropsy
 Outpatient visits: 4,119
 Residencies offered (1970-1971):

1st year	- 4	3rd year	- 1
2nd year	- 4	4th year	- 0
Total (all years)		- 9	

Salary per year: Minimum \$8,100 and maximum \$9,600 with partial maintenance

* indicates discharges instead of admissions

2. ST. PETER'S HOSPITAL

(Note: this residency program has been approved as offering full training through affiliation with the fully approved program at Albany Medical Center Hospital).

Program Director: Allan MacCollam, M.D.

Average daily census: 10

Newborn and premature average daily census: 36

Admissions (includes transfers): 636

Deaths: 3 with 67% necropsy

Outpatient visits: 1,129

Residencies offered (1970-1971):

1st year - 3

2nd year - 2

Total (all years) - 5

Salary per year: Minimum \$8,500 and maximum \$11,500 with no information on maintenance available.

COOPERSTOWN, NEW YORK

MARY IMOGENE BASSETT HOSPITAL

(Note: this residency program has been approved as offering full training through affiliation with the fully approved program at Presbyterian (Babies) Hospital, New York City).

Program Director: Joe Hamilton Cannon, M.D.

Average daily census: 8

Newborn and premature average daily census: 5

Admissions (includes transfers): 188

Deaths: 4 with 100% necropsy

Outpatient visits: 7,749

Residencies offered (1970-1971):

1st year - 1

Total (all years) - 1

Salary per year: Minimum \$7,500 and maximum \$9,000 with partial maintenance

PITTSFIELD, MASSACHUSETTS

BERKSHIRE MEDICAL CENTER HOSPITALS

Program Director: Alexander Ned Drescher, M.D.

Average daily census: 36

Newborn and premature average daily census: 23

Admissions (includes transfers): 1,874

Deaths: 13 with 77% necropsy

Outpatient visits: 850

Residencies offered (1970-1971):

1st year - 1

2nd year - 1

Total (all years) - 2

Salary per year: Minimum \$6,800 and maximum \$7,500 with partial maintenance

PHYSICAL MEDICINE AND REHABILITATION

An approved residency in physical medicine and rehabilitation must be concerned in particular with the treatment and restoration of the convalescent and the physically handicapped patient. Emphasis must be given to the use of paramedical services.

Three years of training is the minimum with at least 500 admissions and 7,500 patient visits annually.

ALBANY, NEW YORKALBANY MEDICAL CENTER HOSPITAL

Program Director: Boris J. Paul, M.D.

Number of patients treated: 1,808

Number of treatments: 25,169

Outpatient visits: 3,000

Residencies offered (1970-1971)

1st year - 2

2nd year - 2

3rd year - 2

Total (all years) - 6

Salary per year: Minimum \$8,100 and maximum \$9,600 with partial maintenance

PLASTIC SURGERY

An approved residency in plastic surgery must consist of one year of internship, 3 years in an approved general surgery program, and at least 2 years in plastic surgery per se. Adequate training in plastic and reconstructive surgery should include experience in excisional restorative surgery of the scalp, face, orbits, nose, oral cavity, neck, trunk, and extremities. Experience in managing neoplasms of the head and neck, cosmetic surgery, facial trauma, surgery of the hands, burns, congenital abnormalities of the extremities and genitalia is highly important.

ALBANY, NEW YORK

ALBANY MEDICAL COLLEGE PROGRAM (includes Albany Medical Center Hospital, Child's Hospital, Memorial Hospital, St. Peter's Hospital, and Veterans Administration Hospital).

Program Director: Walter B. Macomber, M.D.
Average daily census: AMCH - 23, Child's - 6, Memorial - 4,
St. Peter's - 12, VAH - 6.
Admissions (includes transfers): AMCH - 811, Child's - 304,
Memorial - 302, St. Peter's - 520, VAH - 202
Deaths: AMCH - 3 with 100% necropsy, Child's - not available,
Memorial - none, St. Peter's - not available, VAH - 1 with
0% necropsy.
Outpatient visits: AMCH - 118, Child's - 153, Memorial - not
available, St. Peter's - 579, VAH - 594.
Length of approved program: 2 years
Residencies offered (1970-1971):
1st year - 2
2nd year - 3
Total (all years) - 5
Salary per year: AMCH - Minimum \$9,000 and maximum \$10,000 with
partial maintenance; Child's - not available; Memorial -
not available; St. Peter's - minimum \$9,000 and maximum
\$10,000 with no maintenance; VAH - minimum \$8,400 and maxi-
mum \$11,800 with no information on maintenance available.

PREVENTIVE MEDICINE (GENERAL PREVENTIVE MEDICINE)

Any given approved residency in general preventive medicine may place emphasis upon a special field (e.g., epidemiology). Programs may be offered by Schools of Public Health, organized departments of preventive medicine in medical schools, or other appropriate institutions in which an established component of their program is the graduate training of physicians.

The Program should include two phases - Academic Study and Field Training and Experience. The Academic phase must be of at least one year's duration. Field training and experience takes up the second year of residency. The third year may again be academic, or field training, or a combination of the two. A requirement is the undertaking of an independent and original investigation in a special field and the presentation of such research in the form of a thesis.

ALBANY, NEW YORK

The State of New York Department of Health has been approved by the American Medical Association Council on Medical Education and the American Board of Preventive Medicine, through the Residency Review Committee for Preventive Medicine, for three years of training in general preventive medicine.

The purpose of the program is the training of individuals entering careers in public health research. The second year of the residency provides full tuition for attendance at a school of public health for work leading to the M.P.H. degree.

The area of training is epidemiology. Physician-in-charge is Julia L. Freitag, M.D.

PREVENTIVE MEDICINE (PUBLIC HEALTH)

An approved residency in public health should include training in the administration of public health, epidemiology, maternal health, infant and child health, accident prevention, and sanitation. The duration of the program should be at least one year.

Special emphasis must be given to a thorough indoctrination in the preparation and maintenance of reports, registers, and other required records.

Also necessary is experience in the collection of vital statistics, control of communicable disease, promotion of child and adult health, regulation of the environment, and education of the public with respect to personal and community health.

ALBANY, NEW YORK

A residency program in Public Health has been approved at the State of New York, located in Albany, for training by the A.M.A. Council on Medical Education and the American Board of Preventive Medicine, through the Residency Review Committee for Preventive Medicine.

The Director of the program is Franklyn B. Amos, M.D. The length of the approved program is 2 years and the minimum annual salary is \$13,170.

Populations served by local health departments of assignment vary from 50,000 to 1,400,000. Any one of 26 county health departments, 5 city health departments, or 9 district offices may be used. Assignments are made on an individual basis.

PSYCHIATRY

Recommended subjects to be thoroughly covered in an approved program of Psychiatric Residency include:

- A. Fundamentals of dynamics of the mental illnesses, interviewing techniques, and psychotherapy.
- B. Group therapy and ward management of patients.
- C. Adequate exposure to general medicine, neurology, surgery, and pediatrics.
- D. Organized instruction in medical neurology, including neurological history-taking, neurological examination, and knowledge of the more common affections of the nervous system.
- E. Experience in child psychiatry and psychosomatic medicine.
- F. Orientation to social psychiatry ("community psychiatry").
- G. Active collaborative work with psychologists and social workers.
- H. Experience with chronic psychotic patients in an inpatient setting.

ALBANY, NEW YORK

1. ALBANY MEDICAL CENTER HOSPITAL

Program Director: Alan M. Kraft, M.D.
Average daily census: 51
Admissions (includes transfers): 1,526
Deaths: 2 with 0% necropsy
Outpatient visits: 6,111
Residencies offered (1970-1971):
 1st year - 4
 2nd year - 4
 3rd year - 4
 Total (all years) - 12
Salary per year: Minimum \$9,500 and maximum \$12,500 with partial maintenance

2. VETERANS ADMINISTRATION HOSPITAL

Program Director: Alan M. Kraft, M.D.
Average daily census: 306
Admissions (includes discharges): 859
Deaths: 5 with 40% necropsy
Outpatient visits: 11,072
Residencies offered (1970-1971):
 1st year - 3
 2nd year - 3
 3rd year - 3
 Total (all years) - 9
Salary per year: Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

COOPERSTOWN, NEW YORK

MARY IMOGENE BASSETT HOSPITAL

(Note: This program is a part of the Columbia University Affiliated Hospitals, New York City, program. The information given below refers only to Mary Imogene Bassett Hospital data.)

Program Director: Harvey Gurian, M.D.
Average daily census: 7
Admissions (includes transfers): 97
Deaths: None
Outpatient visits: 2,284
Residencies offered (1970-1971): No specific information available on MIBH portion of total program
Salary per year: Minimum \$7,500 and maximum \$12,500 with partial maintenance.

POUGHKEEPSIE, NEW YORK

HUDSON RIVER STATE HOSPITAL

Program Director: Herman Bernard Snow, M.D.
Average daily census: 4,059
Admissions (includes transfers): 2,110
Deaths: 639 with 16% necropsy
Outpatient visits: 4,094
Residencies offered (1970-1971):
 1st year - 4
 2nd year - 4
 3rd year - 4
 Total (all years) - 12
Salary per year: Minimum \$10,000 and maximum \$16,000 with no information on maintenance available.

STOCKBRIDGE, MASSACHUSETTS

AUSTEN RIGGS CENTER

(Note: this institution is approved for a third year of training following two years of residency in a fully approved three year program.)

Program Director: Otto Allen Will, Jr., M.D.
Average daily census: 39
Admissions (includes transfers): 34
Deaths: none
Outpatient visits: 3,606
Residencies offered (1970-1971):
 3rd year - 2
 4th year - 1
 Total (all years) - 3
Salary per year: Minimum \$9,000 and maximum \$13,000 with no maintenance.

CHILD PSYCHIATRY

A residency in child psychiatry usually consists of two years - or more - of special training following two years of general psychiatry. Since July 1, 1968 approved programs in child psychiatry must be an integral part of a General Psychiatric training program approved for 3 years or must have a formal educational affiliation with such a program.

Intensive experience in working with psychiatric social workers and clinical psychologists is essential. A close tie with the institution's pediatric service is desirable, as well as the community child care agencies.

ALBANY, NEW YORK

ALBANY CHILD GUIDANCE CENTER FOR PSYCHIATRIC SERVICES

(Note: this institution holds a dual approval:-

1. For one year of training in Child Psychiatry offered as an affiliated year in a program of general psychiatry;
2. For two years of training in Child Psychiatry offered independently.)

Program Director: Lenore May Sportsman, M.D.

Average daily census: 150

Admissions (includes transfers): not available

Outpatient visits: 5,110

Residencies offered (1970-1971):

3rd year - 1

4th year - 1

Total (all years) - 2

Salary per year: Minimum \$8,000 and maximum \$14,000 with no maintenance.

RADIOLOGY

An approved 3-year program should provide training in all divisions of the specialty: diagnostic roentgenology, therapeutic radiology (including therapy by means of radium or one of its substitutes), and nuclear medicine. Two years must be spent in diagnostic roentgenology, and the 3rd year in therapeutic roentgenology. During the 3rd year, experience must be gained in diagnostic and therapeutic nuclear medicine, radiation physics, health physics and protection, radiation biology, pathology, and electrical engineering.

The hospital with an approved program covering the entire field of radiology must have a minimum of 20,000 x-ray examinations annually, and 1,500 radiotherapeutic procedures related to cancer.

ALBANY, NEW YORK

ALBANY MEDICAL CENTER PROGRAM (includes Albany Medical Center Hospital and Veterans Administration Hospital)

Program Director: John Faunce Roach, M.D.
Number of X-ray Examinations: AMCH - 75,677 and VAH - 43,521
Number of Radium or Cobalt (not teletherapy) treatments: AMCH - 31 and VAH - 0
Number of Superficial and Ortho-Voltage Treatment visits: AMCH - 94 and VAH - 57
Number of Megavoltage Treatment visits: AMCH - 541 and VAH - 0
Residencies offered (1970-1971):
1st year - 2
2nd year - 2
3rd year - 2
Total (all years) - 6
Salary per year: AMCH - Minimum \$8,100 and maximum \$9,600 with partial maintenance; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

SURGERY

Residencies in general surgery should include, after one year of internship, either 3 or 4 years of progressive residency training. Two methods of qualification for examination are approved by the American Board of Surgery:

Group I: In addition to a year of internship, a candidate must have a minimum of 4 years of training in surgery, 3 of which must be spent in an approved residency. One year may be spent in a surgical specialty, or experimental surgery or research.

Group II: In addition to a year of internship, a candidate must have 3 years of residency training in an approved program, followed by 2 years of study or practice of surgery under the supervision of a certified surgeon.

Training in general surgery is recommended as a preliminary to graduate training in most special fields of surgery. Thus, to meet such requirements, hospitals may offer programs of general surgery of less than 3 years. There are no approved programs of this type in the

Albany Region at present.

An approved 3- or 4-year program must, in the case of a general hospital, have annual admissions to the surgical division numbering approximately 300 to 500.

ALBANY, NEW YORK

1. ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital and Veterans Administration Hospital).

(Note: this group of hospitals has been approved by the A.M.A. Council on Education, the American Board of Surgery, and the American College of Surgeons for 4 or more years of training, designed to qualify the trainee for examination by the American Board of Surgery as a Group I candidate).

Program Director: Charles Leonard Eckert, M.D.
 Average daily census: AMCH - 102 and VAH - 100
 Admissions (includes transfers): AMCH - 3,311 and VAH - 1,195
 Deaths: AMCH - 108 with 56% necropsy and VAH - 58 with 76% necropsy
 Outpatient visits: AMCH - 1,056 and VAH - 3,860
 Residencies offered (1970-1971):

1st year	- 9	4th year	- 3
2nd year	- 6	5th year	- 1
3rd year	- 5	Total (all years)	24

Salary per year: AMCH - Minimum \$8,100 and maximum \$11,500 with partial maintenance; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

2. MEMORIAL HOSPITAL

(Note: This program is approved by the A.M.A. Council on Medical Education, the American Board of Surgery, and the American College of Surgeons, for three years of training, designed to qualify the trainee for examination by the American Board of Surgery as a Group II candidate).

Program Director: H. Pelham Glasier, M.D.
 Average daily census: 111
 Admissions (includes transfers): 4,153
 Deaths: 64 with 34% necropsy
 Outpatient visits: 1,436
 Residencies offered (1970-1971):

1st year	- 1
2nd year	- 1
3rd year	- 1
Total (all years)	- 3

Salary per year: Minimum \$9,000 and maximum \$12,000 with partial maintenance.

3. ST. PETER'S HOSPITAL

(Note: This program is approved by the A.M.A. Council on Medical Education, the American Board of Surgery, and the American College of Surgeons, for three years of training, designed to qualify the trainee for examination by the American Board of Surgery as a Group II candidate.)

Program Director: John J. Phelan, Jr., M.D.

Average daily census: 115

Admissions (includes transfers): 4,472

Deaths: 101 with 35% necropsy

Outpatient visits: 912

Residencies offered (1970-1971):

1st year	- 5	3rd year	- 2
2nd year	- 3	4th year	- 2*
Total (all years) - 12			

Salary per year: Minimum \$8,500 and maximum \$11,500 with no maintenance

CASTLE POINT, NEW YORKVETERANS ADMINISTRATION HOSPITAL

(Note: This is part of a combined program with St. Clare's hospital, New York City, fully approved as a 4-year program and designed to qualify the trainee for examination by the American Board of Surgery as a Group I candidate. The data below refer only to the VAH-Castle Point portion of the program unless otherwise indicated.)

Program Director: Bok Youl Lee, M.D.

Average daily census: 70

Admissions (includes transfers): 611

Deaths: 21 with 43% necropsy

Outpatient visits: 1,900

Residencies offered (1970-1971):

These data applied to the combined St. Clare's Hospital (N.Y.C) - VAH program.

1st year	- 7	3rd year	- 3
2nd year	- 5	4th year	- 3

Total (all years) - 18

Salary per year: Minimum \$6,545 and maximum \$8,345 with full or partial maintenance

* 4th year residency not approved.

COOPERSTOWN, NEW YORK

MARY IMOGENE BASSETT HOSPITAL

(Note: Residents in this fully-approved 4-year program, designed to qualify the trainee for examination by the American Board of Surgery as a Group I candidate, are rotated to Presbyterian Hospital, New York City for periods of 6 months to one year on a full-time basis as an integral part of the program.)

Program Director: David A. Blumenstock, M.D.

Average daily census: 34

Admissions (includes transfers): 1,262

Deaths: 49 with 75% necropsy

Outpatient visits: 12,796

Residencies offered (1970-1971):

1st year - 3

2nd year - 1

3rd year - 1

4th year - 1

Total (all years) - 6

Salary per year: Minimum \$7,500 and maximum \$9,000 with partial maintenance.

SCHENECTADY, NEW YORK

ELLIS HOSPITAL

(Note: This hospital has been approved by the A.M.A. Council on Education, the American Board of Surgery, and the American College of Surgeons for 4 or more years of training, designed to qualify the trainee for examination by the American Board of Surgery as a Group I candidate.)

Program Director: Herbert J. Wright, Jr., M.D.

Average daily census: 146

Admissions (includes transfers): 6,265

Deaths: 132 with 52% necropsy

Outpatient visits: 274

Residencies offered (1970-1971):

1st year - 4

2nd year - 4

3rd year - 1

4th year - 1

Total (all years) - 10

Salary per year: Minimum \$6,930 and maximum \$8,520 with full maintenance.

PITTSFIELD, MASSACHUSETTSBERKSHIRE MEDICAL CENTER HOSPITALS

(Note: This group of hospitals has been approved by the A.M.A. Council on Education, the American Board of Surgery, and the American College of Surgeons for 4 or more years of training, designed to qualify the trainee for examination by the American Board of Surgery as a Group I candidate.)

Program Director: Ralph Zupanec, M.D.
 Average daily census: 143
 Admissions (includes transfers): 6,350
 Deaths: 53 with 54% necropsy
 Outpatient visits: 1,705
 Residencies offered (1970-1971):

1st year	- 3	3rd year	- 1
2nd year	- 2	4th year	- 1
		5th year	- 1
		Total (all years)	8

Salary per year: Minimum \$6,800 and maximum \$10,800 with partial maintenance

THORACIC SURGERY

The thoracic surgical experience is an approved program must encompass 2 years of graded responsibility in all aspects of the field, including one year of senior responsibility in thoracic and cardiovascular surgery. There should also be included no more than 6 months of intensified activity in research (animal surgery), cardiopulmonary laboratories, or on medical (non-surgical) services.

ALBANY, NEW YORK

ALBANY MEDICAL CENTER PROGRAM (includes Albany Medical Center Hospital and Veterans Administration Hospital)

Program Director: Allan Stranahan, M.D.
 Average daily census: AMCH - 25 and VAH - 10
 Admissions (includes transfers): AMCH - 1098* and VAH - 186
 Deaths: AMCH - 71 with 63% necropsy; VAH - 22 with 64% necropsy
 Outpatient visits: AMCH - not available; VAH - 596
 Length of approved program: 2 years
 Residencies offered (1970 - 1971): Total (all years) 3
 Salary per year: AMCH - Minimum \$10,500 and maximum \$11,500 with partial maintenance; VAH - Minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

* indicates discharges instead of admissions

UROLOGY

An approved program must include adequate training in diagnosis, therapy, cystoscopic examination, pyelography, and operative procedures. Ordinarily a minimum of 200 inpatients per year is necessary for acceptable residency training in urology.

ALBANY, NEW YORK

ALBANY MEDICAL COLLEGE AFFILIATED HOSPITALS (includes Albany Medical Center Hospital and Veterans Administration Hospital).

Program Director: not available

Average daily census: AMCH - 20 and VAH - 14

Admissions (includes transfers): AMCH - 995 and VAH - 515

Deaths: AMCH - 24 with 29% necropsy; VAH 15 with necropsy percentage not available.

Outpatient visits: AMCH - 449 and VAH - 1,359

Residencies offered (1970-1971):

1st year - 2

2nd year - 2

3rd year - 2

Total (all years) - 6

Salary per year: AMCH - Minimum \$8,100 and maximum \$9,600 with partial maintenance; VAH - minimum \$8,400 and maximum \$11,800 with no information on maintenance available.

SUMMARY OF STATISTICS OF APPROVEDINTERNSHIPS AND RESIDENCIES IN ALBANY REGIONI. INTERNSHIPS

Number of rotating internships offered (1970-1971)	- 160
Number of straight medicine internships offered (1970-1971)	- 14
Number of straight surgery internships offered (1970-1971)	- 11
Number of straight pediatrics internships offered (1970-1971)	- <u>3</u>
TOTAL	- 188

Number of internships filled (Sept. 1, 1968):

A. Foreign graduates	- 103*	(63.2%)
B. Non-foreign graduates	- <u>60</u>	(36.8%)
TOTAL	- 163	(100%)

Percentage of internships filled (Sept. 1, 1968) - 84%

II. RESIDENCIES

Numbers of residencies offered in Albany Region (1970-1971) in various specialties:

<u>Specialty</u>	<u>No. of Residencies offered</u>
Anesthesiology	10
Dermatology	6
Internal Medicine	55
Neurological Surgery	4
Neurology	13
Obstetrics-gynecology	22
Ophthalmology	12
Orthopedic Surgery	23
Otolaryngology	6
Pathology	35
Pediatrics	17
Physical Medicine & Rehabilitation	6
Plastic Surgery	5
Preventive Medicine (General Prev. Medicine)	Not available
Preventive Medicine (Public Health)	Not available
Psychiatry	36
Child Psychiatry	2
Radiology	6
Surgery	69
Thoracic Surgery	3
Urology	<u>6</u>
	Total 336

* includes 3 "over-quota" interns at Ellis Hospital, Schenectady.

SUMMARY (continued)

Number of residencies filled (September 1, 1968):

A. Foreign graduates	-	125	(55%)
B. Non-foreign graduates	-	<u>104</u>	(45%)
TOTAL	-	229	(100%)

Percentage of residencies filled (September 1, 1968): 68%

NUMBER AND DISTRIBUTION OF PHYSICIANS, DENTISTS,
NURSES, AND OTHER HEALTH PERSONNEL IN
THE AREA SERVED BY THE ALBANY REGIONAL
MEDICAL PROGRAM

NOTE: This section contains an inventory (number and distribution) of health personnel in the area served by the Albany Regional Medical Program. Because of the lack of uniformity in which the various data-gathering agencies have collected information concerning the different disciplines, data are not available on a uniform basis. For example, statistics on physicians are "as of" September 16, 1970; those for registered nurses are "as of" 1966 and 1969; etc. However, in each instance the source and date-of-inventory are noted immediately before the pertinent statistics.

NEW A.M.A. SPECIALTY DISTRIBUTION AND CLASSIFICATION

The American Medical Association has adopted a new specialty distribution and classification of all physicians (MD) which is to be effected in late 1970 or early 1971. All break-downs shown in this volume reflect the old specialty distributions and classifications. However, to acquaint the reader with the new system, a description of the changes is presented, beginning on page 6-164.

NUMBER AND DISTRIBUTION OF PHYSICIANS (M.D.) IN
AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

NOTE: The source of these statistics is basic data obtained from Clark - O'Neill, Inc., Fairview, New Jersey, one of the organizations franchised by the American Medical Association to collect and distribute data concerning M.D. manpower in the United States. The statistics were accurate as of September 16, 1970. Total population counts of the various political subdivisions (states, counties, etc.) are those derived from the preliminary figures of the 1970 national census of population.

The specialty designations of individual physicians are those which they have submitted to the American Medical Association as part of its questionnaire sent to all physicians periodically. Thus, an individual indicating on the questionnaire that he is an internist signifies that he limits his practice to internal medicine. It is important to note that such a designation does not indicate that the individual is board-certified, board-qualified, or neither. The inventory of board-certified specialists in the Albany Region is given in a sub-section, beginning on page 6-73.

The table on the following page is a listing of specialties recognized by the American Medical Association, their official abbreviations, and their code numbers. The latter are not utilized in this section, and are given for informational purposes only.

Information on the following pages explains the various column headings of the inventory tables.

PRIMARY SPECIALTY OF PHYSICIAN (M.D.)*

Code No.	Abbreviation	Primary Specialty
00	UNSPEC	Unspecified (Retired, not in practice, no specialty reported)
03	ADM	Administrative Medicine
06	A	Allergy (sub-specialty of Int. Med.)
09	ANES	Anesthesiology
12	AM	Aviation Medicine (Special field of preventive Med.)
15	CD	Cardiovascular Disease (Sub-specialty of Int. Med.)
18	CHP	Child Psychiatry (Sub-specialty of psychiatry)
20	DR	Diagnostic Roentgenology (Special field of Radiology)
21	D	Dermatology
22	FOP	Forensic Pathology (Special field of Pathology)
24	GE	Gastroenterology (Sub-specialty of Int. Med.)
27	GP	General Practice
30	GS	General Surgery
33	IM	Internal Medicine
36	NS	Neurological Surgery
39	N	Neurology
42	OBG	Obstetrics and Gynecology
45	OM	Occupational Medicine (Special field of Preventive Medicine)
48	OPH	Ophthalmology
51	ORS	Orthopedic Surgery
54	OTO	Otolaryngology
57	PATH	Pathology
60	PD	Pediatrics
63	PDA	Pediatric Allergy (Sub-specialty of Pediatrics)
66	PDC	Pediatric Cardiology (Sub-specialty of Pediatrics)
69	PM	Physical Medicine
72	PS	Plastic Surgery
75	GPM	General Preventive Medicine (Special field of Preventive Medicine)
78	CRS	Colon and Rectal Surgery
81	P	Psychiatry
84	PH	Public Health (Special field of Preventive Medicine)
87	PUD	Pulmonary Disease (Sub-specialty of Int. Med.)
90	R	Radiology
91	TR	Therapeutic Radiology (Special field of Radiology)
93	TS	Thoracic Surgery
96	U	Urology
99	Not Rec.	Other (Specialty not recognized)

*In the county and division analyses, only those primary specialties in which there is representation in the area are given.

INTERPRETATION OF COLUMN HEADINGS OF TABLES
IN COUNTY AND DIVISION ANALYSES

Primary Specialty (Primary Spec.)

Indicates the various medical and surgical specialties recognized by the American Medical Association.

MD's in Private Practice and Staff (Total MDs)

This column gives the total count of all MD's in private practice plus those considered as staff physicians. The latter include residents (interns are not included -- inventory of this group is given, beginning on page 5-1 of this volume), full-time hospital staff, medical school faculty, physicians in administrative medicine, physicians in laboratory medicine, and physicians engaged in research.

Full-Time Specialists Including General Practitioners (Full-Time Spec. & GP)

A full-time specialist is a physician who has reported himself to the A.M.A. as being engaged full-time in either a recognized primary specialty or in general practice. By this designation it is not possible to determine whether or not the physician so designated is a board-certified specialist, a board-qualified specialist, or neither. A primary specialty is defined as the recognized specialty field to which the physician devotes his major interest.

General Practitioners with Secondary Specialty (GP's with 2^o Spec.)

A secondary specialty is the recognized specialty field in which the physician (in this case, a general practitioner) indicates that he has a limited interest.

Resident (Res.)

Resident or fellow in hospital service.

Full-Time Hospital Staff (Full-time Hosp.)

Physicians, other than interns, residents, and fellows, engaged full-time in hospital service (e.g., emergency room physician).

Medical School Faculty (Med. Sch. Fac.)

Physicians engaged full-time as medical school faculty.

Administrative Medicine (Adm. Med.)

Physicians engaged full-time in administrative medicine, regardless of location of practice.

Laboratory Medicine (Lab. Med.)

Physicians engaged full-time in laboratory medicine (e.g., pathology).

Preventive Medicine (Prev. Med.)

Physicians engaged full-time in preventive medicine (e.g., public health).

Research (Research)

Physicians engaged full-time in research.

MD's New in Private Practice (NIPP)

Physicians who have been engaged in private practice for five years or less. These physicians are included in those listed in the private practice columns, and are included in the column headed "Total MDs".

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD): CENTRAL DIVISION - ALBANY COUNTY

Primary Total Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE							Total Staff NIPP
	Under 65		65 and over		Total Private Practice Res.	Hosp.	Fac.	Med. Sch. Admin.	Lab. Med.	Prev. Med.	Re-search	
	Full-Time Spec.&GP	GP with 20 Spec.	Full-Time Spec.&GP	GP with 20 Spec.								
UNSPEC.	21	0	1	0	8	5	4	2	0	0	1	20
A	4	0	0	0	0	1	0	0	0	0	0	0
ANES	33	0	1	0	1	7	3	0	0	0	0	11
AM	1	0	0	1	0	0	0	0	0	0	0	0
CD	13	0	1	0	1	2	1	0	0	0	1	5
CHIP	3	0	0	0	0	0	0	0	0	0	0	0
D	13	0	3	0	4	1	1	0	0	0	0	6
GE	6	0	0	0	2	0	0	0	0	0	0	2
GP	66	0	16	0	1	6	1	0	0	0	0	8
GS	97	1	6	0	42	3	4	1	0	0	1	51
ILM	160	6	5	2	38	24	22	4	0	0	4	92
INS	13	0	0	0	5	1	2	0	0	0	0	8
N	21	0	0	0	10	4	2	0	0	0	0	16
OBG	58	4	5	1	12	1	3	1	0	0	0	17
OM	6	1	2	0	0	0	0	0	0	0	0	0
OPH	36	16	3	0	12	3	2	0	0	0	0	17
ORS	34	12	3	0	14	1	3	1	0	0	0	19
OTO	21	13	1	0	5	0	1	1	0	0	0	7
PATH	56	14	1	0	12	15	10	0	0	0	4	41
PD	69	31	2	0	18	4	8	2	0	0	3	35
PDA	1	1	0	0	0	0	0	0	0	0	0	0
PDC	1	0	0	0	0	0	1	0	0	0	0	1
PM	8	6	0	0	0	1	1	0	0	0	0	2
PS	12	4	0	1	7	0	0	0	0	0	0	7
EPM	11	6	1	0	1	1	2	0	0	0	0	4
ERS	4	0	1	1	1	0	1	0	0	0	0	2
P	77	34	3	0	9	14	8	8	0	0	1	40
PH	25	13	3	0	2	1	1	5	0	0	0	9
PUD	7	4	1	0	1	1	0	0	0	0	0	2
R	35	5	2	0	12	16	0	0	0	0	0	28
TS	8	3	0	0	2	3	0	0	0	0	0	5
J	27	13	3	0	6	3	0	1	0	0	0	10
Not Rec.	11	1	0	2	1	2	1	1	0	0	3	8
TOTALS	959	399	14	8	227	120	82	27	0	0	18	474

SUMMARY: CENTRAL DIVISION, ALBANY

Note: In appropriate instances, and when possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MDs), excluding interns 959 (100%)
2. Private practice 485 (50.5%)
3. Not in private practice 474 (49.5%)

The following statistics (#4 - #10), unless otherwise indicated, are based on the number of all physicians in private practice: 485 = 100% (1966: 334 = 100%)

4. Aged 65 or over - 72 (14.9%) 1966 = 54 (16.1%)
5. Gen. practitioners - 58 (11.9%) 1966 = 86 (26.0%)
6. GPs, 65 or over - 16 (27.5% of all GPs) 1966 = 23 (25.3% of all GPs)
7. Internists - 68 (14.0%) 1966 = 41 (12.3%)
8. Internists, 65 or over - 7 (10.3% of all IMs) 1966 = 3 (7.3% of all IMs)
9. Family physicians* - 126 (26.0%) 1966 = 127 (38%)
10. Fam. MDs*, 65 or over - 23 (18.2% of all fam. MDs) 1966 = 26 (20.5% of all fam. MDs)

11. Population of Albany County - 280,118 1966 = 289,100 (est.)**
12. Ratio of number of physicians in private practice to total population - 1:577 1966 = 1:868
13. Ratio of number of general practitioners to total population: 1:4,830 1966 = 1:3,362
14. Ratio of number of internists to total population: 1:4,120 1966 = 1:7,005
15. Ratio of number of family physicians* to total population: 1:2,223 1966 = 1:2,270

16. Physicians in private practice 5 years or less - 80
17. General practitioners in private practice 5 years or less - 5
18. Internists in private practice 5 years or less - 14
19. Family physicians* in private practice 5 years or less - 19 (15.1% of all family physicians)

*defined as general practitioners plus internists

**based on actual 1970 census figures, the 1966 estimate appears to have been too high.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN NORTHERN DIVISION - RENSSELAER COUNTY

Primary Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE							Total		
	Under 65		65 and over		Full-Time Spec. & GP 2 ⁰	GP with Spec. 2 ⁰	Hosp. Res.	Full-Time Med. Fac.	Sch. Admin. Med.	Lab. Med.	Prev. Med. search		Re-Staff	Total
	Spec. & GP 2 ⁰	Spec.	Full-Time GP 2 ⁰	Spec.										
UNSPEC.	2	0	0	0	0	0	0	0	0	0	0	2	2	0
ANES	7	6	0	0	0	6	0	0	0	0	0	0	1	2
CD	1	0	0	0	0	0	0	0	0	0	0	0	1	0
CHP	1	1	0	0	0	1	0	0	0	0	0	0	0	0
D	5	1	2	1	5	0	0	0	0	0	0	0	0	0
GP	35	27	0	8	35	0	0	0	0	0	0	0	0	2
GS	34	14	6	4	25	3	5	1	0	0	0	0	9	1
IM	20	11	2	3	16	1	1	1	0	0	0	0	4	1
N	1	0	1	0	1	0	0	0	0	0	0	0	0	0
OBG	12	11	1	0	12	0	0	0	0	0	0	0	0	0
OM	1	0	0	0	1	0	0	0	0	0	0	0	0	0
OPH	7	7	0	0	7	0	0	0	0	0	0	0	0	0
ORS	5	3	0	2	5	0	0	0	0	0	0	0	0	1
OTO	8	5	1	2	8	0	0	0	0	0	0	0	0	0
PATH	3	2	0	0	2	1	0	0	0	0	0	0	1	1
PD	9	7	0	2	9	0	0	0	0	0	0	0	0	1
PH	1	1	0	0	1	0	0	0	0	0	0	0	0	0
PUD	2	1	1	0	2	0	0	0	0	0	0	0	0	0
R	8	7	0	0	7	0	1	0	0	0	0	0	1	3
U	2	2	0	0	2	0	0	0	0	0	0	0	0	0
Not Rec.	2	0	1	0	1	0	0	0	0	0	0	1	1	0
TOTALS	166	106	14	23	146	5	9	2	1	0	0	3	20	14

SUMMARY: NORTHERN DIVISION - RENSSELAER COUNTY

Note: In appropriate instances, and when possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 166 (100%)
1966 = 153 (100%)
2. Private practice - 146 (87.9%) 1966 = 136 (89.0%)
3. Not in private practice 20 (12.1%) 1966 = 41 (11.0%)

The following statistics, (#4 - #10), unless otherwise indicated, are based on the number of all physicians in private practice: 146 = 100% (1966: 136 = 100%)

4. Aged 65 or over - 26 (17.8%) 1966 = 24 (17.5%)
5. General practitioners - 35 (24.0%) 1966 = 55 (40.5%)
6. GPs, 65 or over - 8 (22.9% of all GPs) 1966 = 13 (23.6% of all GPs)
7. Internists - 16 (10.9%) 1966 = 14 (8.4%)
8. Internists, 65 or over - 3 (18.7% of all IMs) 1966 = 3 (21.4% of all IMs)
9. Family physicians* - 51 (34.8%) 1966 = 69 (50.7%)
10. Fam. MDs*, 65 or over - 11 (21.6% of all fam. MDs) 1966 = 16 (23.2% of all fam. MDs)
11. Population of Rensselaer County - 150,218 1966 = 148,000 est.
12. Ratio of number of physicians in private practice to total population:
1:1,029 1966 = 1:1,088
13. Ratio of number of general practitioners to total population:
1:4,292 1966 = 1:2,691
14. Ratio of number of internists to total population:
1:9,388 1966 = 1:10,571
15. Ratio of number of family physicians* to total population:
1:2,946 1966 = 1:2,143
16. Physicians in private practice 5 years or less - 14
17. General practitioners in private practice 5 years or less - 2
18. Internists in private practice 5 years or less - 1
19. Family physicians in private practice 5 years or less - 3 (5.9% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN NORTHERN DIVISION - SARATOGA COUNTY

Primary Spec.	MDs IN PRIVATE PRACTICE			MDs NOT IN PRIVATE PRACTICE								Total Staff NIPP	
	Under 65	65 and over	Total	Full-Time Hosp.	Med. Sch. Fac.	Admin. Med.	Lab. Med.	Prev. Med.	Re-search	Total			
	Spec.&GP 20	Full-Time GP with Spec. & GP 20	Private Practice								Res.		Fac.
UNSPEC.	4	0	4	1	0	0	0	0	0	0	0	1	2
ANES	0	0	0	0	1	0	0	0	0	0	0	1	0
D	0	0	1	0	0	0	0	0	0	0	0	0	0
GP	15	0	18	0	2	1	0	0	0	0	0	3	2
GS	5	1	7	0	0	0	0	0	0	0	0	0	1
IM	6	3	11	1	0	0	0	0	0	0	0	1	1
OBG	4	1	6	0	1	0	0	0	0	0	0	1	1
OM	0	1	2	0	0	0	0	0	0	0	0	0	0
OPH	1	0	1	0	0	0	0	0	0	0	0	0	0
ORS	1	0	0	1	0	0	0	0	0	0	0	0	0
OTO	1	0	1	0	0	0	0	0	0	0	0	1	0
PATH	1	0	0	0	1	0	0	0	0	0	0	0	0
PD	6	0	5	1	0	0	0	0	0	0	0	1	1
P	3	0	1	0	1	0	0	0	0	0	0	0	0
R	1	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	42	7	58	4	6	1	1	0	0	0	0	12	8

SUMMARY: NORTHERN DIVISION - SARATOGA COUNTY

Note: In appropriate instances, and when possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 70 (100%)
1966 = 67 (100%)
2. Private practice - 58 (82.9%) 1966 = 55 (82.1%)
3. Not in private practice - 12 (17.1%) 1966 = 15 (17.9%)

The following statistics, (#4 - #10), unless otherwise indicated, are based on the number of all physicians in private practice: 58 = 100% (1966: 55 = 100%)

4. Aged 65 or over - 9 (15.5%) 1966 = 9 (18.2%)
5. General practitioners - 18 (31.0%) 1966 = 32 (58.2%)
6. GPs, 65 or over - 3 (16.7% of all GPs) 1966 = 6 (18.8% of all GPs)
7. Internists - 11 (19.0%) 1966 = 6 (10.9%)
8. Internists, 65 or over - 2 (18.2% of all IMs) 1966 = 2 (33.3% of all IMs)
9. Family physicians* - 29 (50.0%) 1966 = 38 (69.1%)
10. Fam. MDs*, 65 or over - 5 (17.2% of all fam. MDs) 1966 = 8 (21.1% of all fam. MDs)
11. Population of Saratoga County - 120,423 1966 - 96,400 (est.)
12. Ratio of number of physicians in private practice to total population:
1:2,076 1966 = 1:1,753
13. Ratio of number of general practitioners to total population:
1:6,690 1966 = 1:3,012
14. Ratio of number of internists to total population:
1:10,948 1966 = 1:16,066
15. Ratio of number of family physicians* to total population:
1:4,152 1966 = 1:2,536
16. Physicians in private practice 5 years or less - 8
17. General practitioners in private practice 5 years or less - 3
18. Internists in private practice 5 years or less - 1
19. Family physicians* in private practice 5 years or less - 4 (17.2% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN NORTHERN DIVISION - WARREN COUNTY

Primary Total Spec.	MDS IN PRIVATE PRACTICE			MDS NOT IN PRIVATE PRACTICE							Total			
	Under 65	65 and over	Total	Full-Time Spec.&GP 2 ^o	GP with Spec. 2 ^o	Full-Time GP with Spec. 2 ^o	Hosp. Res.	Full-Time Med. Sch. Fac.	Admin. Med.	Lab. Med.		Prev. Med. search	Re- search Staff	Total
1	0	0	0	0	0	0	1	0	0	0	0	0	1	0
1	0	1	1	0	0	0	0	0	0	0	0	0	0	0
9	7	2	9	0	0	0	0	0	0	0	0	0	0	1
1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
19	13	5	18	0	0	1	0	0	0	0	0	0	1	1
12	8	2	11	0	1	1	0	0	0	0	0	0	1	0
14	10	3	14	0	1	0	0	0	0	0	0	0	0	1
2	2	0	2	0	0	0	0	0	0	0	0	0	0	1
8	7	1	8	0	0	0	0	0	0	0	0	0	0	1
1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
7	5	2	7	0	0	0	0	0	0	0	0	0	0	1
3	3	0	3	0	0	0	0	0	0	0	0	0	0	1
3	3	0	3	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	5	0	5	0	0	0	0	1	0	0	0	0	1	1
3	2	0	2	0	0	1	0	0	0	0	0	0	1	0
1	0	0	0	0	0	0	0	1	0	0	0	0	1	0
6	4	0	4	0	0	2	0	0	0	0	0	0	2	1
2	2	0	2	0	0	0	0	0	0	0	0	0	0	0
2	2	0	2	0	0	0	0	0	0	0	0	0	0	1
103	75	4	79	2	12	7	1	2	0	0	0	0	10	10
TOTALS			93											

SUMMARY: NORTHERN DIVISION - WARREN COUNTY

Note: In appropriate instances, and when possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 103 (100%)
1966 = 92 (100%)
2. Private practice - 93 (90.3%) 1966 = 78 (84.8%)
3. Not in private practice - 10 (9.7%) 1966 = 14 (15.2%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 93 = 100% (1966: 78 = 100%)

4. Aged 65 or over - 6 (6.5%) 1966 = 8 (1.0%)
5. General practitioners - 18 (19.4%) 1966 = 26 (33.3%)
6. GPs, 65 or over - 5 (22.2% of all GPs) 1966 = 4 (15.4% of all GPs)
7. Internists - 14 (15.0%) 1966 = 11 (14.0%)
8. Internists, 65 or over - 4 (28.6% of all IMs) 1966 = 2 (18.2% of all IMs)
9. Family physicians* - 32 (34.4%) 1966 = 37 (47.5%)
10. Fam. MDs,* 65 or over - 9 (28.1% of all fam. MDs) 1966 = 6 (16.2% of all fam. MDs)

11. Population of Warren County - 47,850 1966 = 46,500 (est.)
12. Ratio of number of physicians in private practice to total population:
1:515 1966 = 1:600
13. Ratio of number of general practitioners to total population:
1:2,660 1966 = 1:1,790
14. Ratio of number of internists to total population:
1:3,418 1966 = 1:4,228
15. Ratio of number of family physicians* to total population:
1:1,500 1966 = 1:1,260

16. Physicians in private practice 5 years or less - 10
17. General practitioners in private practice 5 years or less - 1
18. Internists in private practice 5 years or less - 1
19. Family physicians* in private practice 5 years or less - 2 (6.3% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN NORTHERN DIVISION - WASHINGTON COUNTY

Primary Total Spec.	Mds in Private Practice				Mds Not in Private Practice							Total Staff
	Under 65		65 and over		Total Private	Full-Time Hosp.	Med. Sch. Fac.	Admin. Med.	Lab. Med.	Prev. Med.	Re-search	
	Full-Time Spec. & GP	GP with Spec.	Full-Time Spec. & GP	GP with Spec.								
1	0	0	0	0	1	0	0	0	0	0	0	0
22	19	0	3	0	22	0	0	0	0	0	0	0
5	4	0	0	0	4	1	0	0	0	0	0	3
5	5	0	0	0	5	0	0	0	0	0	0	1
2	2	0	0	0	2	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	1	0	0	0	0	0	1
1	1	0	0	0	0	1	0	0	0	0	0	1
2	0	0	0	0	1	0	0	0	0	0	0	0
40	32	0	3	0	35	1	1	0	0	0	0	2
TOTALS	0	0	0	0	0	4	1	0	0	0	0	5
												4

SUMMARY: NORTHERN DIVISION - WASHINGTON COUNTY

Note: In appropriate instances, and when possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 40 (100%)
1966 = 41 (100%)
2. Private practice - 35 (87.5%) 1966 = 34 (83.0%)
3. Not in private practice - 5 (12.5%) 1966 = 7 (17.0%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 35 = 100% (1966: 34 = 100%)

- | | |
|---|----------------------------------|
| 4. Aged 65 or over - 3 (8.6%) | 1966 = 6 (17.7%) |
| 5. General practitioners - 22 (62.9%) | 1966 = 21 (61.8%) |
| 6. GPs, 65 or over - 3 (13.6% of all GPs) | 1966 = 6 (28.6% of all GPs) |
| 7. Internists - 5 (14.4%) | 1966 = 4 (11.5%) |
| 8. Internists, 65 or over - 0 (0.0%) | 1966 = 0 (0.0%) |
| 9. Family physicians* - 27 (77.1%) | 1966 = 25 (73.5%) |
| 10. Fam. MDs,* 65 or over - 3 (11.1% of all fam. MDs) | 1966 = 6 (28.6% of all fam. MDs) |
| | |
| 11. Population of Washington County - 50,417 | 1966 = 49,100 (est.) |
| 12. Ratio of number of physicians in private practice to total population:
1:1,155 | 1966 = 1:1,416 |
| 13. Ratio of number of general practitioners to total population:
1:2,292 | 1966 = 1:2,233 |
| 14. Ratio of number of internists to total population:
1:10,083 | 1966 = 1:12,275 |
| 15. Ratio of number of family physicians* to total population:
1:1,800 | 1966 = 1:1,964 |
| | |
| 16. Physicians in private practice 5 years or less - 4 | |
| 17. General practitioners in private practice 5 years or less - 3 | |
| 18. Internists in private practice 5 years or less - 0 | |
| 19. Family physicians* in private practice 5 years or less - 3 (11.1% of all family physicians) | |

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN NORTHERN DIVISION

Primary Total Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE							Total Staff NIPP			
	Under 65		65 and over		Total Private Practice	Res.	Hosp.	Fac.	Full-Time Med. Sch.	Admin. Med.	Lab. Prev. Med.		Re- search		
	Full-Time GP with Spec. & GP 2 ⁰	Spec.	Full-Time GP with Spec. & GP 2 ⁰	Spec.											
UNSPEC	9	5	0	0	5	2	0	0	0	0	0	0	2	4	0
A	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0
ANES	18	14	2	0	16	0	2	0	0	0	0	0	0	2	3
CD	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0
CHP	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0
D	7	2	1	3	7	0	0	0	0	0	0	0	0	0	0
GP	97	74	0	19	93	0	3	1	0	0	0	0	0	4	8
GS	58	31	7	7	47	3	7	1	0	0	0	0	0	11	3
IM	51	32	5	7	46	2	1	1	0	0	0	0	0	5	3
N	3	2	1	0	3	0	0	0	0	0	0	0	0	0	1
OBG	29	24	3	0	28	0	1	0	0	0	0	0	0	1	3
OM	4	1	1	1	4	0	0	0	0	0	0	0	0	0	0
OPH	15	13	0	2	15	0	0	0	0	0	0	0	0	0	0
ORS	9	6	0	2	8	1	0	0	0	0	0	0	0	1	1
OTO	13	8	2	2	12	0	1	0	0	0	0	0	0	1	1
PATH	7	2	0	0	2	1	4	0	0	0	0	0	0	5	1
PD	22	18	0	2	20	1	0	1	0	0	0	0	0	2	3
P	6	3	0	0	3	0	2	1	0	0	0	0	0	3	0
PH	2	1	0	0	1	0	0	1	0	0	0	0	0	1	0
PUD	2	1	1	0	2	0	0	0	0	0	0	0	0	0	0
	17	12	0	0	12	0	4	1	0	0	0	0	0	5	4
	4	4	0	0	4	0	0	0	0	0	0	0	0	0	0
Inf Rec.	4	2	1	0	3	0	0	0	0	0	0	0	1	1	0
TOTALS	379	255	25	45	332	10	26	7	1	0	0	0	3	47	33

SUMMARY: NORTHERN DIVISION

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 379 (100%)
1966 = 366 (100%)
2. Private practice - 332 (87.6%) 1966 = 303 (82.8%)
3. Not in private practice - 47 (12.4%) 1966 = 63 (17.2%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 332 = 100% (1966: 303 = 100%)

4. Aged 65 or over - 52 (15.7%) 1966 = 47 (15.5%)
5. General practitioners - 93 (28.0%) 1966 = 134 (44.2%)
6. GPs, 65 or over - 19 (20.5% of all GPs) 1966 = 29 (21.7% of all GPs)
7. Internists - 46 (13.8%) 1966 = 35 (11.5%)
8. Internists, 65 or over - 9 (19.6% of all IMs) 1966 = 7 (20.0% of all IMs)
9. Family physicians* - 139 (41.9%) 1966 = 169 (55.8%)
10. Fam. MDs*, 65 or over - 28 (20.1% of all fam. MDs) 1966 = 36 (21.3% of all fam. MDs)
11. Population of Northern Division - 368,908 1966 = 340,000 (est.)
12. Ratio of number of physicians in private practice to total population:
1:1,111 1966 = 1:1,122
13. Ratio of number of general practitioners to total population:
1:3,967 1966 = 1:2,537
14. Ratio of number of internists to total population:
1:8,020 1966 = 1:9,714
15. Ratio of number of family physicians* to total population:
1:2,654 1966 = 1:2,012
16. Physicians in private practice 5 years or less - 33
17. General practitioners in private practice 5 years or less - 8
18. Internists in private practice 5 years or less - 3
19. Family physicians* in private practice 5 years or less - 11 (7.9% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN SOUTHERN DIVISION - COLUMBIA COUNTY

Primary Spec.	MDS IN PRIVATE PRACTICE				MDS NOT IN PRIVATE PRACTICE							Total Staff NIPP		
	MDS	Under 65		65 and over	Total Private	Full-Time Hosp.	Fac.	Admin. Med.	Lab. Med.	Prev. Med.	Re-search			
		Full-Time Spec.&GP 2 ^o	GP with Spec. 2 ^o										Res.	
UNSPEC.	1	0	0	0	0	0	0	1	0	0	0	0	1	0
CHP	1	1	0	0	1	0	0	0	0	0	0	0	0	0
GP	10	4	0	5	9	1	0	0	0	0	0	0	1	0
GS	7	5	0	1	6	1	0	0	0	0	0	0	1	0
IM	10	6	0	2	8	1	0	0	0	0	0	0	2	1
OBG	5	1	2	1	5	0	0	0	0	0	0	0	0	0
OM	1	0	1	0	1	0	0	0	0	0	0	0	0	0
OPH	1	0	0	1	1	0	0	0	0	0	0	0	0	0
ORS	1	0	0	0	1	0	0	0	0	0	0	0	0	0
PD	5	2	0	3	5	0	0	0	0	0	0	0	0	0
GPM	1	0	0	1	1	0	0	0	0	0	0	0	0	0
P	3	1	0	0	1	0	0	1	0	0	0	1	2	0
R	3	2	0	1	3	0	0	0	0	0	0	0	0	1
TOTALS	49	22	3	15	42	3	1	1	1	0	0	1	7	2

SUMMARY: SOUTHERN DIVISION - COLUMBIA COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 49 (100%)
1966 = 48 (100%)
2. Private practice 42 (85.7%) 1966 = 37 (77.1%)
3. Not in private practice - 7 (14.3%) 1966 = 11 (22.9%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 42 = 100% (1966: 37 = 100%)

4. Aged 65 or over - 17 (40.5%) 1966 = 3 (9.1%)
5. General practitioners - 9 (21.4%) 1966 = 13 (35.2%)
6. GPs, 65 or over - 5 (55.5% of all GPs) 1966 = 2 (15.4% of all GPs)
7. Internists - 8 (19.1%) 1966 = 10 (27.0%)
8. IMs, 65 or over - 2 (25.0% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 17 (40.5%) 1966 = 23 (62.2%)
10. Fam. MDs*, 65 or over - 7 (41.2% of all fam. MDs) 1966 = 2 (8.7% of all fam. MDs)

11. Population of Columbia County - 50,366 1966 = 49,300 (est.)
12. Ratio of number of physicians in private practice to total population:
1:1,199 1966 = 1:1,333
13. Ratio of number of general practitioners to total population:
1:5,596 1966 = 1:3,792
14. Ratio of number of internists to total population:
1:6,271 1966 = 1:4,930
15. Ratio of number of family physicians* to total population:
1:2,962 1966 = 1:2,142

16. Physicians in private practice 5 years or less - 2
17. General practitioners in private practice 5 years or less - 0
18. Internists in private practice 5 years or less - 1
19. Family physicians* in private practice five years or less - 1 (5.9% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN SOUTHERN DIVISION - DELAWARE COUNTY

Primary Total Spec. MDs	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE							Total		
	Under 65		65 and over		Res.	Hosp.	Fac.	Med. Sch.	Admin.	Lab. Prev.	Re-search		Staff	NIPP
	Full-Time Spec.&GP	GP 2° Spec.	Full-Time GP with Spec.	GP 2° Spec.										
3	0	3	0	0	0	0	0	0	0	0	0	0	0	
8	5	0	2	0	1	0	0	0	0	0	0	1	2	
15	9	2	1	2	14	1	0	0	0	0	0	1	2	
6	3	3	0	0	6	0	0	0	0	0	0	0	0	
4	4	0	0	0	4	0	0	0	0	0	0	0	0	
4	3	0	0	0	3	0	1	0	0	0	0	0	1	
2	1	0	0	0	1	0	1	0	0	0	0	0	1	
42	25	8	3	2	38	4	0	0	0	0	0	0	5	

SUMMARY: SOUTHERN DIVISION - DELAWARE COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 42 (100%)
1966 = 40 (100%)
2. Private practice - 38 (90.5%) 1966 = 37 (92.5%)
3. Not in private practice - 4 (9.5%) 1966 = 3 (7.5%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 38 = 100% (1966: 37 = 100%)

4. Aged 65 or over - 5 (13.2%) 1966 = 3 (8.1%)
5. General practitioners - 7 (18.4%) 1966 = 20 (54.1%)
6. GPs, 65 or over - 2 (28.6% of all GPs) 1966 = 2 (10% of all GPs)
7. Internists - 6 (15.8%) 1966 = 3 (8.1%)
8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 13 (34.2%) 1966 = 23 (62.2%)
10. Fam. MDs, 65 or over - 2 (15.4% of all fam. MDs) 1966 = 2 (8.7% of all fam. MDs)

11. Population of Delaware County - 43,565 1966 = 43,100 (est.)
12. Ratio of number of physicians in private practice to total population:
1:1,146 1966 = 1:1,165
13. Ratio of number of general practitioners to total population:
1:6,223 1966 = 1:2,155
14. Ratio of number of internists to total population:
1:7,261 1966 = 1:14,366
15. Ratio of number of family physicians* to total population:
1:3,351 1966 = 1:1,874

16. Physicians in private practice 5 years or less - 5
17. General practitioners in private practice 5 years or less - 1
18. Internists in private practice 5 years or less - 0
19. Family physicians* in private practice 5 years or less - 1 (7.7% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN SOUTHERN DIVISION - DUTCHESS COUNTY

Primary Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE							Total Staff NIPP				
	Under 65		65 and over		Total Private Practice	Full-Time Hosp. Res.	Med. Fac.	Sch. Admin. Med.	Lab. Prev. Med.	Re-search						
	Full-Time Spec. & GP	GP with 2° Spec.	0	1							2		3	4	5	6
UNSPEC.	5	2	0	0	2	0	1	0	0	2	0	0	0	0	3	1
A	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
ANES	17	14	2	0	16	0	1	0	0	0	0	0	0	0	1	3
AM	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
CD	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0
CHP	4	0	0	0	0	1	3	0	0	0	0	0	0	0	4	0
D	7	5	0	1	6	0	1	0	0	0	0	0	0	0	1	1
GP	36	24	0	10	34	0	1	1	0	0	0	0	0	0	2	3
GS	44	26	7	7	42	0	2	0	0	0	0	0	0	0	2	2
IM	47	35	2	3	40	1	5	0	1	1	0	0	0	0	7	6
NS	3	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0
N	5	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0
OBG	37	26	5	0	36	0	1	0	0	0	0	0	0	0	1	6
OM	3	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0
OPH	9	8	0	1	9	0	0	0	0	0	0	0	0	0	0	0
ORS	8	8	0	0	8	0	0	0	0	0	0	0	0	0	0	2
OTO	8	5	0	0	7	0	1	0	0	0	0	0	0	0	0	2
PATH	7	0	0	0	0	0	7	0	0	0	0	0	0	0	1	0
PD	25	18	0	0	20	0	4	0	1	1	0	0	0	0	7	0
PM	3	1	0	0	1	0	2	0	0	0	0	0	0	0	5	3
PS	3	3	0	0	3	0	0	0	0	0	0	0	0	0	2	0
GPM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
P	126	23	2	4	29	12	73	4	5	0	0	0	0	3	97	9
PUD	6	0	0	1	1	0	4	0	0	0	0	0	0	1	5	0
R	8	3	0	0	3	0	5	0	0	0	0	0	0	0	5	0
TS	1	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
U	8	3	0	3	6	0	2	0	0	0	0	0	0	0	2	0
Not Rec.	3	2	0	0	2	0	0	1	0	0	0	0	0	0	1	1
TOTALS	428	217	20	39	280	14	114	6	10	0	0	0	4	148	41	41

SUMMARY: SOUTHERN DIVISION - DUTCHESS COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 428 (100%)
1966 = 365 (100%)
2. Private practice - 280 (65.4%) 1966 = 211 (57.8%)
3. Not in private practice - 148 (34.6%) 1966 = 54 (42.2%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 280 = 100% (1966: 211 = 100%)

4. Aged 65 or over - 43 (15.4%) 1966 = 27 (12.8%)
5. General practitioners - 34 (12.1%) 1966 = 63 (30.0%)
6. GPs, 65 or over - 10 (29.4% of all GPs) 1966 = 12 (19.1% of all GPs)
7. Internists - 40 (14.4%) 1966 = 25 (11.8%)
8. IMs, 65 or over - 3 (7.5% of all IMs) 1966 = 1 (4% of all IMs)
9. Family physicians* - 74 (26.4%) 1966 = 88 (40.0%)
10. Fam. MDs*, 65 or over - 13 (17.6% of all fam. MDs) 1966 = 13 (15.0% of all fam. MDs)

11. Population of Dutchess County - 218,331 1966 = 195,100 (est.)
12. Ratio of number of physicians in private practice to total population:
1:780 1966 = 1:924
13. Ratio of number of general practitioners to total population:
1:6,422 1966 = 1:3,096
14. Ratio of number of internists to total population:
1:5,458 1966 = 1:7,804
15. Ratio of number of family physicians* to total population:
1:2,950 1966 = 1:2,217

16. Physicians in private practice 5 years or less - 41
17. General practitioners in private practice 5 years or less - 3
18. Internists in private practice 5 years or less - 6
19. Family physicians* in private practice 5 years or less - 9 (12.2% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN SOUTHERN DIVISION - GREENE COUNTY

Primary Total Spec.	Mds IN PRIVATE PRACTICE		Mds NOT IN PRIVATE PRACTICE							Total		
	Under 65	65 and over	Full-Time Spec.&GP 2°	GP with Spec. 2°	Full-Time GP with Spec.	Private Practice Res.	Hosp. Fac.	Full-Time Med.Sch. Admin. Med.	Lab. Prev. Med. search Staff		Re- search Staff	Total
4	3	1	0	0	0	0	0	0	0	0	0	0
2	0	2	0	0	0	0	0	0	0	0	0	0
1	0	1	0	0	0	0	0	0	0	0	0	0
8	5	0	3	0	0	0	0	0	0	0	0	0
3	2	0	1	0	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	0	0	0	0	0
2	1	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	0	0	0	0	0	0	0	0	1
1	0	0	1	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	1	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0
25	13	4	6	0	0	1	1	0	0	0	0	2
TOTALS	25	13	4	6	0	0	1	1	0	0	0	2

SUMMARY: SOUTHERN DIVISION - GREENE COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 25 (100%)
1966 = 26 (100%)
2. Private practice - 23 (92%) 1966 = 25 (96.2%)
3. Not in private practice - 2 (8%) 1966 = 1 (3.8%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 23 = 100% (1966: 25 = 100%)

- | | |
|--|----------------------------------|
| 4. Aged 65 or over - 6 (26.1%) | 1966 = 6 (24.0%) |
| 5. General practitioners - 8 (34.8%) | 1966 = 18 (72.0%) |
| 6. GPs, 65 or over - 3 (37.5% of all GPs) | 1966 = 5 (27.8% of all GPs) |
| 7. Internists - 1 (4.4%) | 1966 = 1 (4.0%) |
| 8. IMs, 65 or over - 0 (0.0% of all IMs) | 1966 = 0 (0.0% of all IMs) |
| 9. Family physicians* - 9 (39.5%) | 1966 = 19 (76.0%) |
| 10. Fam. MDs*, 65 or over - 3 (33.3% of all fam. MDs) | 1966 = 5 (26.3% of all fam. MDs) |
| | |
| 11. Population of Greene County - 32,000 | 1966 = 32,500 (est.)** |
| 12. Ratio of number of physicians in private practice to total population:
1:1,396 | 1966 = 1:1,300 |
| 13. Ratio of number of general practitioners to total population:
1:4,000 | 1966 = 1:1,800 |
| 14. Ratio of number of internists to total population:
1:32,000 | 1966 = 1:32,500 |
| 15. Ratio of number of family physicians* to total population:
1:3,555 | 1966 = 1:1,710 |
| | |
| 16. Physicians in private practice 5 years or less - 1 | |
| 17. General practitioners in private practice 5 years or less - 0 | |
| 18. Internists in private practice 5 years or less - 0 | |
| 19. Family physicians* in private practice 5 years or less - 0 (0.0% of all family physicians) | |

*defined as general practitioners plus internists.

**based on actual 1970 census figures, the 1966 estimate appears to have been too high.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN SOUTHERN DIVISION - SULLIVAN COUNTY

Primary Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE							Total Staff NIPP		
	Under 65		65 and over		Total Private Practice	Res.	Hosp.	Fac.	Med. Sch. Admin.	Lab. Prev. Med.	Re-search			
	Full-Time Spec.&GP	GP with 2° Spec.	Full-Time Spec.&GP	GP with 2° Spec.										
UNSPEC.	1	0	0	0	0	0	1	0	0	0	0	0	1	0
A	1	0	1	0	1	0	0	0	0	0	0	0	0	0
ANES	3	1	1	0	3	0	0	0	0	0	0	0	0	0
CD	4	3	1	0	4	0	0	0	0	0	0	0	0	1
D	1	0	0	1	1	0	0	0	0	0	0	0	0	0
GP	18	11	0	7	18	0	0	0	0	0	0	0	0	0
GS	11	8	1	0	10	1	0	0	0	0	0	0	0	1
IM	6	5	0	0	5	0	1	0	0	0	0	0	0	1
OBG	1	1	0	0	1	0	0	0	0	0	0	0	0	0
OPH	2	0	0	2	2	0	0	0	0	0	0	0	0	0
PATH	1	0	0	0	0	0	1	0	0	0	0	0	0	1
PD	1	1	0	0	1	0	0	0	0	0	0	0	0	0
P	3	3	0	0	3	0	0	0	0	0	0	0	0	0
PUD	1	0	0	1	1	0	0	0	0	0	0	0	0	0
R	2	0	0	1	1	0	1	0	0	0	0	0	0	0
TOTALS	56	33	4	13	51	1	4	0	0	0	0	0	5	3

SUMMARY: SOUTHERN DIVISION - SULLIVAN COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 56 (100%)
1966 = 61 (100%)
2. Private practice - 51 (91.1%) 1966 = 52 (85.3%)
3. Not in private practice - 5 (8.9%) 1966 = 9 (14.7%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 51 = 100% (1966: 52 = 100%)

4. Aged 65 or over - 14 (27.5%) 1966 = 10 (19.2%)
5. General practitioners - 18 (35.5%) 1966 = 31 (59.2%)
6. GPs, 65 or over - 7 (39.0% of all GPs) 1966 = 7 (22.6% of all GPs)
7. Internists - 5 (9.8%) 1966 = 5 (9.6%)
8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 23 (45.1%) 1966 = 38 (73.1%)
10. Fam. MDs*, 65 or over - 7 (30.4% of all fam. MDs) 1966 = 7 (13.5% of all fam. MDs)

11. Population of Sullivan County - 47,740 1966 = 47,400 (est.)
12. Ratio of number of physicians in private practice to total population:
1:975 1966 = 1:912
13. Ratio of number of general practitioners to total population:
1:2,763 1966 = 1:1,530
14. Ratio of number of internists to total population:
1:9,948 1966 = 1:9,480
15. Ratio of number of family physicians* to total population:
1:2,163 1966 = 1:1,248

16. Physicians in private practice 5 years or less - 3
17. General practitioners in private practice 5 years or less - 0
18. Internists in private practice 5 years or less - 1
19. Family physicians* in private practice 5 years or less - 1 (4.4% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN SOUTHERN DIVISION - ULSTER COUNTY

Primary Spec.	MDS IN PRIVATE PRACTICE				MDS NOT IN PRIVATE PRACTICE				Total	Total Staff NIPP			
	Under 65		65 and over		Full-Time Med. Sch. Fac.		Admin. Med. search				Lab. Prev. Re-		
	Full-Time Spec. & GP 20	GP with Spec. 20	Full-Time Spec. & GP 20	GP with Spec. 20	Hosp. Res.	Fac.	Med.	Med.					
UNSPEC.	4	0	0	0	0	2	0	0	0	0	0	4	0
A	1	0	0	0	0	0	0	0	0	0	0	0	0
ANES	11	9	0	0	0	0	0	0	0	0	0	0	0
AM	1	0	1	0	0	0	0	0	0	0	0	0	3
CD	1	0	0	0	0	0	0	0	0	0	0	0	0
D	3	2	0	0	0	0	1	0	0	0	0	0	0
GP	43	32	0	0	0	0	0	0	0	0	0	0	0
GS	19	11	0	1	1	2	0	0	0	0	0	0	1
IM	22	13	0	1	1	3	0	0	0	0	0	0	2
NS	1	0	0	0	0	0	0	0	0	0	0	0	2
OBG	11	9	2	0	0	0	0	0	0	0	0	0	0
OM	1	0	0	0	0	0	0	0	0	0	0	0	1
OPH	2	2	0	0	0	0	0	0	0	1	0	0	0
ORS	5	4	0	0	0	0	0	0	0	0	0	0	0
OTO	2	2	0	0	0	0	0	0	0	0	0	0	0
PATH	3	2	0	0	0	0	0	0	0	0	0	0	0
PD	10	7	1	0	0	2	0	0	0	0	0	1	0
P	9	4	2	0	0	2	0	0	0	0	0	0	1
PH	1	1	0	0	0	0	0	0	0	0	0	0	2
PUD	3	1	1	0	0	0	0	0	0	0	0	0	0
R	6	3	0	0	0	1	0	0	0	0	0	0	1
TS	2	2	0	0	0	2	0	0	0	0	0	0	3
U	4	2	0	0	0	0	0	0	0	0	0	0	1
Not Rec.	4	3	1	0	0	0	0	0	0	0	0	0	0
TOTALS	169	110	8	27	2	15	2	3	0	0	1	22	15



SUMMARY: SOUTHERN DIVISION - ULSTER COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 169 (100%)
1966 = 145 (100%)
2. Private practice - 147 (86.9%) 1966 = 119 (82.1%)
3. Not in private practice - 22 (13.1%) 1966 = 26 (17.9%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 147 = 100% (1966: 119 = 100%)

4. Aged 65 or over - 29 (19.7%) 1966 = 19 (16.0%)
5. General practitioners - 42 (28.6%) 1966 = 53 (44.5%)
6. GPs, 65 or over - 10 (23.8% of all GPs) 1966 = 11 (20.8% of all GPs)
7. Internists - 19 (13.0%) 1966 = 14 (11.8%)
8. IMs, 65 or over - 6 (31.6% of all IMs) 1966 = 1 (7.2% of all IMs)
9. Family physicians* - 61 (41.6%) 1966 = 67 (56.3%)
10. Fam. MDs*, 65 or over - 16 (26.2% of all fam. MDs) 1966 = 12 (17.9% of all fam. MDs)

11. Population of Ulster County - 135,319 1966 = 131,200 (est.)
12. Ratio of number of physicians in private practice to total population:
1:911 1966 = 1:905
13. Ratio of number of general practitioners to total population:
1:3,222 1966 = 1:2,476
14. Ratio of number of internists to total population:
1:7,122 1966 = 1:9,371
15. Ratio of number of family physicians* to total population:
1:2,153 1966 = 1:1,958

16. Physicians in private practice 5 years or less - 15
17. General practitioners in private practice 5 years or less - 2
18. Internists in private practice 5 years or less - 2
19. Family physicians* in private practice 5 years or less - 4 (7.5% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN SOUTHERN DIVISION

Primary Spec.	MDS IN PRIVATE PRACTICE				MDS NOT IN PRIVATE PRACTICE							Total	
	Under 65		65 and over		Total Private	Res.	Hosp. Fac.	Full-Time Med. Sch. Admin. Med.	Lab. Med. search	Prev. Re-	Staff		NIPP
	Full-Time Spec. & GP 2	GP with Spec. 2	Full-Time GP 2	GP with Spec. 2									
UNSPEC.	11	2	0	0	2	0	4	0	5	0	0	9	
A	3	1	1	0	3	0	0	0	0	0	0	0	
ANES	38	27	7	0	37	0	1	0	0	0	0	1	
AM	2	0	2	0	2	0	0	0	0	0	0	0	
CD	9	5	3	0	8	0	0	1	0	0	0	1	
CHP	5	1	0	0	1	0	3	0	0	0	0	4	
D	12	7	1	2	11	0	1	0	0	0	0	1	
GP	123	81	0	37	118	0	4	1	0	0	0	5	
GS	99	61	10	14	91	2	6	0	0	0	0	8	
IM	92	63	5	10	79	2	10	0	1	0	0	13	
NS	4	4	0	0	4	0	0	0	0	0	0	0	
N	5	4	0	0	5	0	0	0	0	0	0	0	
ORG	60	42	9	1	58	0	2	0	0	0	0	2	
OM	5	1	1	2	4	0	0	0	1	0	0	1	
OPH	14	10	0	4	14	0	0	0	0	0	0	0	
ORS	14	12	0	1	14	0	0	0	0	0	0	0	
OTO	10	7	0	2	9	0	1	0	0	0	0	1	
PATH	17	6	0	1	7	0	9	0	0	0	0	10	
PD	41	28	1	5	34	0	6	0	1	0	0	7	
PM	3	1	0	0	1	0	2	0	0	0	0	2	
PS	3	3	0	0	3	0	0	0	0	0	0	0	
GPM	2	0	0	1	1	0	0	0	0	0	0	1	
P	142	31	4	6	41	12	75	5	5	0	4	101	
PH	1	1	0	0	1	0	0	0	0	0	0	0	
PUD	10	1	1	2	4	0	5	0	0	0	0	6	
R	21	9	0	2	11	0	9	1	0	0	0	10	
TS	3	2	0	0	2	0	1	0	0	0	0	1	
U	13	5	0	5	10	1	2	0	0	0	0	3	
Not Rec.	7	5	1	0	6	0	0	1	0	0	0	1	
TOTALS	769	420	47	103	581	18	141	9	14	0	6	188	
												68	

SUMMARY: SOUTHERN DIVISION

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 769 (100%)
1966 = 685 (100%)
2. Private practice - 581 (75.5%) 1966 = 482 (70.4%)
3. Not in private practice - 188 (24.5%) 1966 = 203 (29.6%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 581 = 100% (1966: 482 = 100%)

4. Aged 65 or over - 114 (19.6%) 1966 = 69 (14.1%)
5. General practitioners - 118 (20.3%) 1966 = 198 (41.1%)
6. GPs, 65 or over - 37 (31.3% of all GPs) 1966 = 39 (19.6% of all GPs)
7. Internists - 79 (13.6%) 1966 = 59 (12.3%)
8. IMs, 65 or over - 11 (13.9% of all IMs) 1966 = 2 (3.4% of all IMs)
9. Family physicians* - 197 (33.9%) 1966 = 257 (53.3%)
10. Fam. MDs*, 65 or over - 48 (24.4% of all fam. MDs) 1966 = 41 (15.5% of all fam. MDs)

11. Population of Southern Division - 529,321 1966 = 498,600 (est.)
12. Ratio of number of physicians in private practice to total population:
1:911 1966 = 1:1,035
13. Ratio of number of general practitioners to total population:
1:4,485 1966 = 1:2,518
14. Ratio of number of internists to total population:
1:6,701 1966 = 1:8,450
15. Ratio of number of family physicians* to total population:
1:2,686 1966 = 1:1,940

16. Physicians in private practice 5 years or less - 68
17. General practitioners in private practice 5 years or less - 7
18. Internists in private practice 5 years or less - 11
19. Family physicians* in private practice 5 years or less - 18 (9.0% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN EASTERN DIVISION - BERKSHIRE COUNTY (MASSACHUSETTS)

Primary Spec.	Total MDS	MDS IN PRIVATE PRACTICE				MDS NOT IN PRIVATE PRACTICE							Total Staff	NIPP			
		Under 65	Full-Time GP with Spec. & GP 2 ^o	Full-Time GP with Spec. & GP 2 ^o	65 and over	Private Practice	Res.	Hosp.	Full-Time Med. Sch. Fac.	Admin. Med.	Lab. Med.	Prev. Med.			Re-search		
UNSPEC.	5	2	0	0	0	2	3	0	0	0	0	0	0	0	0	3	1
A	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
ANES	13	7	2	0	0	9	0	4	0	0	0	0	0	0	0	4	2
CD	5	2	0	1	1	4	1	0	0	0	0	0	0	0	0	1	0
CHP	3	1	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0
D	4	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	1
GP	35	22	0	12	0	34	1	0	0	0	0	0	0	0	0	1	3
GS	28	17	2	1	2	22	4	2	0	0	0	0	0	0	0	6	0
IM	41	29	1	0	2	32	7	0	0	1	0	0	0	0	1	9	7
NS	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
OBG	22	14	2	1	1	17	5	0	0	0	0	0	0	0	0	5	3
OM	3	2	0	0	0	2	0	0	0	1	0	0	0	0	0	1	0
OPH	8	8	0	0	0	8	0	0	0	0	0	0	0	0	0	0	1
ORS	14	13	0	1	0	14	0	0	0	0	0	0	0	0	0	0	3
OTO	6	4	0	2	0	6	0	0	0	0	0	0	0	0	0	0	1
PATH	9	4	0	0	0	4	1	4	0	0	0	0	0	0	0	5	2
PD	10	7	0	1	1	9	1	0	0	0	0	0	0	0	0	1	0
PM	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
PS	2	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1
P	16	7	0	0	0	7	2	6	0	0	0	0	1	1	10	1	1
PUD	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
R	7	5	1	0	0	6	0	1	0	0	0	0	0	0	0	1	1
U	5	4	0	0	0	4	0	1	0	0	0	0	0	0	0	1	1
Not Rec.	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
TOTALS	241	159	8	19	6	192	25	18	1	3	0	0	0	2	49	28	

SUMMARY: EASTERN DIVISION - BERKSHIRE COUNTY (MASSACHUSETTS)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 241 (100%)
1966 = 227 (100%)
2. Private practice - 192 (79.7%) 1966 = 155 (68.3%)
3. Not in private practice - 49 (20.3%) 1966 = 72 (31.7%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 192 = 100% (1966: 155 = 100%)

4. Aged 65 or over - 25 (13.0%) 1966 = 20 (12.9%)
5. General practitioners - 34 (17.6%) 1966 = 51 (32.9%)
6. GPs, 65 or over - 12 (35.3% of all GPs) 1966 = 12 (23.5% of all GPs)
7. Internists - 32 (16.7%) 1966 = 17 (10.9%)
8. IMs, 65 or over - 2 (6.4% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 66 (34.4%) 1966 = 68 (43.9%)
10. Fam. MDs*, 65 or over - 14 (21.2% of all fam. MDs) 1966 = 12 (17.7% of all fam. MDs)

11. Population of Berkshire Co. (Eastern Div.) - 147,844
1966 = 146,000 (est.)
12. Ratio of number of physicians in private practice to total population:
1:770 1966 = 1:942
13. Ratio of number of general practitioners to total population:
1:4,054 1966 = 1:2,863
14. Ratio of number of internists to total population:
1:4,620 1966 = 1:8,689
15. Ratio of number of family physicians* to total population:
1:2,240 1966 = 1:2,147

16. Physicians in private practice 5 years or less - 28
17. General practitioners in private practice 5 years or less - 3
18. Internists in private practice 5 years or less - 7
19. Family physicians* in private practice 5 years or less - 10 (15.2% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION - FULION COUNTY

Primary Total Spec. MDS	MDS IN PRIVATE PRACTICE			MDS NOT IN PRIVATE PRACTICE										Total		
	Under 65	65 and over	Total	Full-Time Spec.&GP	2° Spec.	Full-Time GP with Spec.	GP with 2° Spec.	Res.	Hosp.	Fac.	Med. search	Lab. Med.	Admin. Med.		Prev. Re- search	Staff NIPP
5	1	3	0	1	5	0	0	0	0	0	0	0	0	0	0	0
1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
16	11	0	5	0	16	0	0	0	0	0	0	0	0	0	0	0
11	7	2	0	2	11	0	0	0	0	0	0	0	0	0	0	1
3	2	0	0	1	3	0	0	0	0	0	0	0	0	0	0	1
5	4	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0
3	2	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0
1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
2	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
52	31	5	10	4	50	0	1	0	1	0	0	0	0	0	0	2

SUMMARY: WESTERN DIVISION - FULTON COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (M.), excluding interns - 52 (100%)
1966 = 56 (100%)
2. Private practice - 50 (96.1%) 1966 = 50 (89.3%)
3. Not in private practice - 2 (3.9%) 1966 = 6 (10.7%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 50 = 100% (1966: 50 = 100%)

4. Aged 65 or over - 14 (28.0%) 1966 = 10 (20.0%)
5. General practitioners - 16 (32.0%) 1966 = 27 (54.0%)
6. GPs, 65 or over - 5 (31.3% of all GPs) 1966 = 5 (18.5% of all GPs)
7. Internists - 3 (6.0%) 1966 = 3 (6.0%)
8. IMs, 65 or over - 1 (33.3% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 19 (38.0%) 1966 = 30 (60.0%)
10. Fam. MDs*, 65 or over - 6 (31.6% of all fam. MDs) 1966 = 5 (16.7% of all fam. MDs)

11. Population of Fulton County - 51,854 1966 = 51,600 (est.)
12. Ratio of number of physicians in private practice to total population:
1:1,037 1966 = 1:1,032
13. Ratio of number of general practitioners to total population:
1:3,241 1966 = 1:1,911
14. Ratio of number of internists to total population:
1:17,285 1966 = 1:17,200
15. Ratio of number of family physicians* to total population:
1:2,729 1966 = 1:1,720

16. Physicians in private practice 5 years or less - 2
17. General practitioners in private practice 5 years or less - 1
18. Internists in private practice 5 years or less - 0
19. Family physicians* in private practice 5 years or less - 1 (5.3% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION - HAMILTON COUNTY

Primary Spec.	MDs IN PRIVATE PRACTICE			MDs NOT IN PRIVATE PRACTICE									
	Under 65	65 and over	Total	Full-Time Spec.&GP	GP with 2° Spec.	Full-Time GP with 2° Spec.	Res. Hosp.	Full-Time Med. Sch. Fac.	Admin. Med.	Lab. Med. search	Prev. Med. Staff	Re- search NIPP	Total
CD	0	1	1	0	0	0	0	0	0	0	0	0	0
GP	2	0	2	0	0	0	0	0	0	0	0	0	1
GS	1	0	1	0	0	0	0	0	0	0	0	0	0
OPH	1	0	1	0	0	0	0	0	0	0	0	0	0
TOTALS	5	2	7	0	0	0	0	0	0	0	0	0	1

SUMMARY: WESTERN DIVISION - HAMILTON COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 5 (100%)
1966 = 7 (100%)
2. Private practice - 5 (100%) 1966 = 6 (85.7%)
3. Not in private practice - 0 (0.0%) 1966 = 1 (14.3%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 5 = 100% (1966: 6 = 100%)

4. Aged 65 or over - 3 (60.0%) 1966 = 3 (50.0%)
5. General practitioners - 2 (40.0%) 1966 = 5 (83.3%)
6. GPs, 65 or over - 0 (0.0% of all GPs) 1966 = 2 (40.0% of all GPs)
7. Internists - 0 (0.0%) 1966 = 0 (0.0%)
8. IMs, 65 or over - 0 1966 = 0
9. Family physicians* - 2 (40.0%) 1966 = 5 (83.3%)
10. Fam. MDs*, 65 or over - 0 (0.0% of all fam. MDs) 1966 = 2 (40.0% of all fam. MDs)

11. Population of Hamilton County - 4,496 1966 = 4,300 (est.)
12. Ratio of number of physicians in private practice to total population:
1:899 1966 = 1:717
13. Ratio of number of general practitioners to total population:
1:2,248 1966 = 1:860
14. Ratio of number of internists to total population:
No internists in county, 1970 or 1966
15. Ratio of number of family physicians* to total population:
1:2,248 1966 = 1:860

16. Physicians in private practice 5 years or less - 1
17. General practitioners in private practice 5 years or less - 1
18. Internists in private practice 5 years or less - 0
19. Family physicians* in private practice 5 years or less - 1 (50.0% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION - HERKIMER COUNTY

Primary Total Spec.	Mds IN PRIVATE PRACTICE			Mds NOT IN PRIVATE PRACTICE							Total				
	Under 65	65 and over		Full-Time Spec.&GP 20	GP with Spec. 20	GP with Spec.&GP 20	Spec. 20	Res.	Hosp.	Fac.		Med. Sch.	Admin. Lab.	Prev. Re- Med. search	Total Staff NIPP
		Full-Time Spec.&GP 20	GP with Spec. 20												
2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
18	0	7	0	0	1	0	0	0	0	0	0	0	0	1	
10	3	1	2	0	1	0	0	0	0	0	0	0	0	1	
3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
5	2	0	0	0	1	0	0	0	0	0	0	0	0	1	
46	23	7	10	2	4	0	0	0	0	0	0	0	0	4	
TOTALS	46	23	10	2	4	0	0	0	0	0	0	0	0	4	
														3	

SUMMARY: WESTERN DIVISION - HERKIMER COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 46 (100%)
1966 = 47 (100%)
2. Private practice - 42 (91.3%) 1966 = 44 (93.6%)
3. Not in private practice - 4 (8.7%) 1966 = 3 (6.4%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 42 = 100% (1966: 44 = 100%)

4. Aged 65 or over - 12 (28.6%) 1966 = 10 (22.7%)
5. General practitioners - 17 (40.5%) 1966 = 31 (70.5%)
6. GPs, aged 65 or over - 7 (41.2% of all GPs) 1966 = 8 (25.8% of all GPs)
7. Internists - 3 (7.1%) 1966 = 1 (2.3%)
8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 20 (47.6%) 1966 = 32 (72.7%)
10. Fam. MDs*, 65 or over - 7 (35.0% of all fam. MDs) 1966 = 8 (25.0% of all fam. MDs)

11. Population of Herkimer County - 66,823 1966 = 69,100 (est.)**
12. Ratio of number of physicians in private practice to total population:
1:1,591 1966 = 1:1,571
13. Ratio of number of general practitioners to total population:
1:3,931 1966 = 1:2,229
14. Ratio of number of internists to total population:
1:22,274 1966 = 1:69,100
15. Ratio of number of family physicians* to total population:
1:3,341 1966 = 1:2,160

16. Physicians in private practice 5 years or less - 3
17. General practitioners in private practice 5 years or less - 0
18. Internists in private practice 5 years or less - 0
19. Family physicians* in private practice 5 years or less - 0 (0.0% of all family physicians)

*defined as general practitioners plus internists.

**Based on 1970 census figures, it would appear that the 1966 estimate was too high.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION - MONTGOMERY COUNTY

Primary Total Spec.	MDs IN PRIVATE PRACTICE			MDs NOT IN PRIVATE PRACTICE						Total Staff	NIPP		
	Under 65	65 and over	Total Private Practice	Res.	Hosp.	Fac.	Med. Sch. Admin.	Lab. Med.	Prev. Med.			Re-search	
	20 Spec. & GP	20 Spec. & GP	20 Spec. & GP with 20 Spec.										
ANES	2	0	0	0	0	0	0	0	0	0	0	0	0
CD	2	0	0	0	0	0	0	0	0	0	0	0	1
GP	10	5	0	10	0	0	0	0	0	0	0	0	0
GS	10	2	3	9	0	1	0	0	0	0	0	0	1
IM	11	7	1	11	0	0	0	0	0	0	0	0	1
OBG	2	1	0	2	0	0	0	0	0	0	0	0	0
OPH	1	0	0	1	0	0	0	0	0	0	0	0	0
ORS	2	0	0	2	0	0	0	0	0	0	0	0	1
OTO	2	0	0	2	0	0	0	0	0	0	0	0	0
PATH	1	0	0	1	0	0	0	0	0	0	0	0	0
PD	2	0	0	2	0	0	0	0	0	0	0	0	0
P	1	0	0	0	0	1	0	0	0	0	0	0	1
R	3	0	0	1	0	2	0	0	0	0	0	0	2
U	1	0	0	1	0	0	0	0	0	0	0	0	0
Not Rec.	3	2	0	1	0	0	0	0	0	0	0	0	1
TOTALS	53	27	7	11	4	4	0	0	0	0	0	0	4
						49							4

SUMMARY: WESTERN DIVISION - MONTGOMERY COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 53 (100%)
1966 = 58 (100%)
2. Private practice - 49 (92.5%) 1966 = 51 (88.0%)
3. Not in private practice - 4 (7.5%) 1966 = 7 (12.0%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 49 = 100% (1966: 51 = 100%)

4. Aged 65 or over - 15 (30.6%) 1966 = 12 (23.5%)
5. General practitioners - 10 (20.4%) 1966 = 29 (58.8%)
6. GPs, 65 or over - 5 (50.0% of all GPs) 1966 = 10 (34.5% of all GPs)
7. Internists - 11 (22.4%) 1966 = 7 (13.9%)
8. IMs, 65 or over - 1 (9.1% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 21 (42.9%) 1966 = 36 (70.6%)
10. Fam. MDs*, 65 or over - 6 (28.6% of all fam. MDs) 1966 = 10 (27.8% of all fam. MDs)

11. Population of Montgomery County - 55,253 1966 = 56,200 (cst.)
12. Ratio of number of physicians in private practice to total population:
1:1,127 1966 = 1:1,102
13. Ratio of number of general practitioners to total population:
1:5,525 1966 = 1:1,903
14. Ratio of number of internists to total population:
1:5,023 1966 = 1:8,028
15. Ratio of number of family physicians* to total population:
1:2,631 1966 = 1:1,561

16. Physicians in private practice 5 years or less - 4
17. General practitioners in private practice 5 years or less - 0
18. Internists in private practice 5 years or less - 1
19. Family physicians* in private practice 5 years or less - 1 (4.8% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION - OTSEGO COUNTY*

Primary Total Spec.	MDS IN PRIVATE PRACTICE			MDS NOT IN PRIVATE PRACTICE							Total Private Practice	Total Staff NIPP	
	Under 65		65 and over	Full-Time Spec.&GP	2 ^o Spec.	Hosp.	Fac.	Med. Sch.	Admin.	Lab. Prev.			Re- Med. search
	4	0	0										
4	4	0	0	0	0	0	0	0	0	0	0	0	1
1	0	1	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	0
14	8	0	4	0	0	1	0	1	0	0	0	0	1
13	7	0	0	0	5	1	0	0	0	0	0	0	2
25	17	1	0	0	3	3	0	1	0	0	0	0	6
2	2	0	0	0	0	0	0	0	0	0	0	0	7
1	1	0	0	0	0	0	0	0	0	0	0	0	1
7	5	0	1	0	0	0	0	0	0	0	0	0	0
2	1	0	0	0	1	0	0	0	0	0	0	0	1
2	2	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	1
5	5	0	0	0	0	0	0	0	0	0	0	0	2
7	7	0	0	0	0	0	0	0	0	0	0	0	0
3	2	0	0	0	0	1	0	0	0	0	0	0	1
1	1	0	0	0	0	0	0	0	0	0	0	0	0
4	1	0	0	0	0	0	0	0	0	0	0	0	0
6	5	0	1	0	0	0	0	0	0	0	0	0	3
2	2	0	0	0	0	0	0	0	0	0	0	0	0
2	2	0	0	0	0	0	0	0	0	0	0	0	1
2	2	0	0	0	0	0	0	0	0	0	0	0	0
107	78	2	6	0	10	9	0	2	0	0	0	0	21
													28

*In comparing the physician (MD) inventory of Otsego County with that of counties with a similar total population, it should be considered that this county has a teaching hospital with a large full-time staff, most of whom would appear to consider themselves in private practice. This is in contrast to the inventory of 1966, at which time these physicians indicated they were staff members. Therefore, strict comparisons are not possible.



SUMMARY: WESTERN DIVISION - OTSEGO COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1965 are provided.

1. Total number of physicians (MD), excluding interns - 107 (100%)
1966 = 90 (100%)
2. Private practice**- 86 (80.4%) 1966 = 30 (33.3%)
3. Not in private practice - 21 (19.6%) 1966 = 60 (66.7%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice**: 86 = 100% (1966: 30 = 100%)

4. Aged 65 or over - 6 (7.0%) 1966 = 4 (13.3%)
5. General practitioners - 12 (13.9%) 1966 = 17 (56.7%)
6. GPs, 65 or over - 4 (33.3% of all GPs) 1966 = 4 (23.5% of all GPs)
7. Internists - 18 (20.9%) 1966 = 4 (13.3%)
8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 30 (34.9%) 1966 = 21 (70.0%)
10. Fam. MDs*, 65 or over - 4 (13.3% of all fam. MDs) 1966 = 4 (19.0% of all fam. MDs)

11. Population of Otsego County - 55,421 1966 = 52,400 (est.)
12. Ratio of number of physicians in private practice to total population:
1:645 1966 = 1:1,747
13. Ratio of number of general practitioners to total population:
1:4,619 1966 = 1:3,082
14. Ratio of number of internists to total population:**
1:3,080 1966 = 1:13,100
15. Ratio of number of family physicians* to total population:**
1:1,847 1966 = 1:2,500

16. Physicians in private practice 5 years or less** - 28
17. General practitioners in private practice 5 years or less - 1
18. Internists in private practice 5 years or less** - 7
19. Family physicians* in private practice 5 years or less** - 8 (26.7% of all family physicians)

*defined as general practitioners plus internists.

**see footnote on page 6-42.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION - SCHENECTADY COUNTY

Primary Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE										Total Staff	NIPP		
	Under 65		65 and over		Total Private	Res.	Hosp.	Full-Time Med. Sch. Fac.	Admin. Med.	Lab. Med.	Prev. Med.	Re-search						
	Full-Time Spec. & GP	GP with Spec.	Full-Time GP	2° Spec.														
UNSPEC.	7	0	0	0	0	0	5	0	1	0	0	1	0	0	0	0	7	0
A	5	2	3	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0
ANES	18	17	0	0	17	0	1	0	0	0	0	0	0	0	0	0	1	3
CD	9	7	0	0	7	1	1	0	0	0	0	0	0	0	0	0	2	2
CHP	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
D	4	2	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2	0
GE	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
GP	35	25	0	0	34	0	0	0	1	0	0	0	0	0	0	0	1	2
GS	42	24	1	0	27	11	4	0	0	0	0	0	0	0	0	0	15	3
IM	40	25	6	0	31	2	5	1	0	0	0	0	0	0	0	0	9	4
NS	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
N	9	7	0	0	7	1	1	0	0	0	0	0	0	0	0	0	2	3
OBG	26	16	3	2	22	3	1	0	0	0	0	0	0	0	0	0	4	2
OM	2	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
OPH	13	10	1	2	13	0	0	0	0	0	0	0	0	0	0	0	0	0
ORS	13	10	0	0	10	1	2	0	0	0	0	0	0	0	0	0	3	1
OTO	4	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
PATH	19	7	0	0	7	4	8	0	0	0	0	0	0	0	0	0	12	3
PD	20	16	1	1	18	1	0	1	0	0	0	0	0	0	0	0	2	3
PM	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
PS	3	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	1
GPM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
CRS	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
P	14	12	0	1	13	0	1	0	0	0	0	0	0	0	0	0	1	2
PUD	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1
R	17	16	0	0	16	0	1	0	0	0	0	0	0	0	0	0	1	5
TS	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1
U	7	5	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	1
Not Rec.	6	3	1	1	5	0	0	0	0	0	0	0	0	0	0	0	1	1
TOTALS	325	219	16	19	258	24	34	3	2	0	0	4	0	0	0	0	67	39

SUMMARY: WESTERN DIVISION - SCHENECTADY COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 325 (100%)
1966 = 260 (100%)
2. Private practice - 258 (79.4%) 1966 = 200 (76.9%)
3. Not in private practice - 67 (20.6%) 1966 = 60 (23.1%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 258 = 100% (1966: 200 = 100%)

4. Aged 65 or over - 23 (8.9%) 1966 = 17 (8.5%)
5. General practitioners - 34 (13.2%) 1966 = 56 (28.0%)
6. GPs, 65 or over - 9 (26.5% of all GPs) 1966 = 9 (16.1% of all GPs)
7. Internists - 31 (12.1%) 1966 = 21 (10.5%)
8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 1 (4.8% of all IMs)
9. Family physicians* - 65 (25.2%) 1966 = 77 (38.5%)
10. Fam. MDs*, 65 or over - 9 (13.9% of all fam. MDs) 1966 = 10 (13.0% of all fam. MDs)

11. Population of Schenectady County - 159,995
1966 = 158,000 (est.)
12. Ratio of number of physicians in private practice to total population:
1:620 1966 = 1:790
13. Ratio of number of general practitioners to total population:
1:4,706 1966 = 1:2,822
14. Ratio of number of internists to total population:
1:5,161 1966 = 1:7,524
15. Ratio of number of family physicians* to total population:
1:2,462 1966 = 1:2,053

16. Physicians in private practice 5 years or less - 39
17. General practitioners in private practice 5 years or less - 2
18. Internists in private practice 5 years or less - 4
19. Family physicians* in private practice 5 years or less - 6 (9.1% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION - SCHOHARIE COUNTY

Primary Spec.	Total MDS	MDS IN PRIVATE PRACTICE		Full-Time Spec.&GP 20	GP with Spec. 20	Full-Time GP with Spec. 20	65 and over	Total Private Practice	MDS NOT IN PRIVATE PRACTICE						Total Staff	NIPP			
		Under 65	65 and over						Res.	Hosp.	Fac.	Med. Sch.	Admin. Med.	Lab. Med.			Prev. Med.	Re-search	
UNSPEC.	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	
GP	10	5	0	5	0	0	0	10	0	0	0	0	0	0	0	0	0	0	
GS	3	2	1	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	
IM	2	1	0	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	
OBG	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
ORS	2	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	
PD	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
PM	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
GPM	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
U	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	
TOTALS	23	12	3	6	1	1	0	22	0	0	1	0	0	0	0	0	1	0	1

SUMMARY: WESTERN DIVISION - SCHOHARIE COUNTY

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

- | | |
|---|-------------------|
| 1. Total number of physicians (MD), excluding interns - 23 (100%) | 1966 = 23 (100%) |
| 2. Private practice - 22 (95.7%) | 1966 = 20 (87.0%) |
| 3. Not in private practice - 1 (4.3%) | 1966 = 3 (13.0%) |

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 22 = 100% (1966: 20 = 100%)

- | | |
|---|----------------------------------|
| 4. Aged 65 or over - 7 (31.8%) | 1966 = 4 (20.0%) |
| 5. General practitioners - 10 (45.5%) | 1966 = 13 (65.0%) |
| 6. GPs, 65 or over - 5 (50.0% of all GPs) | 1966 = 3 (23.0% of all GPs) |
| 7. Internists - 2 (9.1%) | 1966 = 1 (5.0%) |
| 8. IMs, 65 or over - 0 (0.0% of all IMs) | 1966 = 0 (0.0% of all IMs) |
| 9. Family physicians* - 12 (54.5%) | 1966 = 14 (70.0%) |
| 10. Fam. MDs*, 65 or over - 5 (41.7% of all fam. MDs) | 1966 = 3 (21.4% of all fam. MDs) |

- | | |
|---|----------------------|
| 11. Population of Schoharie County - 24,203 | 1966 = 22,500 (est.) |
| 12. Ratio of number of physicians in private practice to total population:
1:1,100 | 1966 = 1:1,125 |
| 13. Ratio of number of general practitioners to total population:
1:2,420 | 1966 = 1:1,730 |
| 14. Ratio of number of internists to total population:
1:12,102 | 1966 = 1:22,500 |
| 15. Ratio of number of family physicians* to total population:
1:2,017 | 1966 = 1:1,607 |

- | | |
|--|--|
| 16. Physicians in private practice 5 years or less - 1 | |
| 17. General practitioners in private practice 5 years or less - 0 | |
| 18. Internists in private practice 5 years or less - 0 | |
| 19. Family physicians* in private practice 5 years or less - 0 (0.0% of all family physicians) | |

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN WESTERN DIVISION

Primary Spec.	MDS IN PRIVATE PRACTICE		MDS NOT IN PRIVATE PRACTICE						Total Staff	NIPP		
	Total MDS	Under 65		Total Private	Full-Time Hosp.	Fac.	Med. Sch. Admin.	Lab. Prev. Med.			Re-search	
		Full-Time GP with Spec. & GP 20	65 and over									
UNSPEC.	8	0	0	0	6	0	1	0	0	1	8	0
A	5	2	3	0	0	0	0	0	0	0	0	3
ANES	31	23	6	0	1	0	0	0	0	0	0	1
CD	13	9	2	0	1	0	0	0	0	0	2	3
CHP	3	2	0	0	1	0	0	0	0	0	1	1
D	5	2	0	0	2	0	0	0	0	0	2	0
GE	3	2	0	0	0	0	0	0	0	0	1	1
GP	105	66	0	35	2	0	2	0	0	0	4	5
GS	90	45	10	5	7	0	0	0	0	0	23	7
IM	84	54	11	0	8	1	1	0	0	1	16	11
NS	4	4	0	0	0	0	0	0	0	0	0	1
N	10	8	0	0	1	0	0	0	0	0	2	3
OBG	43	26	6	5	1	0	0	0	0	0	5	4
OM	3	2	0	1	0	0	0	0	0	0	0	0
OPH	20	13	1	5	0	0	0	0	0	0	1	1
ORS	19	16	0	0	1	0	0	0	0	0	3	4
OTO	9	8	0	1	0	0	0	0	0	0	0	1
PATH	27	13	0	1	0	0	0	0	0	0	13	5
PD	35	29	2	1	0	1	0	0	0	0	2	7
PM	2	1	0	0	1	0	0	0	0	0	1	0
PS	3	3	0	0	0	0	0	0	0	0	0	1
GPM	2	0	0	1	0	1	0	0	0	0	1	0
CRS	2	2	0	0	0	0	0	0	0	0	0	0
P	24	17	0	3	3	0	0	0	0	0	4	4
PH	2	1	0	0	0	0	1	0	0	0	1	0
PUD	7	3	0	0	4	0	0	0	0	0	4	0
R	27	22	0	2	3	0	0	0	0	0	3	7
TS	4	4	0	0	0	0	0	0	0	0	0	2
U	12	10	0	1	0	0	0	0	0	0	0	2
Not Rec.	9	5	1	1	0	0	0	0	0	1	1	2
TOTALS	611	392	42	63	15	34	5	0	0	3	99	78

SUMMARY: WESTERN DIVISION*

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 611 (100%)
1966 = 548 (100%)
2. Private practice - 512 (85.2%) 1966 = 401 (73.2%)
3. Not in private practice - 99 (14.8%) 1966 = 147 (26.8%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 512 = 100% (1966: 401 = 100%)

4. Aged 65 or over - 78 (15.2%) 1966 = 60 (14.9%)
5. General practitioners - 101 (19.7%) 1966 = 177 (44.1%)
6. GPs, 65 or over - 35 (34.7% of all GPs) 1966 = 40 (22.6% of all GPs)
7. Internists - 68 (13.3%) of all 1966 = 37 (9.2%)
8. IMs, 65 or over - 11 (16.2% of all IMs) 1966 = 1 (2.8% of all IMs)
9. Family physicians** - 169 (33.0%) 1966 = 214 (53.4%)
10. Fam. MDs**, 65 or over - 46 (27.2% of all fam. MDs) 1966 = 41 (19.2% of all fam. MDs)

11. Population of Western Division - 418,045 1966 = 414,100 (est.)
12. Ratio of number of physicians in private practice to total population:
1:818 1966 = 1:1,030
13. Ratio of number of general practitioners to total population:
1:4,139 1966 = 1:2,345
14. Ratio of number of internists to total population:
1:6,148 1966 = 1:11,192
15. Ratio of number of family physicians** to total population:
1:2,473 1966 = 1:1,935

16. Physicians in private practice 5 years or less - 78
17. General practitioners in private practice 5 years or less - 5
18. Internists in private practice 5 years or less - 11
19. Family physicians** in private practice 5 years or less - 16 (9.5% of all family physicians)

*The comparisons between the statistics for 1970 and those for 1966 may be somewhat distorted due to the statistics for Otsego County (see footnote on page 6 - 42.)

**defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN INTERFACE DIVISION - CLINTON COUNTY (NEW YORK)

Primary Spec.	Mds in Private Practice		Mds Not in Private Practice		Total	Res.	Hosp.	Fac.	Med. Sch.	Admin.	Lab.	Prev. Med.	Re-search	Total Staff	NIPP
	Under 65	65 and over	Full-Time GP with Spec. & GP 2 ⁰	Private Practice											
UNSPEC.	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0
ANES	6	4	0	1	5	0	1	0	0	0	0	0	0	1	1
CD	3	2	0	0	3	0	0	0	0	0	0	0	0	0	1
D	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0
GP	12	8	0	2	10	0	1	0	0	0	0	0	0	2	0
GS	18	16	0	0	18	0	0	0	0	0	0	0	0	0	0
IM	12	11	0	0	11	0	1	0	0	0	0	0	0	1	3
NS	2	2	0	0	2	0	0	0	0	0	0	0	0	0	1
OBG	5	5	0	0	5	0	0	0	0	0	0	0	0	0	1
OPH	3	2	0	1	3	0	0	0	0	0	0	0	0	0	0
ORS	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0
PATH	3	1	0	0	1	0	0	0	0	0	0	0	0	0	0
PD	8	8	0	0	8	0	1	0	0	0	0	0	1	2	0
P	9	4	0	0	4	0	5	0	0	0	0	0	0	0	3
PH	1	1	0	0	1	0	0	0	0	0	0	0	0	5	1
PUD	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
R	8	7	0	1	8	0	0	0	0	0	0	0	0	1	0
U	4	4	0	0	4	0	0	0	0	0	0	0	0	0	3
TOTALS	98	76	0	5	84	0	11	1	1	1	0	0	1	14	17

SUMMARY: INTERFACE DIVISION - CLINTON COUNTY (NEW YORK)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 98 (100%)
1966 = 67 (100%)
2. Private practice - 84 (85.7%) 1966 = 52 (77.6%)
3. Not in private practice - 14 (14.3%) 1966 = 15 (22.4%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 84 = 100% (1966: 52 = 100%)

4. Aged 65 or over - 8 (9.5%) 1966 = 5 (9.6%)
 5. General practitioners - 10 (11.9%) 1966 = 17 (32.7%)
 6. GPs, 65 or over - 2 (20.0% of all GPs) 1966 = 4 (23.5% of all GPs)
 7. Internists - 11 (13.1%) 1966 = 4 (7.7%)
 8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 0 (0.0% of all IMs)
 9. Family physicians* - 21 (25.0%) 1966 = 21 (40.4%)
 10. Fam. MDs*, 65 or over - 2 (9.5% of all fam. MDs) 1966 = 4 (19.0% of all fam. MDs)
-
11. Population of Clinton County - 71,632 1966 = 81,800**
 12. Ratio of number of physicians in private practice to total population:
1:853 1966 = 1:1,573
 13. Ratio of number of general practitioners to total population:
1:7,163 1966 = 1:4,812
 14. Ratio of number of internists to total population:
1:6,512 1966 = 1:20,450
 15. Ratio of number of family physicians* to total population:
1:3,411 1966 = 1:3,900
-
16. Physicians in private practice 5 years or less - 17
 17. General practitioners in private practice 5 years or less - 0
 18. Internists in private practice 5 years or less - 3
 19. Family physicians* in private practice 5 years or less - 3 (14.3% of all family physicians)

*defined as general practitioners and internists.

**based on 1970 census figures, it would appear that the 1966 estimate was in gross excess.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN INTERFACE DIVISION - ESSEX COUNTY (NEW YORK)

Primary Spec.	MDS IN PRIVATE PRACTICE			MDS NOT IN PRIVATE PRACTICE					Total Staff	Total NIPP				
	Under 65	65 and over	Total	Full-Time Res.	Hosp.	Fac.	Admin. Med.	Lab. Med.			Prev. Med.	Re-search		
MDS	GP	Spec.&GP	2 ^o Spec.	GP with Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.	GP with 2 ^o Spec.
UNSPEC.	1	0	0	0	0	0	0	0	1	0	0	0	0	0
GP	12	9	0	0	0	0	0	0	0	0	0	0	0	0
GS	3	1	2	0	0	0	0	0	0	0	0	0	0	0
IM	4	1	1	0	0	0	0	0	0	0	0	0	0	0
OBG	1	0	1	0	0	0	0	0	0	0	0	0	0	0
OM	1	0	1	0	0	0	0	0	0	0	0	0	0	0
PD	1	1	0	0	0	0	0	0	0	0	0	0	0	0
P	1	1	0	0	0	0	0	0	0	0	0	0	0	0
PUD	2	0	0	0	0	0	2	0	0	0	0	0	0	2
R	3	0	2	0	0	0	1	0	0	0	0	0	0	1
TOTALS	29	13	7	5	0	0	3	0	1	0	0	0	0	4

SUMMARY: INTERFACE DIVISION - ESSEX COUNTY (NEW YORK)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 29 (100%)
1966 = 39 (100%)
2. Private practice - 25 (86.2%) 1966 = 28 (71.5%)
3. Not in private practice - 4 (13.8%) 1966 = 11 (28.5%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 25 = 100% (1966: 28 = 100%)

- | | |
|--|----------------------------------|
| 4. Aged 65 or over - 5 (20.0%) | 1966 = 8 (28.6%) |
| 5. General practitioners - 12 (48.0%) | 1966 = 21 (75.0%) |
| 6. GPs, 65 or over - 3 (25.0% of all GPs) | 1966 = 4 (19.1% of all GPs) |
| 7. Internists - 4 (16.0%) | 1966 = 3 (10.7%) |
| 8. IMs, 65 or over - 2 (50.0% of all IMs) | 1966 = 3 (100.0% of all IMs) |
| 9. Family physicians* - 16 (64.0%) | 1966 = 24 (85.7%) |
| 10. Fam. MDs*, 65 or over - 5 (31.2% of all fam. MDs) | 1966 = 7 (29.2% of all fam. MDs) |
| | |
| 11. Population of Essex County - 33,843 | 1966 = 35,400 (est.) |
| 12. Ratio of number of physicians in private practice to total population:
1:1,346 | 1966 = 1:1,264 |
| 13. Ratio of number of general practitioners to total population:
1:2,820 | 1966 = 1:1,686 |
| 14. Ratio of number of internists to total population:
1:8,461 | 1966 = 1:11,800 |
| 15. Ratio of number of family physicians* to total population:
1:2,115 | 1966 = 1:1,475 |
| | |
| 16. Physicians in private practice 5 years or less - 0 | |
| 17. General practitioners in private practice 5 years or less - 0 | |
| 18. Internists in private practice 5 years or less - 0 | |
| 19. Family physicians* in private practice 5 years or less - 0 (0.0% of all family physicians) | |

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN INTERFACE DIVISION - FRANKLIN COUNTY (NEW YORK)

Primary Total Spec.	MDs IN PRIVATE PRACTICE		MDs NOT IN PRIVATE PRACTICE		Total	Full-Time GP with Spec.&GP 2 ^o	Full-Time GP with Spec. 2 ^o	Res.	Hosp.	Fac.	Med. Sch. Admin.	Lab. Prev. Re- search	Total Staff NIPP
	Under 65	65 and over	Under 65	65 and over									
2	0	0	0	0	2	0	0	0	0	0	0	0	0
1	1	0	0	0	1	0	0	0	0	0	0	0	0
5	0	1	1	0	5	0	0	0	0	0	0	0	0
14	8	3	1	2	14	0	0	0	0	0	0	0	1
8	2	1	0	0	3	0	5	0	0	0	0	0	0
4	3	1	0	0	4	0	0	0	0	0	0	0	1
1	0	1	0	0	1	0	0	0	0	0	0	0	0
1	0	1	0	0	1	0	0	0	0	0	0	0	0
1	0	1	0	0	1	0	0	0	0	0	0	0	0
4	0	0	0	0	2	0	0	0	0	0	0	0	0
3	2	0	0	0	2	0	0	0	0	0	0	0	0
1	0	1	0	0	1	0	0	0	0	0	0	0	0
1	0	0	0	0	1	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	2	0	0	3	0	0	0
1	1	0	0	0	1	0	0	0	0	0	0	0	0
4	1	0	0	0	2	0	1	0	0	0	0	0	0
2	0	0	0	0	2	0	0	0	0	0	0	0	0
2	0	0	0	0	2	0	0	0	0	0	0	0	0
3	0	0	0	0	2	0	0	0	0	0	0	0	0
61	29	8	6	2	45	1	8	4	0	0	0	3	16
TOTALS	61	29	8	2	45	1	8	4	0	0	0	3	16

SUMMARY: INTERFACE DIVISION - FRANKLIN COUNTY (NEW YORK)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 61 (100%)
1966 = 53 (100%)
2. Private practice - 45 (73.8%) 1966 = 40 (75.5%)
3. Not in private practice - 16 (26.2%) 1966 = 13 (24.5%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 45 = 100% (1966: 40 = 100%)

4. Aged 65 or over - 8 (17.8%) 1966 = 9 (22.5%)
5. General practitioners - 5 (11.1%) 1966 = 17 (42.5%)
6. GPs, 65 or over - 1 (20.0% of all GPs) 1966 = 3 (17.6% of all GPs)
7. Internists - 3 (6.7%) 1966 = 5 (12.5%)
8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 1 (20.0% of all IMs)
9. Family physicians* - 8 (17.8%) 1966 = 22 (55.0%)
10. Fam. MDs*, 65 or over - 1 (12.5% of all fam. MDs) 1966 = 4 (18.2% of all fam. MDs)

11. Population of Franklin County - 43,075 1966 = 44,600 (est.)
12. Ratio of number of physicians in private practice to total population:
1:957 1966 = 1:1,115
13. Ratio of number of general practitioners to total population:
1:8,615 1966 = 1:2,624
14. Ratio of number of internists to total population:
1:14,358 1966 = 1:8,920
15. Ratio of number of family physicians* to total population:
1:5,385 1966 = 1:2,027

16. Physicians in private practice 5 years or less - 4
17. General practitioners in private practice 5 years or less - 0
18. Internists in private practice 5 years or less - 0
19. Family physicians* in private practice 5 years or less - 0 (0.0% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN INTERFACE DIVISION (3 N.Y. COUNTIES ONLY)

Primary Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE										Total		
	Under 65		65 and over		Total Private Practice	Res.	Hosp.	Fac.	Med.	Admin.	Lab.	Prev.	Re-	Med. search		Staff	NIPP
	Full-Time Spec.&GP	GP 2 ^o	Full-Time Spec.	GP 2 ^o Spec.													
UNSPEC.	2	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0
ANES	8	6	0	1	7	0	1	0	0	0	0	0	0	0	0	1	1
CD	4	2	1	1	4	0	0	0	0	0	0	0	0	0	0	0	1
D	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
GP	29	21	0	6	27	0	1	1	0	0	0	0	0	0	2	0	0
GS	35	25	5	1	35	0	0	0	0	0	0	0	0	0	0	3	3
IM	24	14	2	2	18	0	6	0	0	0	0	0	0	0	6	3	3
NS	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1
OBG	10	8	2	0	10	0	0	0	0	0	0	0	0	0	0	0	2
OM	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
OPH	4	2	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0
ORS	2	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
PATH	7	3	0	0	3	0	1	0	0	0	0	0	0	3	4	0	0
PD	12	11	0	0	11	1	0	0	0	0	0	0	0	0	1	3	0
PDC	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
GFM	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
P	15	5	0	0	5	0	7	3	0	0	0	0	0	0	10	1	0
PH	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
PUD	7	1	0	1	2	0	4	0	0	0	0	0	0	1	5	0	0
R	13	9	2	1	12	0	1	0	0	0	0	0	0	0	1	3	0
U	4	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1
Not Rec.	3	2	0	0	2	0	0	1	0	0	0	0	0	0	1	1	1
TOTALS	188	118	15	16	154	1	22	5	2	0	0	0	0	4	34	21	21

SUMMARY: INTERFACE DIVISION (3 NEW YORK COUNTIES ONLY)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 188 (100%)
1966 = 159 (100%)
2. Private practice - 154 (81.9%) 1966 = 120 (75.5%)
3. Not in private practice - 34 (18.1%) 1966 = 39 (24.5%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 154 (100%) 1966 = 120 (100%)

4. Aged 65 or over - 21 (13.7%) 1966 = 22 (18.3%)
5. General practitioners - 27 (17.6%) 1966 = 55 (45.8%)
6. GPs, 65 or over - 6 (22.2% of all GPs) 1966 = 11 (20.0% of all GPs)
7. Internists - 18 (11.7%) 1966 = 12 (10.0%)
8. IMs, 65 or over - 2 (11.1% of all IMs) 1966 = 4 (33.3% of all IMs)
9. Family physicians* - 45 (29.2%) 1966 = 67 (55.8%)
10. Fam. MDs*, 65 or over - 8 (17.8% of all fam. MDs) 1966 = 15 (22.4% of all fam. MDs)

11. Population of 3-county area = 148,550 1966 = 161,800 (est.)**
12. Ratio of number of physicians in private practice to total population:
1:965 1966 = 1:1,348
13. Ratio of number of general practitioners to total population:
1:5,502 1966 = 1:2,924
14. Ratio of number of internists to total population:
1:8,253 1966 = 1:13,483
15. Ratio of number of family physicians* to total population:
1:3,300 1966 = 1:2,415

16. Physicians in private practice 5 years or less - 21
17. General practitioners in private practice 5 years or less - 0
18. Internists in private practice 5 years or less - 3
19. Family physicians* in private practice 5 years or less - 3 (6.7% of all family physicians)

*defined as general practitioners plus internists

**based on 1970 census figures, it would seem that the 1966 estimate was too high.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN INTERFACE DIVISION - BENNINGTON COUNTY (VERMONT)

Primary Spec.	MDS IN PRIVATE PRACTICE				MDS NOT IN PRIVATE PRACTICE				Total		
	Under 65		65 and over		Full-Time Med. Sch.		Admin. Lab. Prev. Re-				
	Full-Time Spec. & GP	GP with Spec.	Full-Time GP with Spec.	GP 2° Spec.	Hosp.	Fac.	Med.	Med. search Staff			
UNSPEC.	0	0	0	0	0	1	0	0	0	1	0
ANES	4	0	0	0	0	0	0	0	0	0	2
GP	8	0	0	0	0	0	0	0	0	0	0
GS	3	0	2	1	0	0	0	0	0	0	0
IM	6	1	0	0	0	0	0	0	0	0	1
NS	1	0	0	1	0	0	0	0	0	0	0
N	1	0	0	1	0	0	0	0	0	0	0
OBG	6	4	1	0	0	0	0	0	0	0	1
ORS	2	0	0	0	0	0	0	0	0	0	0
OTO	2	0	0	0	0	0	0	0	0	0	0
PATH	2	0	0	0	0	0	0	0	0	0	1
PD	4	3	0	1	2	0	0	0	0	0	0
P	4	3	0	0	0	0	1	0	0	0	1
R	2	1	0	0	0	0	0	0	0	0	0
U	1	1	0	0	0	0	0	0	0	0	0
TOTALS	50	36	3	4	0	2	1	0	0	1	4

SUMMARY: INTERFACE DIVISION - BENNINGTON COUNTY (VERMONT)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 50 (100%)
1966 = 39 (100%)
2. Private practice - 46 (92.0%) 1966 = 34 (87.2%)
3. Not in private practice - 4 (8.0%) 1966 = 5 (12.8%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 46 (100%) (1966: 34 = 100%)

4. Aged 65 or over - 7 (15.2%) 1966 = 4 (11.8%)
5. General practitioners - 8 (17.4%) 1966 = 15 (41.2%)
6. GPs, 65 or over - 0 (0.0% of all GPs) 1966 = 2 (13.3% of all GPs)
7. Internists - 6 (13.1%) 1966 = 3 (8.8%)
8. IMs, 65 or over - 0 (0.0% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 14 (30.5%) 1966 = 18 (53.0%)
10. Fam. MDs*, 65 or over - 0 (0.0% of all fam. MDs) 1966 = 2 (11.1% of all fam. MDs)

11. Population of Bennington County - 28,376 1966 = 25,500 (est.)
12. Ratio of number of physicians in private practice to total population:
1:617 1966 = 1:750
13. Ratio of number of general practitioners to total population:
1:3,547 1966 = 1:1,700
14. Ratio of number of internists to total population:
1:4,730 1966 = 1:8,500
15. Ratio of number of family physicians* to total population:
1:2,027 1966 = 1:1,417

16. Physicians in private practice 5 years or less - 4
17. General practitioners in private practice 5 years or less - 0
18. Internists in private practice 5 years or less - 1
19. Family physicians* in private practice 5 years or less - 1 (7.2% of all family physicians)

*defined as general practitioners plus internists.

SUMMARY: INTERFACE DIVISION - WINDHAM COUNTY (VERMONT)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 61 (100%)
1966 = 48 (100%)
2. Private practice - 47 (77.0%) 1966 = 32 (77.8%)
3. Not in private practice - 14 (23.0%) 1966 = 16 (22.2%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 47 = 100% (1966: 32 = 100%)

4. Aged 65 or over - 9 (21.3%) 1966 = 5 (15.7%)
 5. General practitioners - 15 (31.9%) 1966 = 15 (46.9%)
 6. GPs, 65 or over - 3 (20.0% of all GPs) 1966 = 4 (26.7% of all GPs)
 7. Internists - 6 (12.8%) 1966 = 7 (21.9%)
 8. IMs, 65 or over - 1 (16.7% of all IMs) 1966 = 0 (0.0% of all IMs)
 9. Family physicians* - 21 (44.9%) 1966 = 22 (68.8%)
 10. Fam. MDs*, 65 or over - 4 (19.0% of all fam. MDs) 1966 = 4 (18.2% of all fam. MDs)
-
11. Population of Windham County - 32,054 1966 = 30,000 (est.)
 12. Ratio of number of physicians in private practice to total population:
1:666 1966 = 1:938
 13. Ratio of number of general practitioners to total population:
1:2,137 1966 = 1:2,000
 14. Ratio of number of internists to total population:
1:5,342 1966 = 1:4,286
 15. Ratio of number of family physicians* to total population:
1:1,527 1966 = 1:1,364
-
16. Physicians in private practice 5 years or less - 7
 17. General practitioners in private practice 5 years or less - 2
 18. Internists in private practice 5 years or less - 1
 19. Family physicians* in private practice 5 years or less - 3 (14.3% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN INTERFACE DIVISION (< VERMONT COUNTIES ONLY)

Primary Total Spec.	MDs IN PRIVATE PRACTICE			MDs NOT IN PRIVATE PRACTICE										Total Staff	NIPP				
	Under 65		65 and over	Total Private Practice	Res.	Hosp.	Full-Time Med. Sch. Fac.	Admin. Med.	Lab. Med.	Prev. Med.	Re-search	Total							
	Full-Time GP with Spec.&GP 2°	Spec. Spec.&GP 2°	GP with Spec. 2°																
UNSPEC.	3	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	0	
ANES	6	4	0	1	5	1	0	0	0	0	0	0	0	0	0	0	1	0	
CHP	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	
GP	23	20	3	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	
GS	13	7	3	2	12	1	0	0	0	0	0	0	0	0	0	0	1	1	
IM	13	10	1	0	12	0	0	0	0	0	0	0	0	0	1	1	1	2	
NS	2	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	
OBG	9	7	1	1	9	0	0	0	0	0	0	0	0	0	0	0	0	1	
OPH	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	
ORS	3	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
GTO	3	2	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	
PATH	4	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	
PD	6	5	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	
P	13	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	
R	6	3	2	0	5	0	0	6	1	2	0	0	0	0	0	0	0	1	
U	3	3	0	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	
TOTALS	111	73	4	10	93	6	12	2	3	0	0	0	0	0	0	0	1	18	13

SUMMARY: INTERFACE DIVISION (2 VERMONT COUNTIES ONLY)

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 111 (100%)
1966 = 87 (100%)
2. Private practice - 93 (83.8%) 1966 = 66 (75.8%)
3. Not in private practice - 18 (16.2%) 1966 = 21 (24.2%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 93 = 100% (1966: 66 = 100%)

4. Aged 65 or over - 16 (17.2%) 1966 = 9 (13.6%)
5. General practitioners - 23 (24.7%) 1966 = 30 (45.5%)
6. GPs, 65 or over - 3 (13.1% of all GPs) 1966 = 6 (20.0% of all GPs)
7. Internists - 12 (12.9%) 1966 = 10 (15.2%)
8. IMs, 65 or over - 1 (8.5% of all IMs) 1966 = 0 (0.0% of all IMs)
9. Family physicians* - 35 (37.6%) 1966 = 40 (61.5%)
10. Fam. MDs*, 65 or over - 4 (11.4% of all fam. MDs) 1966 = 6 (15.0% of all fam. MDs)

11. Population of Vermont counties - 60,430 1966 = 55,500 (est.)
12. Ratio of number of physicians in private practice to total population:
1:650 1966 = 1:840
13. Ratio of number of general practitioners to total population:
1:2,628 1966 = 1:1,850
14. Ratio of number of internists to total population:
1:5,036 1966 = 1:5,550
15. Ratio of number of family physicians* to total population:
1:1,441 1966 = 1:1,388

16. Physicians in private practice 5 years or less - 13
17. General practitioners in private practice 5 years or less - 2
18. Internists in private practice 5 years or less - 2
19. Family physicians* in private practice 5 years or less - 4 (11.4% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN INTERFACE DIVISION

Primary Total Spec. MDS	MDS IN PRIVATE PRACTICE				MDS NOT IN PRIVATE PRACTICE				Total Private Practice	Total Staff NIPP					
	Under 65		65 and over		Full-Time Med. Sch. Admin. Lab. Prev. Re- Med. Med. Med. search		Fac. Med. Med. search								
	Full-Time GP with Spec. & GP 2 ^o Spec.	Spec. & GP 2 ^o Spec.	Full-Time GP with Spec. & GP 2 ^o Spec.	Spec. & GP 2 ^o Spec.	Hosp.	Res.	Hosp.	Fac.							
UNSPEC.	5	0	0	0	0	0	1	1	3	0	0	0	0	5	0
ANES	14	10	0	1	1	0	2	0	0	0	0	0	0	2	1
CD	4	2	1	1	0	0	0	0	0	0	0	0	0	0	1
CHP	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
D	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0
GP	52	41	0	9	0	0	1	1	0	0	0	0	0	2	2
GS	48	32	5	4	6	0	1	0	0	0	0	0	0	1	4
IM	37	24	3	3	0	0	6	0	0	0	0	0	0	7	5
NS	4	3	0	0	1	0	0	0	0	0	0	0	0	0	1
OBG	19	15	3	0	1	0	0	0	0	0	0	0	0	0	3
OM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
OPH	6	4	0	2	0	0	0	0	0	0	0	0	0	0	1
ORS	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0
OTO	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0
PATH	11	5	0	0	0	0	3	0	0	0	0	0	0	6	0
FD	18	16	0	0	1	0	0	1	0	0	0	0	0	1	3
FDC	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
GPM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
P	28	9	0	0	0	0	13	4	2	0	0	0	0	19	2
PH	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
PUD	7	1	0	1	0	0	4	0	0	0	0	0	0	5	0
R	19	12	4	1	0	0	2	0	0	0	0	0	0	2	3
U	7	7	0	0	0	0	0	0	0	0	0	0	0	0	2
Not Rec.	3	2	0	0	0	0	0	1	0	0	0	0	0	1	1
TOTALS	299	191	19	26	11	247	34	7	5	0	0	5	52	34	

SUMMARY: INTERFACE DIVISION

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 299 (100%)
1966 = 246 (100%)
2. Private practice - 247 (82.6%) 1966 = 186 (75.7%)
3. Not in private practice - 52 (17.4%) 1966 = 60 (24.3%)

The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 247 = 100% (1966: 186 = 100%)

- | | |
|---|-----------------------------------|
| 4. Aged 65 or over - 37 (15.0%) | 1966 = 31 (16.7%) |
| 5. General practitioners - 50 (20.3%) | 1966 = 85 (45.7%) |
| 6. GPs, 65 or over - 9 (18.0% of all GPs) | 1966 = 17 (20.0% of all GPs) |
| 7. Internists - 30 (12.2%) | 1966 = 22 (11.8%) |
| 8. IMs, 65 or over - 3 (10.0% of all IMs) | 1966 = 4 (18.2% of all IMs) |
| 9. Family physicians* - 80 (32.4%) | 1966 = 107 (57.5%) |
| 10. Fam. MDs, 65 or over - 12 (15.0% of all fam. MDs) | 1966 = 21 (19.6% of all fam. MDs) |

11. Population of Interface Division - 208,980 1966 = 217,300 (est.)
12. Ratio of number of physicians in private practice to total population:
1:842 1966 = 1:1,168
13. Ratio of number of general practitioners to total population:
1:4,180 1966 = 1:2,557
14. Ratio of number of internists to total population:
1:6,966 1966 = 1:9,887
15. Ratio of number of family physicians* to total population:
1:2,612 1966 = 1:2,033

16. Physicians in private practice 5 years or less - 34
17. General practitioners in private practice 5 years or less - 2
18. Internists in private practice 5 years or less - 5
19. Family physicians* in private practice 5 years or less - 7 (8.8% of all family physicians)

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS (MD) IN ALBANY REGION

Primary Spec.	MDs IN PRIVATE PRACTICE				MDs NOT IN PRIVATE PRACTICE							Total			
	Under 65		65 and over		Total Private Practice	Res.	Hosp.	Fac.	Med. Sch.	Admin. Lab.	Plav. Re-		Med. search	Staff	NIPP
	Spec. & GP	2° Spec.	Full-Time GP with Spec.	2° Spec.											
UNSPEC.	59	9	0	1	10	13	16	5	11	0	0	4	49	2	
A	14	7	5	1	13	0	1	0	0	0	0	0	1	0	
ANES	147	102	17	5	126	1	17	3	0	0	0	0	21	20	
AM	3	0	2	0	3	0	0	0	0	0	0	0	0	0	
CD	45	25	6	3	35	3	4	2	0	0	0	1	10	7	
CHP	16	8	0	1	9	1	4	1	1	0	0	0	7	2	
D	42	19	2	9	32	4	5	1	0	0	0	0	10	3	
GE	9	6	0	0	6	2	0	0	0	0	0	1	3	0	
GP	478	326	0	128	454	2	17	4	1	0	0	0	24	27	
GS	420	225	35	37	320	66	27	5	1	0	0	1	100	27	
IM	465	257	31	25	323	54	49	24	8	0	0	7	142	51	
NS	26	17	0	0	18	5	1	2	0	0	0	0	8	2	
N	39	19	1	0	21	11	5	2	0	0	0	0	18	6	
OBG	231	152	27	12	201	21	5	3	1	0	0	0	30	25	
OM	17	8	3	4	16	0	0	0	1	0	0	0	1	0	
OPH	99	64	1	16	81	12	4	2	0	0	0	0	18	12	
ORS	95	63	1	7	72	16	3	3	1	0	0	0	23	12	
OTO	62	42	2	9	53	5	2	1	1	0	0	0	9	8	
PATH	127	44	0	3	47	18	44	10	0	0	0	8	80	15	
PD	195	129	4	11	147	22	10	10	2	0	0	3	48	22	
PDA	1	1	0	0	1	0	0	0	0	0	0	0	0	0	
PDC	2	0	1	0	1	0	0	1	0	0	0	0	1	0	
PM	14	9	0	0	9	0	4	1	0	0	0	0	5	2	
PS	20	12	0	0	13	7	0	0	0	0	0	0	7	3	
GPM	16	6	0	4	10	1	1	3	1	0	0	0	6	0	
CRS	6	2	0	1	4	1	0	1	0	0	0	0	2	0	
P	293	104	4	12	120	24	113	14	15	0	1	6	173	25	
PH	30	18	0	3	21	2	1	1	5	0	0	0	9	0	
PUD	34	11	2	4	17	1	14	0	0	0	0	2	17	1	
R	126	65	5	7	77	12	35	2	0	0	0	0	49	17	
TS	15	9	0	0	9	2	4	0	0	0	0	0	6	2	
J	68	43	1	9	54	7	6	0	1	0	0	0	14	8	
Not Rec.	35	16	3	1	23	1	2	3	1	0	0	5	12	6	
TOTALS	3,249	1,818	153	313	2,346	314	398	107	51	0	1	32	903	305	

SUMMARY: ALBANY REGION

Note: In appropriate instances, and where possible, comparative statistics for 1966 are provided.

1. Total number of physicians (MD), excluding interns - 3,249 (100%)
1966 = 2,849 (100%)
2. Private practice - 2,346 (72.2%) 1966 = 1,861 (65.3%)
3. Not in private practice - 903 (27.8%) 1966 = 988 (34.7%)

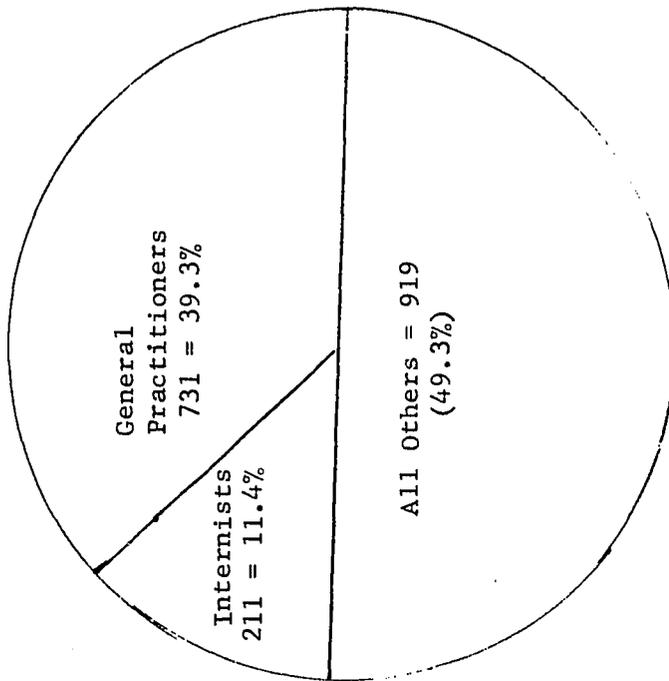
The following statistics, #4 - #10, unless otherwise indicated, are based on the number of all physicians in private practice: 2,346 = 100% (1966: 1,861 = 100%)

4. Aged 65 or over - 375 (16.0%) 1966 = 281 (15.1%)
5. General practitioners - 454 (19.3%) 1966 = 731 (39.3%)
6. GPs, 65 or over - 128 (28.2% of all GPs) 1966 = 160 (21.9% of all GPs)
7. Internists - 323 (13.8%) 1966 = 211 (11.4%)
8. IMs, 65 or over - 35 (10.9% of all IMs) 1966 = 17 (8.1% of all IMs)
9. Family physicians* - 777 (33.1%) 1966 = 942 (50.6%)
10. Fam. MDs*, 65 or over - 163 (20.9% of all fam. MDs) 1966 = 177 (18.8% of all fam. MDs)

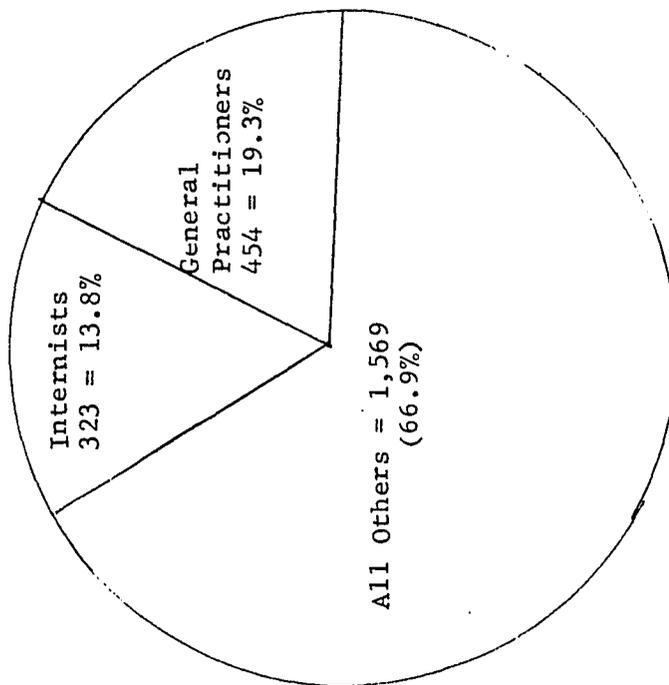
11. Population of Albany Region - 1,953,216 1966 = 1,905,100 (est.)
12. Ratio of number of physicians in private practice to total population:
1:832 1966 = 1:1,023
13. Ratio of number of general practitioners to total population:
1:4,302 1966 = 1:2,606
14. Ratio of number of internists to total population:
1:6,047 1966 = 1:9,081
15. Ratio of number of family physicians* to total population:
1:2,514 1966 = 1:2,022

16. Physicians in private practice 5 years or less - 305
17. General practitioners in private practice 5 years or less - 27
18. Internists in private practice 5 years or less - 51
19. Family physicians* in private practice 5 years or less - 78 (9.9% of all family physicians)

*defined as general practitioners plus internists.

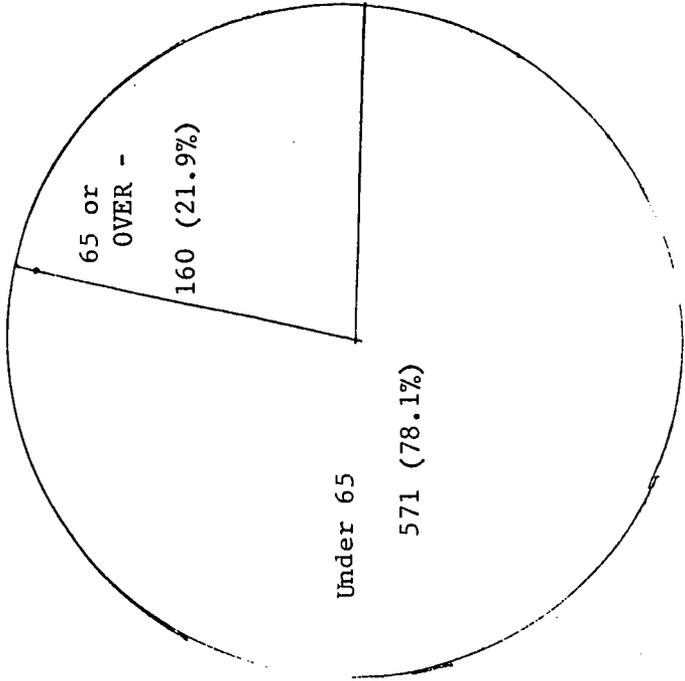


1970 Total = 2,346

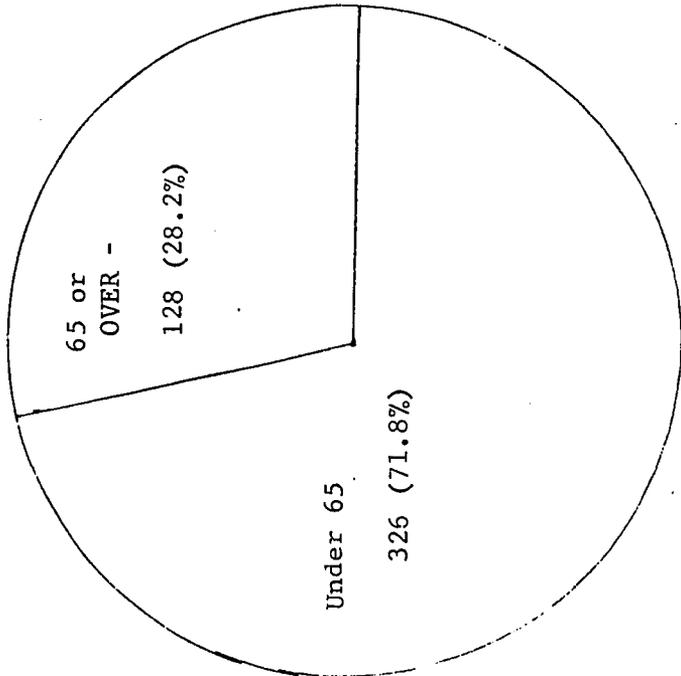


1966 Total = 1,861

DISTRIBUTION OF PHYSICIANS IN PRIVATE PRACTICE - ALBANY REGION

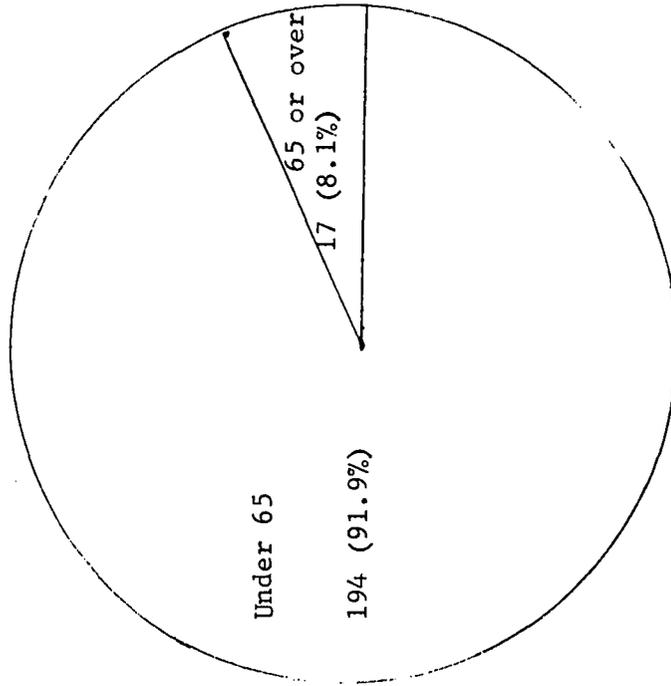


1960 - Total - 731 (100%)

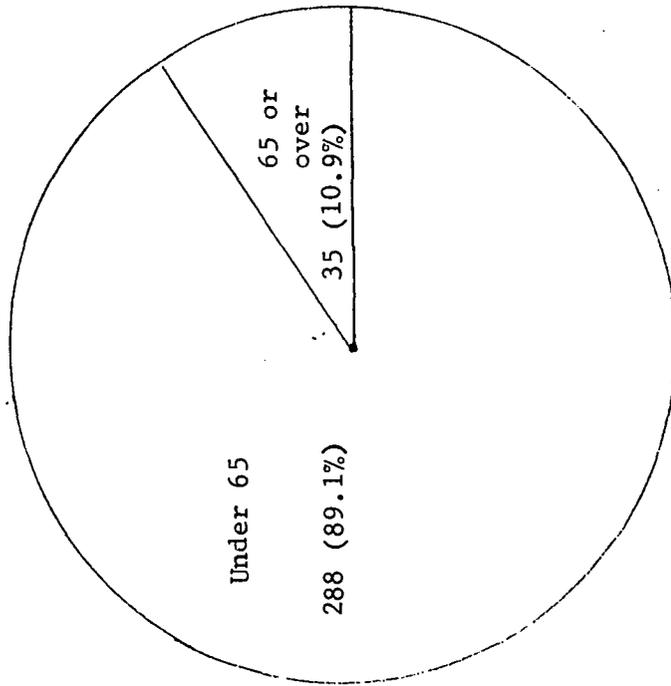


1970 - Total - 454 (100%)

GENERAL PRACTITIONERS-AGE DISTRIBUTION

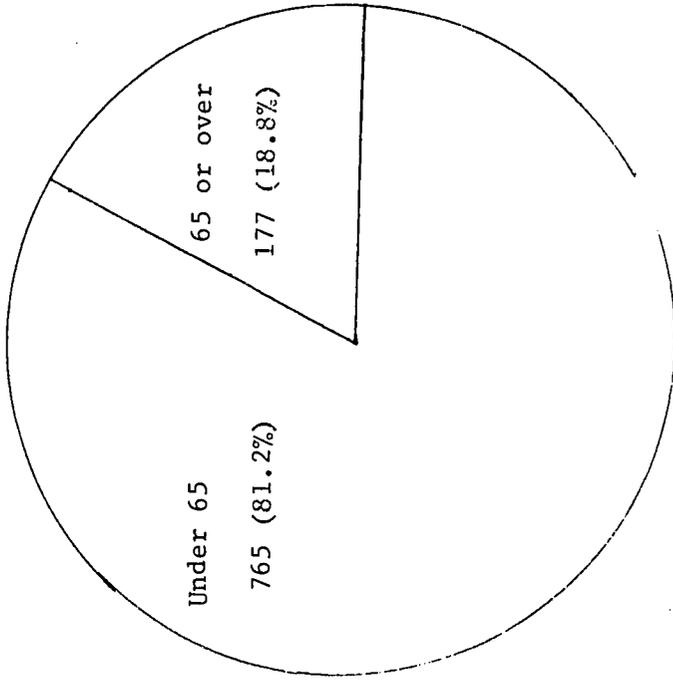


1966 - Total - 211 (100%)

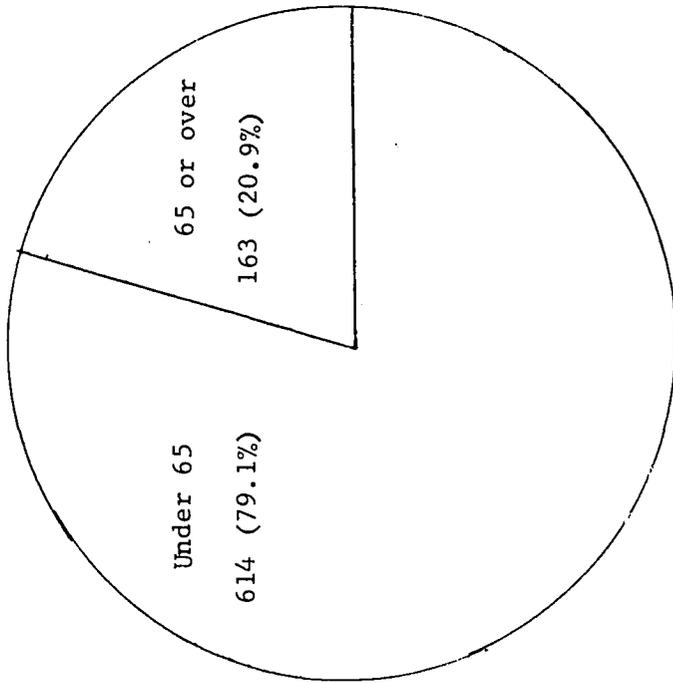


1970 - Total - 323 (100%)

INTERNISTS - AGE DISTRIBUTION



1966 - Total - 942 (100%)



1970 - Total - 777 (100%)

FAMILY PHYSICIANS* - AGE DISTRIBUTION

*General Practitioners plus Internists.

SUMMARY: RATIO OF NUMBER OF GENERAL PRACTITIONERS, INTERNISTS,
AND FAMILY PHYSICIANS* IN PRIVATE PRACTICE TO TOTAL POPULATION
OF COUNTIES IN ALBANY REGION WITH COMPARISON TO
NATIONAL RATIOS - SEPTEMBER 16, 1970

Area	G.P.'s	Internists	Fam. M.D.'s
United States	1:4,875	1:7,120	1:2,893
Albany County	1:4,830	1:4,120	1:2,223
Rensselaer County	1:4,292	1:9,388	1:2,946
Saratoga County	1:6,690	1:10,948	1:4,152
Warren County	1:2,660	1:3,418	1:1,500
Washington County	1:2,292	1:10,083	1:1,800
Columbia County	1:5,596	1:6,271	1:2,962
Delaware County	1:6,223	1:7,261	1:3,351
Dutchess County	1:6,422	1:5,458	1:2,950
Greene County	1:4,000	1:32,000	1:3,555
Sullivan County	1:2,763	1:9,948	1:2,163
Ulster County	1:3,222	1:7,122	1:2,153
Bershire County (Mass.)	1:4,054	1:4,620	1:2,240
Fulton County	1:3,241	1:17,285	1:2,729
Hamilton County	1:2,248	No internists	1:2,248
Herkimer County	1:3,931	1:22,274	1:3,341
Montgomery County	1:5,525	1:5,023	1:2,631
Otsego County	1:4,619	1:3,080	1:1,847
Schenectady County	1:4,706	1:5,161	1:2,462
Schoharie County	1:2,420	1:12,102	1:2,017
Clinton County	1:7,163	1:6,512	1:3,411
Essex County	1:2,820	1:8,461	1:2,115
Franklin County	1:8,615	1:14,358	1:5,385
Bennington County (Vt.)	1:3,547	1:4,730	1:2,027
Windham County (Vt.)	1:2,137	1:5,342	1:1,527
Albany Region	1:4,302	1:6,047	1:2,514

*defined as general practitioners plus internists.

NUMBER AND DISTRIBUTION OF PHYSICIANS HOLDING CERTIFICATION
BY AMERICAN SPECIALTY BOARDS - ALBANY REGION

Note: Statistics on the number and distribution of physicians, in the area served by the Albany Regional Medical Program, holding certification by American specialty boards were derived from Directory of Medical Specialists - Thirteenth Edition (1968 - 1969). Only diplomates of the 19 approved boards are included. Because of the time lag between receipt and confirmation of data from the individual physicians and publication of the directory, the statistics on the following pages include only those certified physicians in active specialty practice prior to July, 1966. Therefore, these statistics are not strictly comparable with the overall MD statistics on the previous pages which are correct as of September 16, 1970. However, it is questionable if any greatly significant increase among practicing specialists have occurred during the interim.

Following is the list of approved specialty boards, with sub-specialties (if any).

1. American Board of Anesthesiology (incorporated 1937).
2. American Board of Colon and Rectal Surgery (incorporated 1934).
3. American Board of Dermatology (incorporated 1932).
4. American Board of Internal Medicine (incorporated 1936).
This Board certifies specialists in internal medicine and specialists in the following sub-groups: Allergy, cardiovascular disease, gastroenterology, and pulmonary disease.
5. American Board of Neurological Surgery (incorporated in 1940).

6. American Board of Obstetrics and Gynecology (incorporated in 1930).
This Board certifies specialists in obstetrics, gynecology, and obstetrics and gynecology.
7. American Board of Ophthalmology (incorporated in 1917).
8. American Board of Orthopedic Surgery (incorporated in 1934).
9. American Board of Otolaryngology (incorporated in 1924).
This Board certifies specialists in otolaryngology, or limited branches of the specialty.
10. American Board of Pathology (incorporated in 1936).
This Board certifies specialists in anatomic pathology, anatomic pathology and clinical microbiology, anatomic pathology and clinical pathology, anatomic pathology and neuropathology, clinical chemistry, clinical microbiology, clinical microbiology and clinical chemistry, clinical pathology, forensic pathology, hematology, and neuropathology.
11. American Board of Pediatrics (incorporated in 1933).
This Board certifies specialists in pediatrics, and in the sub-specialties of pediatric allergy and pediatric cardiology.
12. American Board of Physical Medicine and Rehabilitation (incorporated in 1947).
13. American Board of Plastic Surgery (incorporated in 1937).
14. American Board of Preventive Medicine (incorporated in 1948).
This Board certifies specialists in general preventive medicine, aviation medicine, occupational medicine, and public health.
15. American Board of Psychiatry and Neurology (incorporated in 1934).
This Board certifies specialists in psychiatry, neurology, psychiatry and neurology, and child psychiatry.
16. American Board of Radiology (incorporated in 1934).
This Board certifies specialists in diagnostic roentgenology, medical nuclear physics, radiological physics, radiology, radium therapy, roentgen ray and radium physics, roentgenology, therapeutic radiology, and therapeutic roentgenology.
17. American Board of Surgery (incorporated in 1937).

18. Board of Thoracic Surgery - an affiliate of the American Board of Surgery (incorporated in 1948).
19. American Board of Urology (incorporated in 1935).

BOARD DIPLOMATES - CENTRAL DIVISION - ALBANY COUNTY

Board	Number of Diplomates	
Anesthesiology	12	
Colon and Rectal Surgery	1	
Dermatology	7	
Internal Medicine	39	Total
subspecialty: Gastroenterology		3
Pulmonary Disease		2
Cardiovascular Disease		4
Neurosurgery	5	
Obstetrics and Gynecology	16	
Ophthalmology	11	
Orthopedic Surgery	11	
Otolaryngology	7	
Pathology	23	Total
subspecialty: Pathologic anatomy		15
Forensic pathology		1
Path. anat. & clinical path.		4
Path. anat. & forensic path.		1
Clinical pathology		2
Pediatrics	21	
Physical Medicine and Rehabilitation	3	
Plastic Surgery	4	
Preventive Medicine	18	Total
subspecialty: Public health		8
General preventive medicine		1
Psychiatry and Neurology	27	Total
subspecialty: Psychiatry		22
Neurology		5
Radiology	16	Total
subspecialty: Roentgenology		3
Diagnostic roentgenology		2
Surgery	27	
Thoracic Surgery	4	
Urology	7	
Total Number of Diplomates		259

BOARD DIPLOMATES - NORTHERN DIVISION - RENSSELAER COUNTY

Board	Number of Diplomates	
Anesthesiology	2	
Dermatology	1	
Internal Medicine	7	Total
subspecialty: Cardiovascular disease		1
Obstetrics and Gynecology	5	
Ophthalmology	5	
Orthopedic Surgery	2	
Otolaryngology	3	
Pathology	2	Total
subspecialty: Path. anat. & clinical path.		1
Pediatrics	2	
Radiology	3	
Surgery	7	
Urology	2	
Total Number of Diplomates		41

BOARD DIPLOMATES - NORTHERN DIVISION - SARATOGA COUNTY

Board	Number of Diplomates	
Anesthesiology	1	
Dermatology	1	
Internal Medicine	2	
Obstetrics and Gynecology	1	
Ophthalmology	1	
Otolaryngology	1	
Pathology	1	Total
subspecialty: Path. anat. & clinical path.		1
Pediatrics	2	
Psychiatry and Neurology	1	Total
subspecialty: Psychiatry		1
Radiology	1	
Surgery	1	
Total Number of Diplomates		13

BOARD DIPLOMATES - NORTHERN DIVISION - WARREN COUNTY

<u>Board</u>	<u>Number of Diplomates</u>	
Anesthesiology	2	
Internal Medicine	1	
Obstetrics and Gynecology	1	
Ophthalmology	4	
Orthopedic Surgery	1	
Otolaryngology	2	
Pathology	1	
Pediatrics	2	
Psychiatry and Neurology	1	Total
subspecialty: Psychiatry		1
Radiology	4	
Surgery	4	
Urology	1	
	<u>Total Number of Diplomates</u>	<u>24</u>

BOARD DIPLOMATES - NORTHERN DIVISION - WASHINGTON COUNTY

<u>Board</u>	<u>Number of Diplomates</u>	
Anesthesiology	1	
Internal Medicine	3	
Pathology	1	Total
subspecialty: Pathologic anatomy		1
Pediatrics	1	
Radiology	1	
Surgery	2	
	<u>Total Number of Diplomates</u>	<u>9</u>

SUMMARY: BOARD DIPLOMATES - NORTHERN DIVISION

Board	Number of Diplomates	
Anesthesiology	6	
Dermatology	2	
Internal Medicine	13	Total
subspecialty: Cardiovascular disease		1
Obstetrics and Gynecology	7	
Ophthalmology	10	
Orthopedic Surgery	3	
Otolaryngology	6	
Pathology	5	Total
subspecialty: Path. anat. & clinical path.		2
subspecialty: Pathologic anatomy		1
Pediatrics	7	
Psychiatry and Neurology	2	Total
subspecialty: Psychiatry		2
Radiology	9	
Surgery	14	
Urology	3	
Total Number of Diplomates		87

BOARD DIPLOMATES - SOUTHERN DIVISION - COLUMBIA COUNTY

Board	Number of Diplomates	
Internal Medicine	2	
Ophthalmology	1	
Otolaryngology	1	
Pathology	1	Total
subspecialty: Pathologic anatomy		1
Pediatrics	1	
Psychiatry and Neurology	1	Total
subspecialty: Psychiatry		1
Radiology	1	Total
subspecialty: Roentgenology		1
Surgery	4	
Thoracic Surgery	1	
Total Number of Diplomates		13

BOARD DIPLOMATES - SOUTHERN DIVISION - DELAWARE COUNTY

Board	Number of Diplomates
Internal Medicine	2
Pathology	2 Total
subspecialty: Pathologic anatomy	2
Radiology	3
Surgery	2
Total Number of Diplomates	9

BOARD DIPLOMATES - SOUTHERN DIVISION - DUTCHESS COUNTY

Board	Number of Diplomates
Anesthesiology	2
Dermatology	2
Internal Medicine	10
Neurosurgery	1
Obstetrics and Gynecology	13
Ophthalmology	3
Orthopedic Surgery	2
Otolaryngology	6
Pathology	4 Total
subspecialty: Pathologic anatomy	3
Pediatrics	12
Physical Medicine and Rehabilitation	1
Plastic Surgery	1
Preventive Medicine	3 Total
subspecialty: Occupational medicine	1
Psychiatry and Neurology	17 Total
subspecialty: Psychiatry	16
Neurology	1
Radiology	7 Total
subspecialty: Diagnostic roentgenology	1
Surgery	18
Thoracic Surgery	1
Urology	4
Total Number of Diplomates	107

BOARD DIPLOMATES - SOUTHERN DIVISION - GREENE COUNTY

Board	Number of Diplomates
Surgery	2
Total Number of Diplomates	2

BOARD DIPLOMATES - SOUTHERN DIVISION - SULLIVAN COUNTY

Board	Number of Diplomates	
Anesthesiology	1	
Dermatology	1	
Internal Medicine	2	
Ophthalmology	1	
Pathology	1	Total
subspecialty: Pathologic anatomy		1
Pediatrics	1	
Radiology	1	
Surgery	3	
Urology	2	
Total Number of Diplomates		13

BOARD DIPLOMATES - SOUTHERN DIVISION - ULSTER COUNTY

Board	Number of Diplomates	
Anesthesiology	1	
Dermatology	2	
Internal Medicine	5	
Obstetrics and Gynecology	4	
Ophthalmology	2	
Orthopedic Surgery	1	
Otolaryngology	3	
Pathology	1	Total
subspecialty: Path. anat. & clinical path.		1
Pediatrics	1	
Preventive Medicine	1	
Psychiatry and Neurology	2	Total
subspecialty: Psychiatry		2
Radiology	4	Total
subspecialty: Diagnostic roentgenology		1
Surgery	4	
Urology	1	
Total Number of Diplomates		32

SUMMARY: BOARD DIPLOMATES - SOUTHERN DIVISION

Board	Number of Diplomates	
Anesthesiology	4	
Dermatology	5	
Internal Medicine	21	
Neurosurgery	1	
Obstetrics and Gynecology	13	
Ophthalmology	7	
Orthopedic Surgery	3	
Otolaryngology	10	
Pathology	9	Total
subspecialty: Pathologic anatomy		7
Path. anat. & clinical path.		1
Pediatrics	15	
Physical Medicine and Rehabilitation	1	
Plastic Surgery	1	
Preventive Medicine	4	Total
subspecialty: Occupational medicine		1
Psychiatry and Neurology	20	Total
subspecialty: Psychiatry		19
Neurology		1
Radiology	16	
subspecialty: Diagnostic roentgenology		2
roentgenology		1
Surgery	33	
Thoracic Surgery	2	
Urology	7	
Total Number of Diplomates		172

BOARD DIPLOMATES - EASTERN DIVISION - BERKSHIRE COUNTY (MASS.)

Board	Number of Diplomates	
Anesthesiology	3	
Dermatology	1	
Internal Medicine	15	Total
subspecialty: Cardiovascular disease		2
Obstetrics and Gynecology	8	
Ophthalmology	4	
Orthopedic Surgery	8	
Otolaryngology	2	
Pathology	7	Total
subspecialty: Pathologic anatomy		3
Clinical pathology		2
Path. anat. & clinical path.		2
Pediatrics	8	
Psychiatry and Neurology	6	Total
subspecialty: Psychiatry		5
Neurology		1
Radiology	4	Total
subspecialty: Roentgenology		3
Surgery	8	
Urology	2	
Total Number of Diplomates		76

BOARD DIPLOMATES - WESTERN DIVISION - FULTON COUNTY

Board	Number of Diplomates
Internal Medicine	2
Obstetrics and Gynecology	3
Ophthalmology	1
Pediatrics	2
Radiology	1
Surgery	2
Total Number of Diplomates	11

BOARD DIPLOMATES - WESTERN DIVISION - HAMILTON COUNTY

-- NO DIPLOMATES --

BOARD DIPLOMATES - WESTERN DIVISION - HERKIMER COUNTY

Board	Number of Diplomates
Preventive Medicine	1 Total
subspecialty: Occupational medicine	1
Psychiatry and neurology	1 Total
subspecialty: Psychiatry	1
Total Number of Diplomates	2

BOARD DIPLOMATES - WESTERN DIVISION - MONTGOMERY COUNTY

Board	Number of Diplomates
Obstetrics and Gynecology	1
Ophthalmology	1
Otolaryngology	1
Pathology	1 Total
subspecialty: Pathologic anatomy	1
Pediatrics	1
Radiology	1 Total
subspecialty: Roentgenology	1
Surgery	2
Urology	1
Total Number of Diplomates	9

BOARD DIPLOMATES - WESTERN DIVISION - OTSEGO COUNTY

Board	Number of Diplomates	
Anesthesiology	2	
Internal Medicine	12	Total
subspecialty: Pulmonary disease		2
Neurosurgery	1	
Obstetrics and Gynecology	3	
Otolaryngology	1	
Pathology	4	Total
subspecialty: Pathologic anatomy		4
Pediatrics	3	
Psychiatry and Neurology	1	Total
subspecialty: Psychiatry		1
Radiology	4	Total
subspecialty: Diagnostic roentgenology		1
Roentgenology		1
Surgery	3	
Thoracic Surgery	1	
Urology	1	
Total Number of Diplomates		36

BOARD DIPLOMATES - WESTERN DIVISION - SCHENECTADY COUNTY

Board	Number of Diplomates	
Anesthesiology	12	
Colon and Rectal Surgery	1	
Dermatology	4	
Internal Medicine	8	Total
subspecialty: Cardiovascular disease		1
Neurosurgery	2	
Obstetrics and Gynecology	7	
Ophthalmology	7	
Orthopedic Surgery	5	
Otolaryngology	4	
Pathology	5	Total
subspecialty: Path. anat. & clinical path.		3
Pathologic anatomy		2
Pediatrics	11	
Psychiatry and Neurology	6	Total
subspecialty: Psychiatry		4
Neurology		2
Radiology	8	Total
subspecialty: Diagnostic roentgenology		1
Surgery	13	
Urology	2	
Total Number of Diplomates		95

BOARD DIPLOMATES - WESTERN DIVISION - SCHOHARIE COUNTY

<u>Board</u>	<u>Number of Diplomates</u>
Surgery	2
Total Number of Diplomates	2

SUMMARY: BOARD DIPLOMATES - WESTERN DIVISION

<u>Board</u>	<u>Number of Diplomates</u>
Anesthesiology	14
Colon and Rectal Surgery	1
Dermatology	4
Internal Medicine	22 Total
subspecialty: Cardiovascular disease	1
subspecialty: Pulmonary disease	2
Neurosurgery	3
Obstetrics and Gynecology	14
Ophthalmology	9
Orthopedic Surgery	5
Otolaryngology	6
Pathology	10 Total
subspecialty: Pathologic anatomy	7
subspecialty: Path. anat. & clinical path.	3
Pediatrics	17
Preventive Medicine	1 Total
subspecialty: Occupational Medicine	1
Psychiatry and Neurology	8 Total
subspecialty: Psychiatry	6
subspecialty: Neurology	2
Radiology	14 Total
subspecialty: Diagnostic roentgenology	2
subspecialty: Roentgenology	2
Surgery	22
Thoracic Surgery	1
Urology	4
Total Number of Diplomates	155

BOARD DIPLOMATES - INTERFACE DIVISION - CLINTON COUNTY (N.Y.)

<u>Board</u>	<u>Number of Diplomates</u>
Obstetrics and Gynecology	1
Ophthalmology	1
Orthopedic Surgery	1
Pathology	3 Total
subspecialty: Pathologic anatomy	2
Pediatrics	1
Psychiatry and Neurology	1 Total
subspecialty: Psychiatry	1
Radiology	1
Surgery	3
Urology	1
Total Number of Diplomates	13

BOARD DIPLOMATES - INTERFACE DIVISION - ESSEX COUNTY (N.Y.)

Board	Number of Diplomates
Internal Medicine	1
Psychiatry and Neurology	1 Total
subspecialty: Psychiatry	1
Surgery	2
Thoracic Surgery	1
Total Number of Diplomates	5

BOARD DIPLOMATES - INTERFACE DIVISION - FRANKLIN COUNTY (N.Y.)

Board	Number of Diplomates
Anesthesiology	1
Internal Medicine	3 Total
subspecialty: Pulmonary disease	1
Otolaryngology	1
Pathology	3 Total
subspecialty: Pathologic anatomy	1
subspecialty: Path. anat. & clinical path.	2
Preventive Medicine	2 Total
subspecialty: Public health	2
Psychiatry and Neurology	1 Total
subspecialty: Psychiatry	1
Radiology	2
Surgery	2
Thoracic Surgery	2
Total Number of Diplomates	17

SUMMARY: BOARD DIPLOMATES - INTERFACE DIVISION (NEW YORK COUNTIES ONLY)

Board	Number of Diplomates	
Anesthesiology	1	
Internal Medicine	4	Total
subspecialty: Pulmonary disease		1
Obstetrics and Gynecology	1	
Ophthalmology	1	
Orthopedic Surgery	1	
Otolaryngology	1	
Pathology	6	Total
subspecialty: Pathologic anatomy		3
Path. anat. & clinical path.		2
Pediatrics	1	
Preventive Medicine	2	Total
subspecialty: Public health		2
Psychiatry and Neurology	3	Total
subspecialty: Psychiatry		3
Radiology	3	
Surgery	7	
Thoracic Surgery	3	
Urology	1	
Total Number of Diplomates		35

BOARD DIPLOMATES - INTERFACE DIVISION - BENNINGTON COUNTY (VT.)

Board	Number of Diplomates	
Internal Medicine	2	
Pathology	1	Total
subspecialty: Pathologic anatomy		1
Psychiatry and Neurology	1	Total
subspecialty: Psychiatry		1
Radiology	2	
Surgery	2	
Total Number of Diplomates		8

BOARD DIPLOMATES - INTERFACE DIVISION - WINDHAM COUNTY (VT.)

Board	Number of Diplomates	
Anesthesiology	2	
Internal Medicine	3	
Otolaryngology	1	
Pediatrics	1	
Preventive Medicine	1 Total	
subspecialty: Aviation medicine		1
Psychiatry and Neurology	1 Total	
subspecialty: Psychiatry		1
Radiology	1 Total	
subspecialty: Roentgenology		1
Surgery	1	
	Total Number of Diplomates	11

SUMMARY: BOARD DIPLOMATES - INTERFACE DIVISION (VERMONT COUNTIES ONLY)

Board	Number of Diplomates	
Anesthesiology	2	
Internal Medicine	5	
Otolaryngology	1	
Pathology	1 Total	
subspecialty: Pathologic anatomy		1
Pediatrics	1	
Preventive Medicine	1 Total	
subspecialty: Aviation medicine		1
Psychiatry and Neurology	2 Total	
subspecialty: Psychiatry		2
Radiology	3 Total	
subspecialty: Roentgenology		1
Surgery	3	
	Total Number of Diplomates	19

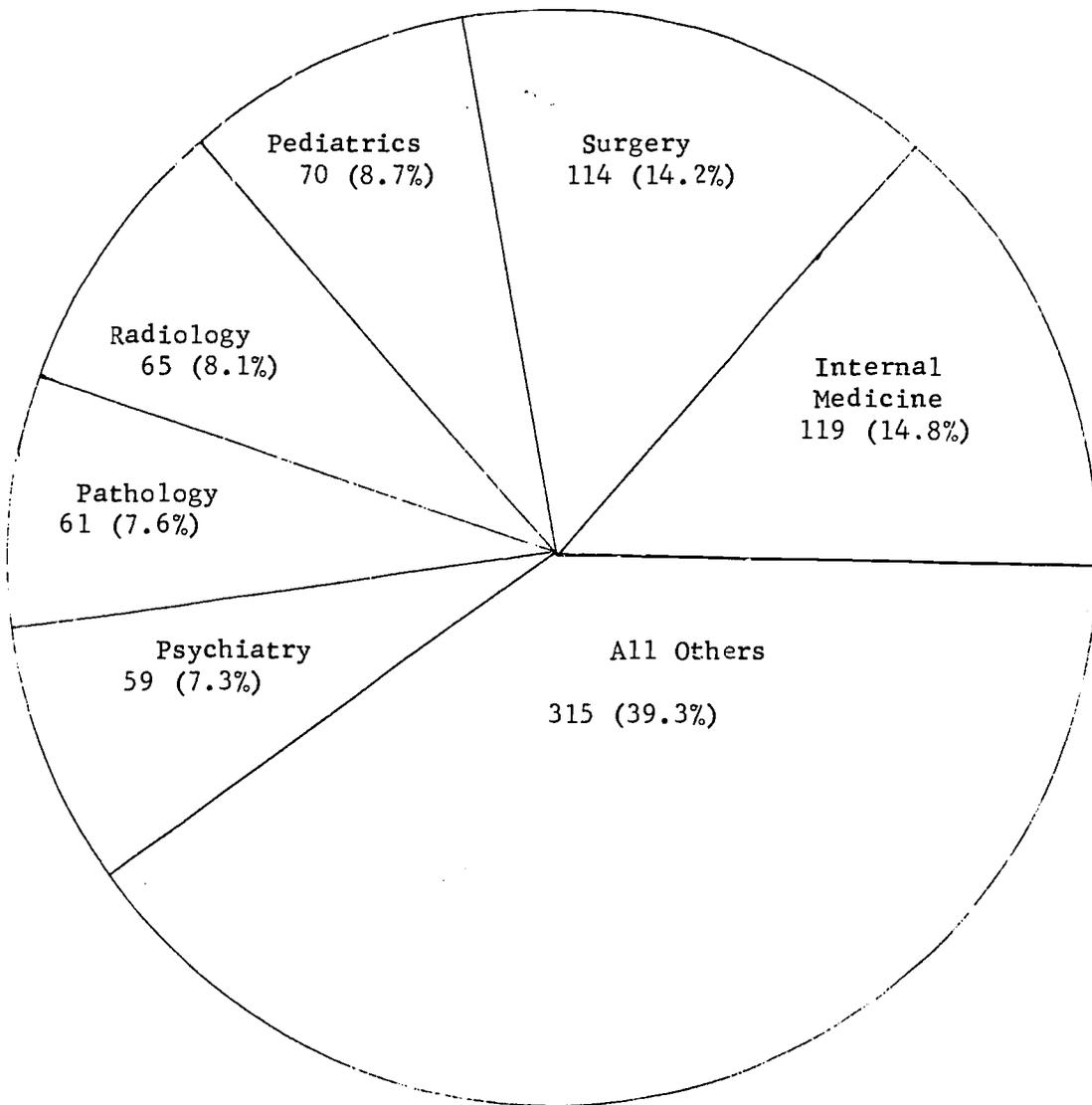
SUMMARY: BOARD DIPLOMATES - INTERFACE DIVISION

Board	Number of Diplomates	
Anesthesiology	3	
Internal Medicine	9 Total	
subspecialty: Pulmonary disease		1
Obstetrics and Gynecology	1	
Ophthalmology	1	
Orthopedic Surgery	1	
Otolaryngology	2	
Pathology	7 Total	
subspecialty: Pathologic anatomy		4
subspecialty: Path. anat. & clinical path.		2
Pediatrics	2	
Preventive Medicine	3 Total	
subspecialty: Public health		2
subspecialty: Aviation medicine		1
Psychiatry and Neurology	5 Total	
subspecialty: Psychiatry		5
Radiology	6 Total	
subspecialty: Roentgenology		1
Surgery	10	
Thoracic Surgery	3	
Urology	1	
Total Number of Diplomates		54

SUMMARY: BOARD OF DIPLOMATES - ALBANY REGION

Board	Number of Diplomates	
Anesthesiology	42	
Colon and Rectal Surgery	2	
Dermatology	19	
Internal Medicine	119 Total	
subspecialty: Cardiovascular disease		8
Pulmonary disease		5
Gastroenterology		3
Neurosurgery	9	
Obstetrics and Gynecology	59	
Ophthalmology	42	
Orthopedic Surgery	31	
Otolaryngology	33	
Pathology	61 Total	
subspecialty: Pathologic anatomy		37
Pathologic anat. & clinical path.		14
Clinical pathology		4
Forensic pathology		1
Pathologic anat. & forensic path.		1
Pediatrics	70	
Physical Medicine and Rehabilitation	4	
Plastic Surgery	5	
Preventive Medicine	26 Total	
subspecialty: Public health		10
Occupational medicine		2
Aviation medicine		1
Psychiatry and Neurology	68 Total	
subspecialty: Psychiatry		59
Neurology		9
Radiology	65 Total	
subspecialty: Roentgenology		10
Diagnostic roentgenology		6
Surgery	114	
Thoracic Surgery	10	
Urology	24	
Total Number of Diplomates		803

DISTRIBUTION OF BOARD DIPLOMATES
ALBANY REGION



NUMBER AND DISTRIBUTION OF DENTISTS IN AREA SERVED
BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of dentists in the area served by the Albany Regional Medical Program were obtained from two sources:

1. New York State Education Department registration of dental licenses as of June, 1969.
2. American Dental Directory (1970), published by American Dental Association, Chicago.

The count of specialists is limited in accordance with a policy adopted by the Board of Trustees of the American Dental Association, April, 1965, to:

American Board of Dental Public Health
American Board of Endodontics
American Board of Oral Pathology
American Board of Oral Surgery
American Board of Orthodontics
American Board of Pedodontics
American Board of Periodontology
American Board of Prosthodontics

In addition to diplomates of the above noted Boards, a dentist may be designated as a specialist under two other conditions:

- A. A dentist who limits his practice to an area of dentistry approved by the American Dental Association and who has completed two or more academic years of advanced education in that area.
- B. A dentist who limits his practice to an area of dentistry approved by the American Dental Association and who ethically announced such limitation prior to December 31, 1964, in accordance with Association policies then in existence.

TABLE I -- NUMBER AND DISTRIBUTION OF ALL DENTISTS IN
AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM*

<u>Division</u>	<u>County</u>	<u>No. of Dentists</u>
Central	Albany	197
Northern	Rensselaer	61
	Saratoga	31
	Warren	39
	Washington	18
	Division Total	149
Southern	Columbia	20
	Delaware	21
	Dutchess	137
	Greene	14
	Sullivan	27
	Ulster	65
	Division Total	284
Eastern (Mass.)	Berkshire	92
Western	Fulton	19
	Hamilton	1
	Herkimer	27
	Montgomery	24
	Otsego	25
	Schenectady	118
	Schoharie	5
		Division Total
Interface (N.Y.)	Clinton	24
	Essex	19
	Franklin	19
	Sub-Division Total	62
Interface (Vt.)	Bennington	14
	Windham	23
	Sub-Division Total	37
	Division Total	99
	Regional Total	1,040

*The count for New York State counties was derived from data supplied by the New York State Education Department, and reflects the number of valid registered licenses as of June, 1969. The count for Vermont and Massachusetts counties was derived from the 1970 American Dental Directory

TABLE II -- NUMBER AND TYPE OF DENTAL SPECIALISTS, BY
CITY OR TOWN, IN AREA SERVED BY ALBANY REGIONAL
MEDICAL PROGRAM*

<u>City or Town</u>	<u>County</u>	<u>Division</u>	<u>No. & Type of Specialists</u>	
<u>NEW YORK STATE</u>				
Albany	Albany	Central	Oral Surgeon	- 5
			Endodontist	- 2
			Orthodontist	- 7
			Pedodontist	- 1
			Periodontist	- 1
			Public Health	- 2
			<u>Total</u>	<u>18</u>
Glens Falls	Warren	Northern	Oral Surgeon	- 1
			Orthodontist	- 3
			Periodontist	- 1
			<u>Total</u>	<u>5</u>
Gloversville	Fulton	Western	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
Lake George	Warren	Northern	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
Lake Placid	Essex	Interface	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
Millbrook	Dutchess	Southern	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
Oneonta	Otsego	Western	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
Plattsburgh	Clinton	Interface	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
Poughkeepsie	Dutchess	Southern	Oral Surgeon	- 1
			Endodontist	- 1
			Orthodontist	- 2
			Periodontist	- 1
			<u>Total</u>	<u>5</u>

*Data derived from 1970 American Dental Directory

TABLE II -- NUMBER AND TYPE OF DENTAL SPECIALISTS (Con't.)

<u>City</u>	<u>County</u>	<u>Division</u>	<u>No. & Type of Specialists</u>	
Schenectady	Schenectady	Western	Oral Surgeon	- 4
			Orthodontist	- 6
			Periodontist	- 3
			<u>Total</u>	<u>13</u>
Troy	Rensselaer	Northern	Oral Surgeon	- 1
			Orthodontist	- 2
			<u>Total</u>	<u>3</u>
Voorheesville	Albany	Central	Public Health	- 1
			<u>Total</u>	<u>1</u>
Wappingers Falls	Dutchess	Southern	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
<u>MASSACHUSETTS</u>				
North Adams	Berkshire	Eastern	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
Pittsfield	Berkshire	Eastern	Oral Surgeon	- 4
			Orthodontist	- 3
			<u>Total</u>	<u>7</u>
<u>VERMONT</u>				
Bellows Falls	Windham	Interface	Orthodontist	- 1
			<u>Total</u>	<u>1</u>
			<u>Regional Total</u>	<u>61</u>

TABLE III -- SUMMARY OF DENTAL SPECIALISTS BY COUNTY
AND DIVISION, IN AREA SERVED BY ALBANY
REGIONAL MEDICAL PROGRAM

<u>Division</u>	<u>County</u>	<u>No. & Type of Specialists</u>	
Central	Albany	Oral Surgeon	- 5
		Endodontist	- 2
		Orthodontist	- 7
		Pedodontist	- 1
		Periodontist	- 1
		Public Health	- 3
		<u>Division Total</u>	<u>19</u>
Northern	Rensselaer	Oral Surgeon	- 1
		Orthodontist	- 2
		<u>Total</u>	<u>3</u>
	Saratoga	No specialists	
	Warren	Oral Surgeon	- 1
		Orthodontist	- 4
		Periodontist	- 1
		<u>Total</u>	<u>6</u>
	Washington	No specialists	
<u>Division Total</u>		<u>9</u>	
Southern	Columbia	No specialists	
	Delaware	No specialists	
	Dutchess	Oral Surgeon	- 1
		Endodontist	- 1
		Orthodontist	- 4
		Periodontist	- 1
		<u>Total</u>	<u>7</u>
	Greene	No specialists	
Sullivan	No specialists		
Ulster	No specialists		
	<u>Division Total</u>	<u>7</u>	
Eastern (Mass.)	Berkshire	Oral Surgery	- 4
		Orthodontist	- 4
		<u>Division Total</u>	<u>8</u>

TABLE III (Con't.)

<u>Division</u>	<u>County</u>	<u>No. & Type of Specialists</u>	
Western	Ulster	Orthodontist	- 1
		<u>Total</u>	<u>1</u>
	Hamilton	No specialists	
	Herkimer	No specialists	
	Montgomery	No specialists	
	Otsego	Orthodontist	- 1
		<u>Total</u>	<u>1</u>
	Schenectady	Oral Surgeon	- 4
		Orthodontist	- 6
		Periodontist	- 3
	<u>Total</u>	<u>13</u>	
	Schoharie	No specialists	
		<u>Division Total</u>	<u>15</u>
Interface (N.Y.)	Clinton	Orthodontist	- 1
		<u>Total</u>	<u>1</u>
	Essex	Orthodontist	- 1
	<u>Total</u>	<u>1</u>	
	Franklin	No specialists	
		<u>Sub-Division Total</u>	<u>2</u>
Interface (Vt.)	Bennington	No specialists	
	Windham	Orthodontist	- 1
		<u>Sub-Division Total</u>	<u>1</u>
		<u>Division Total</u>	<u>3</u>
		<u>Regional Total</u>	<u>61</u>

TABLE IV -- SUMMARY OF DENTAL SPECIALISTS, BY
SPECIALTY, IN AREA SERVED BY ALBANY
REGIONAL MEDICAL PROGRAM

Specialty	Number
Oral Surgeon	16
Endodontist	3
Orthodontist	32
Pedodontist	1
Periodontist	6
Prosthodontist	-
Oral Pathologist	-
Public Health	3
TOTAL	61

TABLE V -- RATIO OF NUMBER OF DENTISTS TO TOTAL
POPULATION IN AREA SERVED BY ALBANY
REGIONAL MEDICAL PROGRAM

Division	County	No. of Dentists	Total Population	Dentists: Total Pop.
Central	Albany	197	280,118	1:1,422
Northern	Rensselaer	61	150,218	1:2,462
	Saratoga	31	120,423	1:3,885
	Warren	39	47,850	1:1,227
	Washington	18	50,417	1:2,801
<u>Division Totals</u>		149	368,908	1:2,476
Southern	Columbia	20	50,366	1:2,518
	Delaware	21	43,565	1:2,075
	Dutchess	137	218,331	1:1,594
	Greene	14	32,000	1:2,286
	Sullivan	27	49,740	1:1,842
	Ulster	65	135,319	1:2,082
<u>Division Totals</u>		284	529,321	1:1,864
Eastern (Mass)	Berkshire	92	147,844	1:1,607
Western	Fulton	19	51,854	1:2,729
	Hamilton	1	4,496	1:4,496
	Herkimer	27	66,823	1:2,475
	Montgomery	24	55,253	1:2,302
	Otsego	25	55,421	1:2,217
	Schenectady	118	159,995	1:1,356
	Schoharie	5	24,203	1:4,841
	<u>Division Totals</u>		219	418,045
Interface (N.Y.)	Clinton	24	71,632	1:2,985
	Essex	19	33,843	1:1,781
	Franklin	19	43,075	1:2,267
<u>Sub-Division Totals</u>		62	148,550	1:2,400
Interface (Vt.)	Bennington	14	28,376	1:2,027
	Windham	23	32,054	1:1,394
<u>Sub-Division Totals</u>		37	60,430	1:1,633
<u>Division Totals</u>		99	208,980	1:2,111
REGIONAL TOTALS		1,040	2,099,922	1:2,020

TABLE VI -- NATIONAL, STATE, AND ALBANY REGION RATIOS OF
NUMBER OF DENTISTS TO TOTAL POPULATION

Area	No. of Dentists*	Total Population	Dentists: Total Pop.
United States	91,000	200,263,721	1:2,200
New York State	12,900	17,979,712	1:1,394
Massachusetts	3,294	5,630,224	1:1,709
Vermont	175	437,744	1:2,501
Albany Region	1,025**	2,099,922	1:2,049

*Active, Non-Federal

**Estimated

TABLE VII -- COUNTIES IN AREA SERVED BY ALBANY REGIONAL
MEDICAL PROGRAM WITH LESS THAN NATIONAL, STATE,
AND REGIONAL AVERAGE DENTIST POPULATION

Division	County	Less Than Avg. No. Dentists Per Pop. Group		
		National	State	Albany Region
Central	Albany	No	Yes	No
Northern	Rensselaer	Yes	Yes	Yes
	Saratoga	Yes	Yes	Yes
	Warren	No	No	No
	Washington	Yes	Yes	Yes
Southern	Columbia	Yes	Yes	Yes
	Delaware	No	Yes	No
	Dutchess	No	Yes	No
	Greene	Yes	Yes	Yes
	Sullivan	No	Yes	No
	Ulster	No	Yes	No
Eastern (Mass.)	Berkshire	No	No	No
Western	Fulton	Yes	Yes	Yes
	Hamilton	Yes	Yes	Yes
	Herkimer	Yes	Yes	Yes
	Montgomery	Yes	Yes	Yes
	Catsago	Yes	Yes	Yes
	Schenectady	No	No	No
	Schoharie	Yes	Yes	Yes
Interface (N.Y.)	Clinton	Yes	Yes	Yes
	Essex	No	Yes	No
	Franklin	Yes	Yes	Yes
Interface (Vt.)	Bennington	No	No	No
	Windham	No	No	No

NUMBER AND DISTRIBUTION OF OSTEOPATHS IN
AREA SERVED BY ALBANY REGIONAL
MEDICAL PROGRAM

Note: Statistics on the number and distribution of osteopaths in the area served by the Albany Regional Medical Program reflect the number of those licensed by the New York State Education Department as of June, 1969.

Data for Vermont and Massachusetts are not available.

<u>Division</u>	<u>County</u>	<u>No. of Osteopaths</u>
Central	Albany	6
Northern	Rensselaer	4
	Saratoga	1
	Warren	2
	Washington	1
	Division Total	8
Southern	Columbia	1
	Delaware	0
	Dutchess	2
	Greene	0
	Sullivan	4
	Ulster	1
Division Total	8	
Western	Fulton	2
	Hamilton	0
	Herkimer	0
	Montgomery	2
	Otsego	1
	Schenectady	3
	Schoharie	0
	Division Total	8
Interface (N.Y.)	Clinton	2
	Essex	0
	Franklin	0
Sub-division Total	2	
REGIONAL TOTAL (N.Y. counties only)		32

NUMBER AND DISTRIBUTION OF PODIATRISTS IN
AREA SERVED BY ALBANY REGIONAL
MEDICAL PROGRAM

Note: Statistics on the number and distribution of podiatrists in the area served by the Albany Regional Medical Program reflect the number of those licensed by the New York State Education Department as of June, 1969.

Data for Vermont and Massachusetts are not available.

Division	County	No. of Podiatrists
Central	Albany	14
Northern	Rensselaer	9
	Saratoga	1
	Warren	2
	Washington	0
	Division Total	12
Southern	Columbia	2
	Delaware	1
	Dutchess	10
	Greene	0
	Sullivan	3
	Ulster	6
Division Total	22	
Western	Fulton	2
	Hamilton	0
	Herkimer	1
	Montgomery	2
	Otsego	2
	Schenectady	4
	Schoharie	0
Division Total	11	
Interface (N.Y.)	Clinton	3
	Essex	0
	Franklin	1
Sub-division Total	4	
REGIONAL TOTAL (N.Y. counties only)		63

NUMBER AND DISTRIBUTION OF CHIROPRACTORS IN
AREA SERVED BY ALBANY REGIONAL
MEDICAL PROGRAM

Note: Statistics on the number and distribution of chiropractors in the area served by the Albany Regional Medical Program reflect the number of those licensed to practice by the New York State Education Department as of June, 1969.

Data for Vermont and Massachusetts are not available.

<u>Division</u>	<u>County</u>	<u>No. of Chiropractors</u>
Central	<u>Albany</u>	<u>7</u>
Northern	Rensselaer	7
	Saratoga	8
	Warren	6
	Washington	4
	Division Total	25
Southern	Columbia	4
	Delaware	6
	Dutchess	13
	Greene	3
	Sullivan	8
	Ulster	14
	Division Total	48
Western	Fulton	6
	Hamilton	0
	Herkimer	2
	Montgomery	4
	Otsego	3
	Schenectady	11
	Schoharie	2
	Division Total	28
Interface (N.Y.)	Clinton	3
	Essex	2
	Franklin	2
	Sub-division Total	7
REGIONAL TOTAL (N.Y. counties only)		115

NUMBER AND DISTRIBUTION OF VETERINARIANS IN
AREA SERVED BY THE ALBANY REGIONAL
MEDICAL PROGRAM

Note: Statistics on the number and distribution of veterinarians in the area served by the Albany Regional Medical Program reflect the number licensed by the New York State Education Department as of June, 1969.

Data for Vermont and Massachusetts are not available.

<u>Division</u>	<u>County</u>	<u>No. of Veterinarians</u>
Central	Albany	24
Northern	Rensselaer	12
	Saratoga	11
	Warren	6
	Washington	11
	Division Total	40
Southern	Columbia	13
	Delaware	18
	Dutchess	31
	Greene	6
	Sullivan	5
	Ulster	14
Division Total	87	
Western	Fulton	4
	Hamilton	0
	Herkimer	10
	Montgomery	10
	Otsego	18
	Schenectady	7
	Schoharie	7
	Division Total	56
Interface (N.Y.)	Clinton	8
	Essex	5
	Franklin	9
Sub-division Total	22	
REGIONAL TOTAL (N.Y. counties only)		229

NUMBER AND DISTRIBUTION OF OPTOMETRISTS AND
AND OPHTHALMIC DISPENSERS IN AREA SER-
VED BY THE ALBANY REGIONAL
MEDICAL PROGRAM

Note: Statistics on the number and distribution of optometrists and ophthalmic dispensers in the area served by the Albany Regional Medical Program reflect the number licensed by the New York State Education Department as of June, 1969.

Data for Vermont and Massachusetts are not available.

<u>Division</u>	<u>County</u>	<u>No. of Optometrists</u>	<u>No. of Oph. Dispensers</u>
Central	Albany	35	33
Northern	Rensselaer	18	15
	Saratoga	8	9
	Warren	9	7
	Washington	4	1
Division Totals		39	32
Southern	Columbia	5	3
	Delaware	5	1
	Dutchess	85	253
	Greene	2	1
	Sullivan	4	1
	Ulster	9	9
Division Totals		110	268
Western	Fulton	4	4
	Hamilton	0	0
	Herkimer	9	5
	Montgomery	4	2
	Otsego	8	4
	Schenectady	20	18
	Schoharie	2	2
Division Totals		47	35
Interface (N.Y.)	Clinton	6	5
	Essex	3	3
	Franklin	6	4
Sub-division Totals		15	12
REGIONAL TOTALS (N.Y. counties only)		246	380

NUMBER AND DISTRIBUTION OF PSYCHOLOGISTS IN
AREA SERVED BY ALBANY REGIONAL MED-
ICAL PROGRAM

Note: Statistics on the number and distribution of psychologists in the area served by the Albany Regional Medical Program reflect the number of psychologists licensed by the New York State Education Department as of June, 1969. No information is available as to specialty distribution.

Data for Vermont and Massachusetts are not available.

<u>Division</u>	<u>County</u>	<u>No. of Psychologists</u>
Central	Albany	44
Northern	Rensselaer	6
	Saratoga	5
	Warren	1
	Washington	0
	Division Total	12
Southern	Columbia	4
	Delaware	1
	Dutchess	30
	Greene	0
	Sullivan	3
	Ulster	4
	Division Total	42
Western	Fulton	0
	Hamilton	0
	Herkimer	1
	Montgomery	1
	Otsego	4
	Schenectady	22
	Schoharie	0
		Division Total
Interface (N.Y.)	Clinton	7
	Essex	1
	Franklin	0
	Sub-division Total	8
REGIONAL TOTAL (N.Y. counties only)		134

NUMBER AND DISTRIBUTION OF REGISTERED
NURSES IN AREA SERVED BY ALBANY
REGIONAL MEDICAL PROGRAM

Source: Health Manpower: A County and Metropolitan Area Data Book; Division of Health Resources Statistics, Health Manpower Statistics Branch, National Center for Health Statistics, Rockville, Maryland (to be published in late 1970).

/Advance copy made available through courtesy of Jacqueline Gleason, Chief, Health Manpower Statistics Branch./

The registered nurse counts and distribution were obtained from a joint mail survey in 1966 by the Public Health Service and the American Nurses Association. The county distribution was developed by allocating registered nurses to counties based on the ZIP codes of their mailing addresses. As such, the R.N. distribution reflects primarily the county of residence rather than the county of employment. Those registered nurses who could not be allocated to a county because of deficient information have been omitted from both county and State totals.

In addition, data are presented from current (June, 1969) registrations of R.N. licenses as supplied by the New York State Education Department. These data also do not necessarily reflect the county of employment, nor do they indicate whether a registrant is in active practice or not.

REGISTERED NURSE COUNTS -- UNITED STATES,
NEW YORK, MASSACHUSETTS, VERMONT
(PHS - ANA SURVEY)

Area	Total No.	Actively Employed		Inactive	
		No.	% of Total	No.	% of Total
United States	906,005	591,666	65.3	314,339	34.7
New York	108,647	70,686	64.8	37,961	35.2
Massachusetts	45,542	25,585	55.5	19,957	44.5
Vermont	2,889	1,887	65.3	1,002	34.7

RATIO OF ACTIVELY EMPLOYED REGISTERED
NURSES TO TOTAL POPULATION*

	Total Population	Actively Em- ployed R.N.'s	Ratio of R.N. to Total Pop.
United States	200,263,721	591,666	1:339**
New York	17,979,712	70,686	1:257
Massachusetts	5,630,224	25,585	1:225
Vermont	437,744	1,887	1:232

*Total population figures are preliminary statistics from 1970 Census.

**The corresponding ratio in 1962 was 1:298; in 1966, it was 1:319.

DISTRIBUTION OF REGISTERED NURSES IN AREA SERVED
BY ALBANY REGIONAL MEDICAL PROGRAM
(PHS - ANA SURVEY)

Division	County	Total No.	Active		Inactive	
			No.	% of Total	No.	% of Total
Central	Albany	2,301	1,384	60.2	917	39.8
Northern	Rensselaer	1,215	789	65.0	426	35.0
	Saratoga	727	440	60.5	287	39.5
	Warren	496	304	61.3	192	38.7
	Washington	370	257	69.4	113	30.6
Division Totals		2,808	1,790	Avg = 63.7	1,018	Avg = 36.3
Southern	Columbia	520	323	62.1	197	37.9
	Delaware	257	153	59.5	104	40.5
	Dutchess	2,193	1,287	58.7	906	41.3
	Greene	242	130	53.7	112	46.3
	Sullivan	326	204	62.6	122	37.4
	Ulster	1,206	729	60.5	477	39.5
Division Totals		4,744	2,826	Avg = 59.5	1,918	Avg = 40.5
Eastern (Mass.)						
	Berkshire	1,455	844	58.4	611	41.6
Western	Fulton	392	241	61.4	151	38.6
	Hamilton	39	20	51.3	19	48.7
	Herkimer	478	300	62.8	178	37.2
	Montgomery	442	289	65.4	153	34.6
	Otsego	446	278	62.3	168	37.7
	Schenectady	1,462	844	57.7	618	42.3
	Schoharie	135	79	58.5	56	41.5
Division Totals		3,394	2,051	Avg = 59.9	1,343	Avg = 40.1
Interface (NY)						
	Clinton	641	389	60.6	252	39.4
	Essex	287	188	65.5	99	34.5
	Franklin	357	219	61.3	138	38.7
Sub-division Totals		1,285	796	Avg = 62.5	489	Avg = 37.5
Interface (Vt)						
	Bennington	179	110	61.4	69	38.6
	Windham	218	139	63.7	79	36.3
Sub-division Totals		397	249	Avg = 62.6	148	Avg = 37.4
Division Totals		1,682	1,045	Avg = 62.5	637	Avg = 37.5
Regional Totals		16,384	9,940	Avg = 60.7	6,444	Avg = 39.3

RATIO OF ACTIVE REGISTERED NURSES TO TOTAL POPULATION SERVED BY ALBANY REGIONAL MEDICAL PROGRAM*

Division	County	Total Population	Ratio of RN to Pop.
Central	Albany	280,118	1:203
Northern	Rensselaer	150,218	1:190
	Saratoga	120,423	1:274*
	Warren	47,850	1:151
	Washington	50,417	1:196
Division Total		368,908	Avg. = 1:203*
Southern	Columbia	50,366	1:186
	Delaware	43,565	1:285
	Dutchess	218,331	1:170*
	Greene	32,000	1:246
	Sullivan	49,740	1:244
	Ulster	135,319	1:186
Division Total		529,321	Avg. = 1:219*
Eastern (Mass.)	Berkshire	147,844	1:175
Western	Fulton	51,854	1:216
	Hamilton	4,496	1:225
	Herkimer	66,823	1:223
	Montgomery	55,253	1:191
	Otsego	55,421	1:200
	Schenectady	159,995	1:189
	Schoharie	24,203	1:306
	Division Total		418,045
Interface (NY)	Clinton	71,632	1:184
	Essex	33,843	1:180
	Franklin	43,075	1:197
Sub-division Total		148,550	Avg. = 1:187
Interface (Vt.)	Bennington	28,376	1:258
	Windham	32,054	1:230
Sub-division Total		60,430	Avg. = 1:244
Division Total		208,980	1:210
Regional Total		2,099,922	Avg. = 1:205
United States		200,263,761	Avg. = 1:338

*Total population figures are based on preliminary data from 1970 census. Although R.N. counts are based on a 1966 PHS-ANA survey, significant differences in the ratio of the number of active registered nurses to total population are probably minimal except for Dutchess and Saratoga counties whose total populations have had very significant increases. However, the regional ratio is probably quite close to the figure given.

NEW YORK STATE REGISTRATIONS OF LICENSES (R.N.): 1969

Division	County	Number of Registrations
Central	Albany	2,484
Northern	Rensselaer	1,310
	Saratoga	895
	Warren	513
	Washington	382
	Division Total	3,097
Southern	Columbia	531
	Delaware	271
	Dutchess	2,280
	Greene	258
	Sullivan	327
	Ulster	1,261
	Division Total	4,928
Western	Fulton	409
	Hamilton	47
	Herkimer	499
	Montgomery	482
	Otsego	462
	Schenectady	1,539
	Schoharie	123
	Division Total	3,561
Interface (N.Y.)	Clinton	690
	Essex	318
	Franklin	430
	Sub-division Total	1,438
New York State Counties Total		15,508*

*This figure is 2,261 more than that produced by PHS-ANA survey of 1966.

NUMBER AND DISTRIBUTION OF LICENSED PRACTICAL NURSES
IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM: 1969

Note: Statistics on the number and distribution of licensed practical nurses in the New York State counties were supplied by the Nursing Section of the New York State Education Department.

Statistics for the two counties in Vermont were supplied by the Licensing and Registration Division of the Vermont Board of Nursing.

No statistics are available for Berkshire County (Massachusetts). The Massachusetts Board of Registry in Nursing reported that licensed practical nurses are "registered" not by the State, but by individual communities.

In no case was it possible to obtain statistics on the proportion of active to inactive licensed practical nurses.

In all instances, the counts reflect county of residence rather than of employment.

Division	County	No. of licensed practical nurses
Central	Albany	704
Northern	Rensselaer	428
	Saratoga	341
	Warren	195
	Washington	182
	Division Total	1,146
Southern	Columbia	162
	Delaware	139
	Dutchess	579
	Greene	171
	Sullivan	126
	Ulster	291
Division Total	1,468	
Western	Fulton	127
	Hamilton	10
	Herkimer	188
	Montgomery	172
	Otsego	205
	Schenectady	609
	Schoharie	59
	Division Total	1,370
Interface (N.Y.)	Clinton	157
	Essex	134
	Franklin	182
Sub-division Total	473	
Interface (Vt.)	Bennington	163
	Windham	240
Sub-division Total	403	
Division Total	876	
Regional Total (excluding Berkshire County, Mass.)		5,564

NUMBER AND DISTRIBUTION OF MEDICAL TECHNOLOGISTS
IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics are available only for New York State counties, and reflect medical technologists who are registered with the American Society of Medical Technologists and reflect county of residence rather than of employment. No information is available as to the proportion of active to inactive individuals.

Statistics on counts in Vermont and Massachusetts are not available.

Information on medical technicians are not available.

<u>Division</u>	<u>County</u>	<u>No. of Reg. Medical Technologists</u>
Central	Albany	80
Northern	Rensselaer	38
	Saratoga	26
	Warren	13
	Washington	1
Division Total		78
Southern	Columbia	7
	Delaware	2
	Dutchess	35
	Greene	4
	Sullivan	3
	Ulster	16
Division Total		67
Western	Fulton	4
	Hamilton	0
	Herkimer	7
	Montgomery	8
	Otsego	8
	Schenectady	53
	Schoharie	2
Division Total		82
Interface (N.Y.)	Clinton	13
	Essex	3
	Franklin	5
Sub-division Total		21
Regional Total (excluding Vermont and Massachusetts)		328

NUMBER AND DISTRIBUTION OF PHARMACIES AND PHARMACISTS
IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of pharmacies and pharmacists in New York State counties were kindly supplied by the Board of Pharmacy of the New York State Education Department. Data on pharmacies reflect establishments registered as of May, 1970. Data on pharmacists reflect individuals registered as of February, 1969, and indicate county of residence rather than of employment.

Statistics for Vermont and Massachusetts are not available.

PHARMACIES REGISTERED IN N.Y. STATE COUNTIES (A.R.M.P.)

<u>Division</u>	<u>County</u>	<u>No. of Reg. Pharmacies</u>
	New York State Total	5,124
	New York City Total	2,302
	Rest of State	2,822
Central	Albany	85
Northern	Rensselaer	37
	Saratoga	27
	Warren	20
	Washington	12
	Division Total	96
Southern	Columbia	16
	Delaware	12
	Dutchess	60
	Greene	12
	Sullivan	32
	Ulster	38
	Division Total	170
Western	Fulton	11
	Hamilton	3
	Herkimer	14
	Montgomery	18
	Otsego	15
	Schenectady	50
	Schoharie	5
	Division Total	116
Interface (N.Y.)	Clinton	14
	Essex	15
	Franklin	10
	Sub-division Total	39
Regional Total (excluding Vermont and Massachusetts)		506

PHARMACISTS REGISTERED IN NEW YORK STATE COUNTIES (A.R.M.P.)

<u>Division</u>	<u>County</u>	<u>No. of Reg. Pharmacists</u>
	New York State Total	14,486
	New York City Total	6,447
	Rest of State Total	8,039
Central	Albany	293
Northern	Rensselaer	112
	Saratoga	66
	Warren	47
	Washington	31
	Division Total	256
Southern	Columbia	35
	Delaware	28
	Dutchess	150
	Greene	25
	Sullivan	57
	Ulster	86
	Division Total	381
Western	Fulton	29
	Hamilton	3
	Herkimer	31
	Montgomery	48
	Otsego	32
	Schenectady	146
	Schoharie	9
	Division Total	298
Interface (N.Y.)	Clinton	43
	Essex	26
	Franklin	20
	Sub-division Total	89
Regional Total (excluding Vermont and Massachusetts)		1,317

NUMBER AND DISTRIBUTION OF PHYSICAL THERAPISTS IN
AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number of physical therapists in the area served by the Albany Regional Medical Program were obtained from the N.Y. State Education Department and are believed to be accurate as of February, 1969. They reflect county of residence rather than of employment.

Statistics for Vermont were supplied through the courtesy of Mr. Fred Bradley, Chief Physical Therapist at Putnam Memorial Hospital, Bennington, Vermont.

Statistics for Massachusetts were said by the Massachusetts Department of Education to be unavailable. However, an unofficial estimate, provided through the courtesy of Miss Irma J. Wilhelm, Consultant Physical Therapist (A.R.M.F.), is given.

PHYSICAL THERAPISTS

<u>Division</u>	<u>County</u>	<u>No. of Physical Therapists</u>
Central	Albany	36
Northern	Rensselaer	18
	Saratoga	6
	Warren	3
	Washington	1
	Division Total	27
Southern	Columbia	3
	Delaware	4
	Dutchess	26
	Greene	0
	Sullivan	3
	Ulster	9
	Division Total	45
Eastern (Mass.)	Berkshire	22
Western	Fulton	5
	Hamilton	0
	Herkimer	2
	Montgomery	3
	Otsego	6
	Schenectady	28
	Schoharie	1
	Division Total	45
Interface (N.Y.)	Clinton	5
	Essex	3
	Franklin	2
	Sub-division Total	10
Interface (Vt.)	Bennington	6
	Windham	3
	Sub-division Total	9
	Division Total	19
	Regional Total	194

NUMBER AND DISTRIBUTION OF X-RAY TECHNICIANS IN
AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of X-Ray technologists in the New York State counties served by the Albany Regional Medical Program were derived from the Directory of X-Ray Technicians published by the Bureau of X-Ray Technology, Division of Preventive Services, New York State Department of Health. The statistics reflect the number of X-Ray technicians with registered licenses for the period January 1, 1968, through December 31, 1969.

Statistics for the A.R.M.P. counties in Massachusetts and Vermont were obtained from the American Registry of Radiologic Technologist, Minneapolis, Minnesota.

Article 35 of the New York State Public Health Law places with the State Department of Health full responsibility for licensing and registering x-ray technicians within the State, and for enforcing laws and regulations in this field.

It is a misdemeanor to practice x-ray technology without a license or with a fraudulent license. Such practices are punishable by fine, imprisonment, or both.

Licenseholders who are in active practice must register their licenses every two years, and must display such licenses and the Department of Health's Certificate of Registration prominently at the principal place of employment. Licenseholders are also required to carry a wallet-sized Registration Card whenever they are actually practicing, and must show it to anyone with a valid interest -- law enforcement officer, employer, or patient.

Just before going to press it was announced that certain new educational standards for X-ray technicians in New York State would go into effect on October 1, 1970. After this date, schools of X-ray technology must employ at least one instructor who is a licensed x-ray technician on a full-time assignment to the school in an administrative title such as School Director, Assistant Director, Educational Director, Educational Supervisor, or Educational Coordinator. This person must have some training in educational methods, such as attendance at a seminar in educational methods or completion of a college-level course in educational methods.

Schools must also be able to offer students a complete and

comprehensive program of clinical experience. This must include patients from medical, surgical, pediatric, orthopedic, and neurological services, as well as radiation therapy experience. Where a school does not have any of these, or lacks adequate volume or variety of special procedures, it must be provided by establishing affiliations with other hospitals where the experience can be obtained. Such affiliations must meet standards established in the rules and regulations of the Bureau of X-Ray Technology, New York State Department of Health.

TABLE I -- NUMBER AND DISTRIBUTION OF GENERAL X-RAY
TECHNICIANS (L.X.T.) IN AREA SERVED
BY ALBANY REGIONAL MEDICAL PROGRAM

Division	County	Number of X-Ray Technicians
Central	Albany	88
Northern	Rensselaer	37
	Saratoga	26
	Warren	20
	Washington	22
	Division Total	105
Southern	Columbia	18
	Delaware	20
	Dutchess	48
	Greene	12
	Sullivan	24
	Ulster	37
Division Total	159	
Eastern (Mass.)	Berkshire	45
Western	Fulton	9
	Hamilton	2
	Herkimer	23
	Montgomery	16
	Otsego	21
	Schenectady	67
	Schoharie	4
	Division Total	142
Interface (N.Y.)	Clinton	20
	Essex	22
	Franklin	21
Sub-division Total	63	
Interface (Vt.)	Bennington	7
	Windham	8
Sub-division Total	15	
Division Total	78	
Regional Total		617

Note: In addition, there is 1 (one) x-ray therapy technician licensed in A.R.M.P. area (Kingston, N.Y.)

Note: Tables II through VII contain information concerning activities of virtually all licensed x-ray technicians in New York State as obtained from a questionnaire returned to the Department of Health with the licensees' application for the 1968-1969 period.

TABLE II -- TYPE OF EMPLOYMENT BY SEX

Type of Employment	Total No.	Male	Female
In X-Ray Work	3,633	1,286 (35%)	2,347 (65%)
Full-Time diagnostic X-ray	2,237	1,051 (47%)	1,186 (53%)
Part-Time diagnostic X-ray	417	57 (11%)	360 (89%)
Full-Time work, part-time X-ray	979	178 (18%)	801 (82%)
Not in X-Ray Work	1,221	222 (18%)	999 (82%)
Related work (therapy, sales, etc.)	346	125 (36%)	221 (64%)
Unrelated employment	226	64 (29%)	162 (71%)
Retired	649	33 (5%)	616 (95%)

TABLE III -- PLACE OF EMPLOYMENT OF THOSE IN ACTIVE X-RAY WORK, BY SEX

Place of Employment	Total No.	Male	Female
Hospital Radiology Dept.	2,084	1,043 (50%)	1,041 (50%)
Private office of radiologist	355	57 (16%)	298 (84%)
<u>Totals</u>	2,439	1,100 (45%)	1,339 (55%)
<u>Not</u> in Radiology Work			
Private M.D. office	792	50 (6%)	742 (94%)
Private office - not M.D.	11	3 (27%)	8 (73%)
Public Health Agency	79	41 (52%)	38 (48%)
Other (business, etc.)	219	72 (33%)	147 (67%)
<u>Totals</u>	1,101	166 (15%)	935 (85%)

TABLE IV -- TECHNICIANS EMPLOYED BY HOSPITAL OR RADIOLOGISTS:
TECHNICAL SUPERVISION RECEIVED, BY SEX

Technical Supervision Received	Total No.	Male	Female
Close supervision by physician	885	411 (46%)	474 (54%)
Close supervision by X-Ray technician	178	76 (43%)	102 (57%)
Not under close supervision	1,259	553 (44%)	706 (56%)
<u>Totals</u>	2,322	1,040 (45%)	1,282 (55%)

TABLE V -- TECHNICIANS EMPLOYED BY HOSPITALS OR RADIOLOGISTS:
CAREER EXPECTATIONS, BY SEX

	Total No.	Male	Female
Expects to remain in X-Ray Technology	1,829	995 (55%)	834 (45%)
A. Expects to hold high position	819	504 (62%)	315 (38%)
B. Hopes to attain high level position	813	438 (54%)	375 (46%)
C. Does not hope to attain high level	197	53 (26%)	144 (74%)
Expects to leave X-Ray Technology	470	61 (13%)	409 (87%)
A. Work in related fields (sales, etc.)	33	31 (94%)	2 (6%)
B. Work in unrelated fields	127	30 (24%)	97 (76%)
C. Housewife, temporary-hopes to return	310	-	310 (100%)

TABLE VI -- TECHNICIANS EMPLOYED BY HOSPITAL OR RADIOLOGIST:
EMPLOYMENT HISTORY, BY X-RAY EDUCATION

Employment History	Total No.	X-Ray Education		
		2-yr. Schooling	Short Course	No formal schooling
Less than 5 yrs. in field	600	453 (75%)	102 (17%)	45 (8%)
Over 5 yrs. - not continuous	145	79 (55%)	51 (35%)	15 (10%)
Over 5 yrs. - continuous	1,574	560 (35%)	840 (55%)	174 (10%)
<u>Totals</u>	2,319	1,092 (43%)	993 (42%)	234 (15%)

TABLE VII -- TECHNICIANS EMPLOYED BY HOSPITALS OR RADIOLOGISTS:
X-RAY EDUCATION, BY AGE

X-Ray Education	All Ages	A G E				Median Age
		18 - 29	30 - 44	45 - 59	60+	
All respondents	2,010	826 (41%)	761 (37%)	374 (18%)	49 (4%)	34
Two-year School	968	592 (61%)	278 (28%)	88 (9%)	10 (2%)	28
Short Course	842	200 (24%)	402 (48%)	217 (25%)	23 (3%)	38
No formal schooling	200	34 (17%)	81 (40%)	69 (35%)	16 (8%)	42

NUMBER AND DISTRIBUTION OF OCCUPATIONAL THERAPISTS
IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of occupational therapists in the area served by the Albany Regional Medical Program were supplied* through the courtesy of the American Occupational Therapy Association, and reflect members residing in the noted counties as of May; 1970.

*Statistics on occupational therapists located in Berkshire County (Mass.) were supplied by the Massachusetts Department of Education.

OCCUPATIONAL THERAPISTS

<u>Division</u>	<u>County</u>	<u>No. of Occupational Therapists</u>
Central	Albany	16
Northern	Rensselaer	2
	Saratoga	1
	Warren	2
	Washington	0
	Division Total	5
Southern	Columbia	3
	Delaware	0
	Dutchess	20
	Greene	1
	Sullivan	1
	Ulster	4
	Division Total	29
Eastern (Mass.)	Berkshire	5
Western	Fulton	1
	Hamilton	0
	Herkimer	1
	Montgomery	0
	Otsego	3
	Schenectady	18
	Schoharie	1
	Division Total	23
Interface (N.Y.)	Clinton	0
	Essex	0
	Franklin	0
Sub-division Total	0	
Interface (Vt.)	Bennington	4
	Windham	3
	Sub-division Total	7
Division Total	7	
Regional Total		85

NUMBER AND DISTRIBUTION OF SPEECH PATHOLOGISTS IN
AREA SERVED IN THE ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of speech therapists in the area served by the Albany Regional Medical Program were supplied for the New York State counties through the courtesy of the New York State Department of Health, Office of Rehabilitation. All except two of the individuals are both speech pathologists and hearing clinicians. In addition, there are four individuals qualified also as audiologists.

Statistics on personnel in Vermont and Massachusetts are not available.

SPEECH PATHOLOGISTS

<u>Division</u>	<u>County</u>	<u>No. of Speech Pathologists</u>
Central	Albany	10*
Northern	Rensselaer	1**
	Saratoga	1**
	Warren	0
	Washington	0
	Division Total	2
Southern	Columbia	1**
	Delaware	0
	Dutchess	4***
	Greene	1****
	Sullivan	1**
	Ulster	0
Division Total	7	
Western	Fulton	1**
	Hamilton	0
	Herkimer	0
	Montgomery	1**
	Otsego	1**
	Schenectady	4**
	Schoharie	0
	Division Total	7
Interface (N.Y.)	Clinton	3**
	Essex	1**
	Franklin	1**
Sub-division Total	5	

Regional Totals (N.Y. counties):
 Speech Pathologists - 31, of whom 29
 are also qualified as Hearing Clinician,
 and 4 are also qualified as Audiologist

*9 are also Hearing Clinicians; 3 are also Audiologists
 **Also qualified as Hearing Clinician
 ***Three also qualified as Hearing Clinician
 ****Also qualified as Hearing Clinician and as Audiologist

NUMBER AND DISTRIBUTION OF VOCATIONAL REHABILITATION
COUNSELORS IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: All individuals in the following counts were employed by the State of New York Office of Vocational Rehabilitation or the Massachusetts Rehabilitation Commission as of July, 1970.

Information on personnel in the State of Vermont is not available.

In counties represented as having a fractional number of vocational rehabilitation counselors, the personnel serve more than one county.

Division	County	No. of Vocat. Rehab. Couns.
Central	Albany	2
Northern	Rensselaer	1.5
	Saratoga	1
	Warren	1
	Washington	1
	Division Total	4.5
Southern	Columbia	1
	Delaware	1
	Leitchess	2.5
	Greene	1
	Sullivan	1
	Ulster	2
	Division Total	8.5
Eastern (Mass.)	Berkshire	6*
Western	Fulton	1
	Hamilton	0.5
	Herkimer	1
	Montgomery	1
	Otsego	1
	Schenectady	2
	Schoharie	0.5
	Division Total	7
Interface (N.Y.)	Clinton	1
	Essex	1
	Franklin	1
	Sub-division Total	3
	Regional Total (excluding Vermont counties)	31

*Two of these are junior Vocat. Rehab. Couns.

NUMBER AND DISTRIBUTION OF PROFESSIONAL MEDICAL
LIBRARIANS IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and dis-
tribution of professional medical
librarians in the area served by the
Albany Regional Medical Program were
kindly supplied by Mrs. Ursula Poland,
Chief Librarian, Albany Medical College.

<u>Division</u>	<u>County</u>	<u>No. of Prof. Med. Librarians</u>
Central	Albany	21
Northern	Rensselaer	2
	Saratoga	0
	Warren	0
	Washington	0
	<u>Division Total</u>	<u>2</u>
Southern	Columbia	0
	Delaware	0
	Dutchess	3
	Greene	0
	Sullivan	0
	Ulster	1
	<u>Division Total</u>	<u>4</u>
Eastern (Mass.)	Berkshire	2
Western	Fulton	1
	Hamilton	0
	Herkimer	0
	Montgomery	0
	Otsego	1
	Schenectady	1
	Schoharie	0
	<u>Division Total</u>	<u>3</u>
Interface (N.Y.)	Clinton	0
	Essex	0
	Franklin	1
	<u>Sub-division Total</u>	<u>1</u>
Interface (Vt.)	Bennington	0
	Windham	0
	<u>Sub-division Total</u>	<u>0</u>
	Division Total	1
	Regional Total	33

NUMBER AND DISTRIBUTION OF MEDICAL RECORD LIBRARIANS
IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of Medical Record Librarians in the area* served by the Albany Regional Medical Program were kindly supplied by Mrs. Koster, Chief Medical Record Librarian, Albany Medical College.

 No data are available on the number and distribution of medical record technicians or medical record clerks.

*Statistics for Berkshire County (Mass.) are not available.

Division	County	No. of Med. Rec. Librarians
Central	Albany	17
Northern	Rensselaer	4
	Saratoga	2
	Warren	2
	Washington	2
	Division Total	10
Southern	Columbia	2
	Delaware	1
	Dutchess	6
	Greene	0
	Sullivan	4
	Ulster	4
	Division Total	17
Western	Fulton	2
	Hamilton	0
	Herkimer	2
	Montgomery	1
	Otsego	4
	Schenectady	5
	Schoharie	1
	Division Total	15
Interface (N.Y.)	Clinton	1
	Essex	2
	Franklin	3
	Sub-division Total	6
Interface (Vt.)	Bennington	1
	Windham	1
	Sub-division Total	2
	Division Total	8
	Regional Total	67

NUMBER AND DISTRIBUTION OF INHALATION THERAPY TECHNICIANS
IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of inhalation therapy technicians (June, 1970) in the area served by the Albany Regional Medical Program were supplied through the courtesy of Miss Gwen Packard, Respiratory Nurse Specialist, Albany Medical Center.

Statistics on personnel in Vermont and Massachusetts are not available.

Division	County	No. of Inhal. Ther. Tech.
Central	Albany	41*
Northern	Rensselaer	9
	Saratoga	5
	Warren	3
	Washington	4
	Division Total	21
Southern	Columbia	1
	Delaware	4
	Dutchess	10
	Greene	1
	Sullivan	2
	Ulster	3
Division Total	21	
Western	Fulton	3
	Hamilton	0
	Herkimer	1
	Montgomery	2
	Otsego	9
	Schenectady	15
	Schoharie	2
	Division Total	32
Interface (N.Y.)	Clinton	4
	Essex	0
	Franklin	1
Sub-division Total	5	
Regional Total (excluding Vermont and Massachusetts)		120

*Albany County also has at least 2 registered inhalation therapists.

NUMBER AND DISTRIBUTION OF DIETITIANS AND HOME ECONOMISTS
IN AREA SERVED BY THE ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of dietitians in the area served by the Albany Regional Medical Program reflect membership as of April, 1970, in the American Dietetic Association. Data on home economists were kindly supplied in March, 1970, by the Home Economics Division of the Cooperative Extension Association of Albany County (New York). It is not believed that the latter list encompasses all home economists in the Albany Region, but is the most complete available.

Division	County	No. of Dieticians	No of Home Economists
Central	Albany	47	3
Northern	Rensselaer	18	3
	Saratoga	10	2
	Warren	2	1
	Washington	2	1
Division	Totals	32	7
Southern	Columbia	5	1
	Delaware	2	2
	Dutchess	25	3
	Greene	2	1
	Sullivan	3	2
	Ulster	8	3
Division	Totals	45	12
Eastern (Mass.)	Berkshire	15	3
Western	Fulton	1	2
	Hamilton	0	0
	Herkimer	2	1
	Montgomery	6	1
	Otsego	6	2
	Schenectady	16	2
	Schoharie	1	1
	Division	Totals	32
Interface (NY)	Clinton	3	3
	Essex	3	1
	Franklin	1	1
Sub-division	Totals	7	5
Interface (Vt)	Bennington	2	1
	Windham	1	1
Sub-division	Totals	3	2
Division	Totals	10	7
Regional Totals		181	41

NUMBER AND DISTRIBUTION OF SOCIAL WORKERS IN AREA
SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of social workers in the area served by the Albany Regional Medical Program were obtained from a number of sources to whom we are indebted:

1. State of New York Department of Social Services
2. National Association of Social Workers
3. Mr. Sully Garofono, Berkshire Rehabilitation Center, Pittsfield, Massachusetts
4. New York State Education Department

Division	County	No. of Social Workers*
Central	Albany	125 (173)
Northern	Rensselaer	113 (60)
	Saratoga	33 (16)
	Warren	27 (7)
	Washington	23 (5)
	Division Total	196 (88)
	Columbia	23 (14)
	Delaware	27 (5)
	Dutchess	56 (64)
	Greene	10 (3)
	Sullivan	18 (5)
Ulster	29 (22)	
Division Total	163 (113)	
Eastern (Mass.)	Berkshire	38
Western	Fulton	38 (4)
	Hamilton	1 (0)
	Herkimer	22 (13)
	Montgomery	29 (9)
	Otsego	37 (9)
	Schenectady	65 (65)
	Schoharie	13 (1)
	Division Total	205 (101)
Interface (N.Y.)	Clinton	47 (13)
	Essex	19 (8)
	Franklin	29 (6)
	Sub-division Total	95 (27)
Interface (Vt.)	Bennington	21
	Windham	26
	Sub-division Total	47
Division Total	142	
Regional Total		869 (502)

*Figures in parentheses indicate number of social workers certified by New York State Education Department as of June, 1969, and reflect place of residence rather than of employment.

NUMBER AND DISTRIBUTION OF DENTAL HYGIENISTS IN
AREA* SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of dental hygienists in the New York State counties served by the Albany Regional Medical Program were derived from: Handbook of Statistics, Dental Hygienists Licensed in New York (1966); published by the New York State Board of Dental Examiners and the American Association of Dental Examiners under contract with the Resource Analysis Branch, Division of Dental Health, NIH, PHS, HEW.

The tables on the following pages are based on a survey conducted in 1966 and refer mainly to the replies given by respondents.

Data on the number and distribution of dental hygienists in the Vermont and Massachusetts counties (A.R.M.P.) are not available.

*New York State counties only. Data for Vermont and Massachusetts not available.

TABLE I -- SURVEY RESPONSE

<u>Characteristics</u>	<u>No. in N.Y. State</u>
Total number of dental hygienists licensed	5,773
<u>Total number of respondents:</u>	4,356*
In active practice	2,483 (57%)
Inactive	1,873 (43%)
<u>Age in 1966:</u>	
Under 25	1,104 (26%)
25 - 29	815 (19%)
30 - 34	698 (16%)
35 and over	1,713 (39%)
<u>Year hygiene training completed:</u>	
1957 - 1966	1,990 (44%)
1947 - 1956	1,134 (27%)
1937 - 1946	597 (14%)
Before 1937	582 (15%)

*The remaining data in this table are based upon approximately this figure.

TABLE II -- PLACE OF EMPLOYMENT

<u>Status and Place of Employment</u>	<u>Number</u>
Active (total)	2,483*
Private dental office	1,417
Dental hygiene school	49
Elementary or secondary school	555
City or county health agency	221
State health agency	23
Other government agency	66
Private agency	53
Not reported	105
Unemployed (seek work as dental hygienist)	165
Inactive	1,873

*Figures in this category add to more than total number of active respondents because some hygienists reported more than one type of employer.

TABLE III -- ACTIVITIES PERFORMED, BY PLACE OF EMPLOYMENT

Activities Performed	Place of Employment	
	School	Health Agency
Oral prophylaxis	367	151
Other clinical services	182	131
School dental inspection	37	-
Patient dental health education	319	114
Management of dental clinic	71	104
Dental assisting tasks	34	105
Group dental health education*	408	124
Administration	32	14
Dental research	2	3

*Classroom instruction of students in schools; talks before civic groups; etc.

TABLE IV -- DISTRIBUTION* OF DENTAL HYGIENISTS IN NEW YORK
STATE COUNTIES - A.R.M.P.

Division	County	Total No. Licensed**	Total No. Respondents	Active	Inactive
Central	Albany	63 (86)	57	35 (60%)	22 (40%)
Northern	Rensselaer	46 (50)	44	35 (80%)	9 (20%)
	Saratoga	22 (38)	21	9 (43%)	12 (57%)
	Warren	22 (23)	21	14 (67%)	7 (33%)
	Washington	13 (15)	12	7 (60%)	5 (40%)
Division	Totals	103 (126)	98	65 (67%)	33 (33%)
Southern	Columbia	13 (19)	10	4 (40%)	6 (60%)
	Delaware	31 (34)	30	18 (60%)	12 (40%)
	Dutchess	64 (76)	62	27 (44%)	35 (56%)
	Greene	8 (9)	7	5 (70%)	2 (30%)
	Sullivan	9 (15)	9	6 (67%)	3 (33%)
	Ulster	15 (19)	15	11 (73%)	4 (27%)
Division	Totals	140 (172)	133	71 (54%)	62 (46%)
Western	Fulton	12 (16)	11	5 (45%)	6 (55%)
	Hamilton	4 (5)	3	2 (67%)	1 (33%)
	Herkimer	31 (34)	29	15 (52%)	14 (48%)
	Montgomery	19 (17)***	19	13 (68%)	6 (32%)
	Otsego	32 (32)	32	22 (70%)	10 (30%)
	Schenectady	66 (89)	63	38 (60%)	25 (40%)
	Schoharie	12 (9)***			
Division	Totals	176 (202)	157	95 (60%)	62 (40%)
Interface (NY)	Clinton	19 (38)	19	11 (58%)	9 (42%)
	Essex	12 (13)	12	9 (75%)	3 (25%)
	Franklin	9 (19)	8	3 (38%)	5 (62%)
Sub-division	Totals	40 (70)	39	23 (60%)	16 (40%)
Regional Totals (N.Y. State counties only)		522 (656)	484	289 (59%)	195 (41%)

*Based on replies of respondents (93% of total licensed).

**Figures in parentheses indicate number of dental hygienists licensed as of June, 1969.

***Indicates loss of number licensed from 1966 to 1969.

TABLE V -- COUNTY LOCATION (A.R.M.P.), BY PLACE
OF EMPLOYMENT*

Division	County	Total No. Employed	PLACE OF EMPLOYMENT**				Not Reported
			Private Den- tal Office	School	Health Agency	All Other	
Central	Albany	33	27	5	1	1	-
Northern	Rensselaer	33	29	2	-	3	-
	Saratoga	9	6	3	1	-	-
	Warren	14	11	3	-	-	-
	Washington	7	4	3	-	-	-
Division	Totals	63	50	11	1	3	-
Southern	Columbia	4	1	2	-	-	1
	Delaware	17	8	8	-	2	1
	Dutchess	25	17	5	-	3	2
	Greene	5	2	3	-	-	-
	Sullivan	5	1	5	-	-	-
	Ulster	10	6	4	1	-	-
Division	Totals	66	35	27	1	5	4
Western	Fulton	5	3	2	-	-	-
	Hamilton	2	-	2	-	-	-
	Herkimer	14	4	8	-	2	1
	Montgomery	13	5	7	-	-	1
	Otsego	22	13	12	1	-	-
	Schenectady	35	24	6	2	5	1
	Schoharie	9	3	6	-	-	-
	Division	Totals	100	52	43	3	7
Interface (NY)	Clinton	11	4	8	1	1	-
	Essex	9	3	5	1	2	1
	Franklin	2	1	1	-	-	-
Sub-division	Totals	22	8	14	2	3	1
Regional	Totals	284	172 (60%)	100(37%)	8	19	8

*Based on replies of respondents.

**Figures add up to more than total number employed since some hygienists reported more than one employer.

TABLE VI -- SCHOOL ATTENDED FOR DENTAL HYGIENE TRAINING:
TOTAL N.Y. STATE LICENSEES (1966)

<u>School</u>	<u>Total No.</u>	<u>Active</u>	<u>Inactive</u>
All schools	4,342	2,474	1,868
Monroe County Community College*	1,111	664	447
N.Y.C. Community College**	799	391	408
Erie County Technical Institute	673	361	312
Columbia University	427	233	194
S.U.N.Y. at Farmingdale	412	225	187
Guggenheim School of Dental Hygienists***	185	109	76
Broome Technical Community College	164	105	59
Hudson Valley Community College	123	102	21
University of Pennsylvania	87	44	43
Onondaga Community College	57	49	8
Forsyth School for Dental Hygienists	47	30	17
Temple University	45	27	18
University of Bridgeport (Conn.)	42	29	13
Fairleigh Dickinson University	31	17	14
University of Vermont	20	12	8
All other schools	119	84	35

*Incl. graduates of Eastman Dental Dispensary and Rochester Dental Dispensary.

**Incl. graduates of Brooklyn Community College

***Last class graduated in 1944

TABLE VII -- COUNTY LOCATION (A.R.M.P.) OF ACTIVE LICENSEES, BY
SELECTED SCHOOLS

Division	County	Active Total No.	Monroe Community College	Erie County Technical Institute	Columbia University	S.U.N.Y. at Farmingdale	Hudson Valley Community College	All other Schools
Central	Albany	38	9	-	-	2	15	12
Northern	Rensselaer	35	3	1	-	4	21	6
	Saratoga	9	5	1	1	-	1	1
	Warren	14	6	2	-	2	2	2
	Washington	7	5	-	-	1	1	-
Division	Totals	65	19	4	1	7	25	9
Southern	Columbia	4	2	-	-	-	-	2
	Delaware	18	11	-	-	-	2	5
	Dutchess	27	6	1	1	6	1	12
	Greene	5	4	-	-	-	1	-
	Sullivan	6	3	-	-	-	-	3
	Ulster	11	3	-	1	3	-	4
Division	Totals	71	29	1	2	9	4	26
Western	Fulton	5	2	-	-	-	3	-
	Hamilton	2	1	1	-	-	-	-
	Herkimer	15	10	1	-	1	2	1
	Montgomery	13	6	1	-	3	1	2
	Otsego	22	3	5	-	3	2	9*
	Schenectady	38	7	-	2	5	21	3
	Schoharie	9	5	1	-	-	1	2
Division	Totals	104	34	9	2	12	30	17
Interface (N.Y.)	Clinton	11	3	1	-	3	2	2
	Essex	9	7	1	-	-	1	-
	Franklin	3	-	-	2	1	-	-
Sub-division	Totals	23	10	2	2	4	3	2
Regional	Totals	301	101	16	7	34	77	66

*All 9 went to Broome Technical Community College (Binghamton)

TABLE VII -- DEGREE OF INTEREST IN TAKING REFRESHER
TRAINING IN DENTAL HYGIENE IF SUCH TRAINING
WERE AVAILABLE NEARBY (NEW YORK STATE ACTIVE LICENSEES)

No. of years active	No. of hygienists	Degree of Interest		
		Interested	Not Interested	Not reported
2 yrs. or less	723	434 (60%)	240 (34%)	49 (6%)
3 - 5 yrs.	492	294 (60%)	161 (33%)	37 (7%)
6 - 10 yrs.	405	243 (60%)	122 (30%)	40 (10%)
11 or more yrs.	783	408 (52%)	242 (30%)	133 (18%)
Yrs. not reported	80	40 (50%)	20 (25%)	20 (25%)
TOTALS	2,483	1,419 (57%)	785 (32%)	279 (11%)

TABLE VIII -- MARTIAL STATUS OF NEW YORK STATE
LICENSED DENTAL HYGIENISTS

Marital Status	Number	Active		
		Total No.	Employed Full-time yr. round	Inactive
Single	949	834	623	115
Ever married	3,399	1,642	688	1,757
Now married	3,150	1,447	586	1,703
Other status	249	195	102	54

TABLE IX -- PRESENCE OF DEPENDENT CHILDREN

Number of dependent children	Ever Married	Active		
		Total No.	Employed Full-time yr. round	Inactive
None	890	668	399	222
1	727	318	123	409
2	956	359	85	597
3	475	154	32	321
4	169	57	10	112
5 or more	108	24	4	84

TABLE X -- MEMBERSHIP IN AMERICAN DENTAL HYGIENISTS
ASSOCIATION - N.Y. STATE LICENSEES*

<u>Membership Status (as of 1966)</u>	<u>Total No.</u>	<u>Active</u>	<u>Inactive</u>
Member	851	665	186
Not member now, but a member at one time	1,767	879	888
Not member, past membership not reported	84	37	47
Never a member	1,580	873	707
Not reported	74	29	45
Totals	4,356	2,483	1,873

*Excludes junior membership

TABLE XI -- TYPE OF PRACTICE OF EMPLOYING DENTIST
N.Y. STATE ACTIVE LICENSEES

<u>Type of Practice of Employing Dentists</u>	<u>No. of Hygienists</u>
General practitioner	1,155
Specialist	171
Endodontist	3
Oral Surgeon	32
Orthodontist	71
Pedodontist	22
Periodontist	51
Prosthodontist	6
Type not reported	91
Total	1,417

TABLE XII -- GROSS EARNINGS FROM DENTAL HYGIENE
PRACTICE (12 MONTHS PRIOR TO MID-1966 SURVEY) IN
PRIVATE DENTAL OFFICE - NEW YORK STATE

Gross Earnings	No. of Hygienists	By time spent in private dental office				Not Reported
		FULL TIME		PART TIME		
		Less than Year round	Less than Year round	Less than Year round	Less than Year round	
Total No. Reporting	1,147	381	189	264	260	53
Under \$1,000	116	-	10	15	85	6
\$1,000 - \$1,999	158	1	45	44	57	11
\$2,000 - \$2,999	149	1	61	42	40	5
\$3,000 - \$3,999	173	50	44	56	21	2
\$4,000 - \$4,999	222	143	16	45	13	5
\$5,000 - \$5,999	178	103	9	33	21	12
\$6,000 - \$6,999	89	59	2	17	9	2
\$7,000 - \$7,999	25	15	-	5	3	2
\$8,000 - \$8,999	7	6	1	-	-	-
\$9,000 - \$9,999	2	1	-	-	-	-
\$10,000 and over	-	-	-	-	-	-
None*	28	2	1	7	11	7

*Generally reported by hygienists working for their dentist-husbands.

TABLE XIII -- REASONS WHY INACTIVE HYGIENISTS
(N.Y. STATE LICENSEES) WERE NOT PRO-
FESSIONALLY ACTIVE

Reasons	No. of Hygienists
Reasons reported - total*	1,861
Full-time family obligations	1,473
Employment in another occupation	161
Attending school	48
Beyond age to practice	21
Poor health	53
Loss of skill to practice	56
Unable to find suitable position as hygienist	75
Prefers not to work	236
Husband does not want her to work	262
Other reasons specified	32
Not reported	12

*Figures add to more than total number of hygienists since some reported more than one reason.

NUMBER AND DISTRIBUTION OF PUBLIC HEALTH EDUCATORS
IN AREA SERVED BY ALBANY REGIONAL MEDICAL PROGRAM*

One in Albany County
One in charge of Albany Region

Total: 2

*Data obtained through courtesy of New York State Department of Health.

NUMBER AND DISTRIBUTION OF MIDWIVES IN AREA SERVED
BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Information obtained from the Division of Maternal and Child Health, New York State Department of Health, indicates that midwives are licensed only in New York City (New York City Board of Health). Elsewhere in New York State they are not officially recognized and are not legally permitted to practice.

Data from Vermont and Massachusetts not available.

NUMBER AND DISTRIBUTION OF ENVIRONMENTAL ENGINEERS IN AREA
SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of environmental engineers in the area served by the Albany Regional Medical Program were supplied through the courtesy of the American Academy of Environmental Engineers (Environmental Engineering Intersociety Board, Inc., P.O. Box 9728, Washington, D.C. 20016). They reflect diplomate membership in the Academy as of December 31, 1969.

Division	County	Number and Specialty			
		Air Pollution Control	Industrial Hygiene	Radiation and Hazard Control	Sanitary Engineer
Central	Albany	2	-	1	10
Northern	Rensselaer	-	-	-	-
	Saratoga	-	-	-	1
	Warren	-	-	-	1
	Washington	-	-	-	-
Division	Totals	-	-	-	2
Southern	Columbia	-	-	-	-
	Delaware	-	-	-	-
	Dutchess	-	-	-	2
	Greene	-	-	-	-
	Sullivan	-	-	-	1
	Ulster	-	-	-	-
Division	Totals	-	-	-	3
Eastern (Mass.)	Berkshire	-	-	-	1
Western	Fulton	-	-	-	-
	Hamilton	-	-	-	-
	Herkimer	-	-	-	-
	Montgomery	-	-	-	-
	Otsego	-	-	-	-
	Schenectady	-	-	-	-
	Schoharie	-	-	-	-
	Division	Totals	-	-	-
Interface (N.Y.)	Clinton	-	-	-	-
	Essex	-	-	-	-
	Franklin	-	-	-	-
Sub-division	Totals	-	-	-	-
Interface (Vt.)	Bennington	-	-	-	-
	Windham	-	-	-	-
Sub-division	Totals	-	-	-	-
Division	Totals	-	-	-	-
Regional	Totals	2	-	1	16

NUMBER AND DISTRIBUTION OF MASSAGERS IN AREA
SERVED BY ALBANY REGIONAL MEDICAL PROGRAM

Note: Statistics on the number and distribution of massagers in the area served by the Albany Regional Medical Program reflect the number of those licensed by the New York State Education Department as of June, 1969.

Division	County	No. of Massagers
Central	Albany	5
Northern	Rensselaer	4
	Saratoga	11
	Warren	3
	Washington	1
	Division Total	19
Southern	Columbia	0
	Delaware	0
	Dutchess	10
	Greene	1
	Sullivan	40
	Ulster	14
Division Total	65	
Western	Fulton	2
	Hamilton	0
	Herkimer	3
	Montgomery	2
	Otsego	0
	Schenectady	3
	Schoharie	1
	Division Total	11
Interface (N.Y.)	Clinton	0
	Essex	1
	Franklin	0
	Sub-division Total	1
Regional Total (N.Y. counties only)		101

NEW A.M.A. SPECIALTY DISTRIBUTION AND PRACTICE CLASSIFICATION

In early 1971 the American Medical Association will put into effect an entirely new system of specialty distribution and classification of practice. To acquaint the A.R.M.P. with the "new look", a digest of the changes with pertinent comparisons/contrasts has been prepared.

TYPE OF PRACTICE

Heretofore, the A.M.A. classified a physician according to the financial composition of his practice. For example, if a physician generated his income from solo, partnership, or group practice, he was considered to be engaged in private practice. On the other hand, if a substantial portion or all of a physician's income was derived from an institutional source, the physician was considered staff.

Obviously, a system based on the source of income has its shortcomings. Thus, the new classification has been based on function rather than finance. As can be seen in the detailed outline on subsequent pages, physicians will now be classified according to whether or not they treat patients, or whether they are engaged in some other form of professional activity.

SPECIALTY

Heretofore, the A.M.A. has recognized 35 different specialties. The new system will recognize 63 specialties. However, this is not to be a static figure; it will rise slowly as new specialties are recognized.

The new specialties have been arranged to reflect their genesis. For example, the specialty of Geriatrics will now be a "Sub-specialty" of Internal Medicine, because most Geriatricians previously reported Internal Medicine as their primary specialty.

NEW SPECIALTY DISTRIBUTION WITH DEFINITIONS

(asterisk indicates new specialty)

Note: The official abbreviation for each specialty is given in parentheses immediately after the designation.

Specialties preceded by lowercase letters (in alphabetical order) are "sub-specialties" under their respective broad heading.

1. ALLERGY (A)

Diagnosis and treatment of body reactions resulting from unusual sensitivity to foods, pollens, dusts, medicines, or other substances.

- (a) PEDIATRIC ALLERGY (PDA)
A sub-specialty of pediatrics dealing with diagnosis and treatment of allergies in children.
- 2. ANESTHESIOLOGY (AN)
Administration of various forms of anesthesia in operations or diagnosis.
- 3. CARDIOVASCULAR DISEASE (CD)
A sub-specialty of internal medicine involving the diagnosis and treatment of diseases of the heart and blood vessels.
 - (a) PEDIATRIC CARDIOLOGY (PDC)
A sub-specialty of pediatrics concerned with examination and treatment of children with diseases of the heart.
- 4. DERMATOLOGY (D)
Diagnosis and treatment of diseases of the skin.
- 5. GASTROENTEROLOGY (GE)
A sub-specialty of internal medicine concerned with diagnosis and treatment of disorders of the digestive tract.
- 6. GENERAL PRACTICE (GP)
Diagnosis and treatment of disease by both medical and surgical methods, without limitation to organ systems or body regions, and without restriction as to age of patients.
 - (a) AEROSPACE MEDICINE (AM)
That field of preventive medicine dealing with the problems of aviation and space flight.
 - (b) FAMILY PRACTICE (FP)
A specialty providing comprehensive and continuing medical care to a patient and his family regardless of age.
 - (c) GENERAL PREVENTIVE MEDICINE (GPM)
Branch of medicine concerned with the relation of environment to health and with special concern for the health requirements of population groups.
 - (d) PHYSICAL MEDICINE AND REHABILITATION (PM)
Diagnosis of disease or injury in the various systems and areas of the body, and treatment by means of physical procedures as well as treatment and restoration of the convalescent and physically handicapped patient.

- (e) PUBLIC HEALTH (PH)
A special field of preventive medicine embodying the use of medical and administrative methods to prevent disease and improve general health through community efforts such as sanitation and health education.

7. INTERNAL MEDICINE (IM)

Diagnosis and non-surgical treatment of illnesses in adults.

- (a) BRONCHO-ESOPHAGOLOGY (BE)*
A specialty using endoscopy in diagnosis and treatment of the esophagus and tracheobronchial tree.
- (b) DIABETES (DIA)*
Diagnosis and treatment of metabolic disorders resulting from the impairment or loss of the incretory function of the pancreas.
- (c) ENDOCRINOLOGY (END)*
Branch of medicine dealing with disorders of the glands of internal secretion.
- (d) GERIATRICS (GER)*
Branch of medical practice concerned with the clinical treatment of old age and its manifestations.
- (e) HEMATOLOGY (HEM)*
Diagnosis and treatment of diseases of the blood and blood-forming organs.
- (f) INFECTIOUS DISEASES (ID)*
Diagnosis and treatment of diseases (especially contagious ones) caused by parasitic microorganisms.
- (g) NEOPLASTIC DISEASES (ND)*
Branch of medicine dealing with the diagnosis and treatment of new and abnormal growths such as tumors.
- (h) NEPHROLOGY (NEP)*
The practice of internal medicine as it relates to diseases of the urinary system.
- (i) NUTRITION (NTR)
A specialty concerned with food requirements and the effects of nutrients.
- (j) RHEUMATOLOGY (RHU)*
Diagnosis and treatment of rheumatic disorders.

8. NEUROLOGY (N)

Diagnosis and treatment of diseases of the brain, spinal cord, and nerves.

(a) CHILD NEUROLOGY (CHN)*

A field of neurology dealing with the diagnosis and treatment of diseases of the brain, spinal cord, and nerves of children.

9. OBSTETRICS AND GYNECOLOGY (OBG)

Diagnosis and treatment of diseases of the female reproductive organs, and the care of women during pregnancy, childbirth, and the interval immediately following.

(a) GYNECOLOGY (GYN)*

Diagnosis and treatment of diseases of the female reproductive organs.

(b) OBSTETRICS (OBS)*

Care and treatment during pregnancy, childbirth, and postpartum period.

10. OCCUPATIONAL MEDICINE (OM)

A specialty field of preventive medicine concerned with the medical problems and practices relating to occupation and especially to employees in industrial organizations.

11. OPHTHALMOLOGY (OPH)

Diagnosis and treatment of diseases of the eye, including prescribing glasses.

12. OTHER SPECIALTY - UNSPECIFIED (OS/US)

OS = physician designated a specialty other than AMA specialty.
US = physician did not specify a specialty.

13. OTORHINOLARYNGOLOGY (OTO)

Diagnosis and treatment of diseases of the ear, nose, and throat.

(a) LARYNGOLOGY (LAR)*

Diagnosis and treatment of diseases of the larynx.

(b) OTOLOGY (OT)*

Diagnosis and treatment of diseases of the ears.

(c) RHINOLOGY (RHI)*

Diagnosis and treatment of diseases of the nose.

14. PATHOLOGY (PTH)

Study and interpretation of changes in organs, tissues, and cells as well as alterations in body chemistry.

(a) CLINICAL PATHOLOGY (CLP)*

A specialty employing the applications of pathology to clinical medicine, especially with regard to diagnosis of disease by laboratory methods.

- (b) FORENSIC PATHOLOGY (FDP)*
A special field of pathology concerning various aspects of medicine and the law.
- 15. PEDIATRICS (PD)
Prevention, diagnosis, and treatment of children's diseases.
- 16. PSYCHIATRY (P)
Diagnosis and treatment of mental disorders.
 - (a) CHILD PSYCHIATRY (CHP)
A sub-specialty of psychiatry and neurology dealing with nervous and mental disorders of children.
 - (b) HYPNOSIS (HYP)*
Branch of medical science concerned with the employment of techniques designed to bring about an altered state of consciousness and increased suggestibility for psychotherapeutic purposes; the practice of hypnotherapy.
 - (c) PSYCHOANALYSIS (PYA)*
The investigation of unconscious mental processes, particularly by the use of free association and the study of dreams for psychotherapeutic purposes.
 - (d) PSYCHOSOMATIC MEDICINE (PYM)*
A system of medicine aiming at discovering the relationship between emotions and bodily functions.
- 17. PULMONARY DISEASES (PUD)
A sub-specialty of internal medicine concerned with the diagnosis and treatment of diseases of the lung.
- 18. RADIOLOGY (R)
Use of radiant energy including x-rays, radium, cobalt 60, etc., in the diagnosis and treatment of disease.
 - (a) DIAGNOSTIC ROENTGENOLOGY (DR)
Use of x-rays in the diagnosis of disease.
 - (b) NUCLEAR MEDICINE (NM)*
Diagnosis and treatment of disease through the use of radioactive isotopes and associated instrumentation.
 - (c) PEDIATRIC RADIOLOGY (PDR)*
Use of radiant energy in the diagnosis and treatment of children's diseases.
 - (d) THERAPEUTIC RADIOLOGY (TR)
Use of radiant energy, including x-rays, radium, and other radioactive substances in the treatment of disease.

19. GENERAL SURGERY (GS)

Diagnosis and treatment of disease by surgical means, without limitation to special organ systems or body regions.

- (a) ABDOMINAL SURGERY (ABS)*
Diagnosis and treatment of disorders of the abdominal region through surgical methods.
- (b) CARDIOVASCULAR SURGERY (CDS)*
Diagnosis and surgical treatment of diseases of the heart and blood vessels.
- (c) COLON AND RECTAL SURGERY (CRS)
Diagnosis and treatment of disorders of the lower digestive tract.
- (d) HAND SURGERY (HS)*
Surgical treatment of diseases, deformities, and injuries of the hand.
- (e) HEAD AND NECK SURGERY (HNS)*
Surgical treatment of diseases and injuries of the head and neck.
- (f) NEUROLOGICAL SURGERY (NS)
Diagnosis and surgical treatment of brain, spinal cord, and nerve disorders.
- (g) ORTHOPEDIC SURGERY (ORS)
Diagnosis and surgical treatment of diseases, fractures, and deformities of the bones and joints.
- (h) PEDIATRIC SURGERY (PDS)*
Diagnosis and treatment of disease by surgical means, without limitation to special organ systems or body regions of children.
- (i) PLASTIC SURGERY (PS)
Corrective or reparative surgery to restore deformed or mutilated parts of the body.
- (j) THORACIC SURGERY (TS)
Operative treatment of the lungs, heart, or the large blood vessels within the chest cavity.
- (k) TRAUMATIC SURGERY (TRS)*
A specialty dealing with the treatment of wounds and injuries through surgical methods.

(1) UROLOGICAL SURGERY (U)

Diagnosis and treatment of diseases or disorders of the kidneys, bladder, ureters, and urethra, and of the male reproductive organs.

The new A.M.A. classifications of practice or other professional activity, with appropriate comments and the corresponding (if any) old classifications, are shown below.

I. PATIENT CARE

A. Office - Based Practice

Under this classification, a physician may be in one of the following categories:

1. Self-employed
2. Solo practice
3. Partnership
4. Arrangement -- Non-Group
5. Group Practice
6. Medical School
7. City or County Government (other than hospital)
8. State Government (other than hospital)
9. Federal Government (other than hospital)
10. Other Employer (pharmaceutical manufacturer, insurance company, etc.)
11. No classification

Note: Under the old A.M.A. classification, all 11 of the above were placed in one of two categories - (1) full-time general practitioner or specialist, or, (2) part-time general practice with secondary specialties.

B. Hospital - Based Practice

1. Intern
2. Resident
3. Full-time hospital staff
 - a. Non-government hospital
 - b. City or county hospital
 - c. State hospital
 - d. Federal hospital

Note: Under the old A.M.A. classification, interns, residents, and full-time members of a hospital staff were all grouped under "Staff". The latter term has now been abandoned, and these individuals are considered "Patient Care - Hospital Based".

II. OTHER PROFESSIONAL ACTIVITY

- A. Medical Teaching
- B. Administration
- C. Research
- D. Other

Note: Under the old A.M.A. classification, individuals in medical teaching, administration, or research were grouped under the broad heading "Staff".

III. INACTIVE

- A. Retired
- B. Semi-retired
- C. Disabled
- D. Temporarily out of practice
- E. Inactive - other