

# **Ophthalmology Manpower: Utilization of Supplementary Personnel United States-1968**

Statistics are presented on the utilization of supplementary personnel by the clinical practitioner of ophthalmology in the United States in 1968, based on data collected by the National Center for Health Statistics in cooperation with the U.S. Bureau of the Census from ophthalmologists in all 50 States and the District of Columbia. Tabulated and described are indicators of the volume and manner of usage of eight categories of supplementary personnel utilized by ophthalmologists, according to selected demographic and professional characteristics of the users.

PROPERTY OF THE  
PUBLICATIONS BRANCH  
EDITORIAL LIBRARY

DHEW Publication No. (HSM) 73-1804

---

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
Public Health Service

Health Services and Mental Health Administration  
National Center for Health Statistics

Rockville, Md.

May 1973



Vital and Health Statistics-Series 14-No. 9

# NATIONAL CENTER FOR HEALTH STATISTICS

THEODORE D. WOOLSEY, *Director*

EDWARD B. PERRIN, Ph.D., *Deputy Director*

PHILIP S. LAWRENCE, Sc.D., *Associate Director*

OSWALD K. SAGEN, Ph.D., *Assistant Director for Health Statistics Development*

WALT R. SIMMONS, M.A., *Assistant Director for Research and Scientific Development*

JOHN J. HANLON, M.D., *Medical Advisor*

JAMES E. KELLY, D.D.S., *Dental Advisor*

EDWARD E. MINTY, *Executive Officer*

ALICE HAYWOOD, *Information Officer*

## DIVISION OF HEALTH RESOURCES STATISTICS

SIEGFRIED A. HOERMANN, *Director*

PETER L. HURLEY, *Deputy Director*

HENRY S. MOUNT, *Chief, Health Manpower Statistics Branch*

G. GLORIA HOLLIS, *Chief, Health Facilities Statistics Branch*

PETER L. HURLEY, *Acting Chief, Family Planning Statistics Branch*

GRACE K. WHITE, *Chief, Hospital Discharge Survey Branch*

### COOPERATION OF THE BUREAU OF THE CENSUS

Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

**Vital and Health Statistics-Series 14-No. 9**

**DHEW Publication No. (HSM) 73-1804**

*Library of Congress Catalog Card Number 73-600049*

# CONTENTS

	Page
Introduction . . . . .	1
General Characteristics of the Users of Supplementary Personnel . . . . .	2
Number of Supplementary Personnel Utilized . . . . .	3
Supplementary Personnel Utilized—Type and Basis of Utilization . . . . .	5
General . . . . .	5
Utilization of Secretaries, Receptionists, and Other Administrative Personnel . . . . .	6
Utilization of Nursing Personnel (RN's, LPN's, and LVN's) . . . . .	7
Utilization of Ophthalmic Medical Assistants (General and Refractive) . . . . .	8
Utilization of Optical Fitters (Including Opticians) . . . . .	8
Utilization of Optical Technicians (Laboratory, Ophthalmic, or Contact Lens Technicians) . . . . .	9
Utilization of Orthoptists . . . . .	10
Utilization of Other Clinical Assistants . . . . .	10
Utilization of Optometrists (Performing Refractions and Prescribing Lenses on Own Authority) . . . . .	11
Associates Sharing the Services of Supplementary Personnel . . . . .	11
List of Detailed Tables . . . . .	12
Appendix I. Technical Notes . . . . .	35
Data Collection . . . . .	35
Processing of Data . . . . .	36
Adjustments . . . . .	36
The User of Supplementary Personnel—A Subuniverse . . . . .	37
Appendix II. Definitions of Terms . . . . .	39
Demographic Terms . . . . .	39
Terms Relating to Ophthalmology . . . . .	39
Appendix III. Survey Questionnaires . . . . .	41
Doctor of Medicine Questionnaire . . . . .	41
Doctor of Osteopathy Questionnaire . . . . .	45

### SYMBOLS

Data not available-----	---
Category not applicable-----	...
Quantity zero-----	-
Quantity more than 0 but less than 0.05----	0.0
Figure does not meet standards of reliability or precision-----	*
Data suppressed to comply with confidentiality requirements-----	#

# OPHTHALMOLOGY MANPOWER: UTILIZATION OF SUPPLEMENTARY PERSONNEL

Hugo K. Koch, M.H.A., *Division of Health Resources Statistics*

## INTRODUCTION

This report is the third in a series of three reports on ophthalmological manpower in the United States in 1968. It presents data on the utilization of supplementary personnel by the clinical practitioner of ophthalmology. Statistics reported in these pages are chiefly the product of a survey of ophthalmologists, one of three national surveys of manpower in the eye-care occupations conducted by the National Center for Health Statistics between May 1968 and June 1969. Optometrists and opticianry personnel, also surveyed in this national effort, are the subjects of separate reports. (See appendix III for facsimiles of the questionnaires used to survey M.D. and osteopathic ophthalmologists.)

Figures used in the three reports on ophthalmological manpower reflect the application of a statistical adjustment designed to compensate for various types of nonresponse to the survey. (See appendix I for a discussion of the methodological considerations that entered into this adjustment.)

The adjustment yielded a figure of 8,616 for ophthalmologists active in their profession at the time of the 1968 survey. About 97 percent of this total (8,327 ophthalmologists) were "clinically" active in the sense that they devoted at least some part of their weekly professional

effort to the direct diagnosis and treatment of eye patients. Of the 8,327 clinical ophthalmologists, about 95 percent (7,882 practitioners) reported that they utilized the services of supplementary personnel in one or more of the eight categories listed in the next paragraph. It is these 7,882 users of supplementary personnel that are the chief subjects of the tabular data and textual commentary presented in this report.

For reporting purposes, supplementary personnel utilized by the clinical practitioner are grouped into eight categories as follows:

1. Secretaries, receptionists, and other administrative personnel
2. Nursing personnel (registered nurses (RN's), licensed practical nurses (LPN's), and licensed vocational nurses (LVN's))
3. Ophthalmic medical assistants (general and refractive)
4. Optical fitters (including opticians)
5. Optical technicians (laboratory, ophthalmic, or contact lens technicians)
6. Orthoptists
7. Other clinical assistants

8. Optometrists (performing refractions and prescribing lenses on own authority)

Survey respondents were requested to specify the basis on which they utilized personnel in any given category. The following four bases of utilization were possible.

1. Full-time utilization (35 hours or more per week); services of supplementary personnel not shared with associates
2. Full-time utilization; services shared with associates
3. Part-time utilization (fewer than 35 hours per week); services of supplementary personnel not shared with associates
4. Part-time utilization; services shared with associates

Therefore, when the designation "user of supplementary personnel" appears in the text and tables that follow, it refers to a clinically active ophthalmologist who utilized the services of one or more of the eight types of supplementary personnel in one or more of the four possible conditions of utilization.

The text is accompanied by 21 detailed tables. Methodology employed in the collection and processing of the survey data, definitions of terms, and facsimiles of the survey questionnaires are given in appendixes I, II, and III, respectively.

**GENERAL CHARACTERISTICS OF THE USERS OF SUPPLEMENTARY PERSONNEL**

A total of 7,882 clinically active ophthalmologists reported that they used the services of supplementary personnel. About 97 percent of the users were male. The median age of users was 50.3 years, roughly 1 year less than the median age of 51.4 years reported for the entire universe of active ophthalmologists.

Geographically, users were distributed as follows:

Geographic division	Percent of total users
Total	100.0
New England	6.3
Middle Atlantic	20.8
East North Central	17.7
West North Central	7.2
South Atlantic	13.8
East South Central	4.5
West South Central	8.4
Mountain	4.9
Pacific	16.4

Users were divided among six principal forms of employment:

Principal form of practice or employment	Percent of total users
Total	100.0
Self-employed:	
Solo practice	67.5
Partnership	17.5
Group practice	6.0
Nongroup arrangement with other physicians	4.4
Salaried:	
Hospital	1.6
Nonhospital	3.0

Certain professional characteristics of the user are brought into sharper focus when they are directly contrasted with corresponding characteristics of the 445 clinically active ophthalmologists who reported that they did not utilize supplementary personnel.

For example, the typical user reported about 104 visits by eye patients per week, more than twice the number (46 visits) reported by the typical non-user. The typical user saw roughly 90 patients in the course of a week, again more than twice the number (37 patients) reported by the typical non-user.

Table A contrasts the volume of clinical activity of the user and the non-user by the extent to which each renders nine selected patient services. The reader may note the direct relationship between use of supplementary personnel and the

Table A. Percent of users and non-users of supplementary personnel, by selected patient services: United States, 1968

Patient service	Percent of users	Percent of non-users
Diagnostic examination (includes tonometry) . . . . .	99.5	97.8
Medical treatment . . . . .	98.1	95.5
Eye surgery . . . . .	90.5	60.5
Visual field examination and medical interpretation . . . . .	94.5	78.9
Fitting contact lenses . . . . .	60.1	22.5
Orthoptic training . . . . .	33.5	15.0
Prescribing low vision aids . . . . .	56.3	30.0
Aniseikonic testing . . . . .	9.6	6.5
Tonography . . . . .	50.1	44.5

tendency to render any given patient service. For several of the services (e.g., “fitting contact lenses” and “orthoptic training”) the reliance on supplementary personnel is especially evident.

Judging by number of services rendered, without regard for the time or degree of sophistication involved in the performance of each service, about 82 percent of all users reported rendering five patient services or more as opposed to about 51 percent of all non-users.

### NUMBER OF SUPPLEMENTARY PERSONNEL UTILIZED

The typical ophthalmologist who used supplementary personnel in the United States in 1968 reported utilizing the services of 2.2 persons (a median figure). Variations from this median can perhaps be more meaningfully analyzed if fractions are discarded and, in their place, user experience is reported by two categories:

**User Category I**—ophthalmologists who reported utilizing fewer than three supplementary personnel.

**User Category II**—ophthalmologists who reported utilizing three supplementary personnel or more.

Figure 1 shows the result of applying this categorization to the reporting of user experience by the region in which the using ophthal-

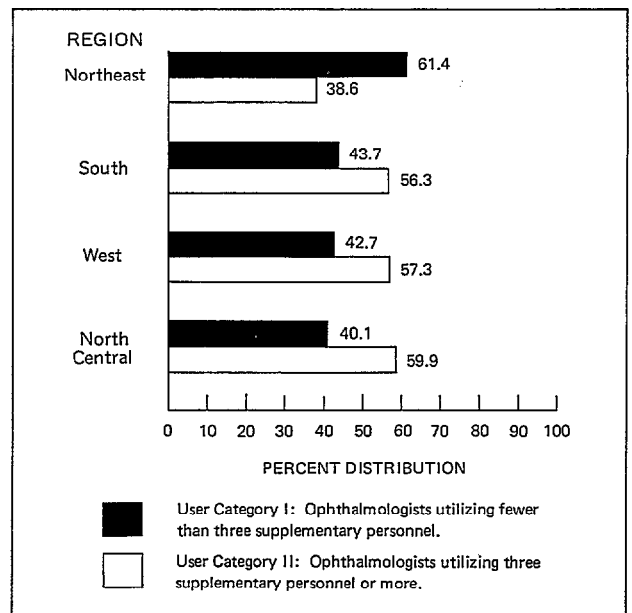


Figure 1. Percent distribution of users of supplementary personnel in User Categories I and II, by region of practice: United States, 1968.

mologist practiced. As may be seen, the majority of users practicing in the Northeast Region fell in User Category I. The tendency to utilize fewer than three personnel was not shared by users in the South, West, and North Central Regions, where—in roughly equivalent proportions for all three regions—the majority of respondents tended to utilize three supplementary assistants or more.

In figure 2, use of supplementary personnel is graphically related to the age of the user. The tendency to utilize three or more personnel, reported by a majority of respondents in the three younger age intervals and strongest among users aged 35-54 years, is seen to decline among users aged 55 years and over until, among respondents aged 64 years and over, a significant majority (65.8 percent) reported utilizing fewer than three supplementary helpers.

Figures 3 and 4 reveal the relationship between number of personnel utilized and two indicators of the volume of the user’s clinical activity, namely, number of patient visits and number of patient services rendered. From both figures, the reader will conclude that the tendency to utilize larger numbers of personnel



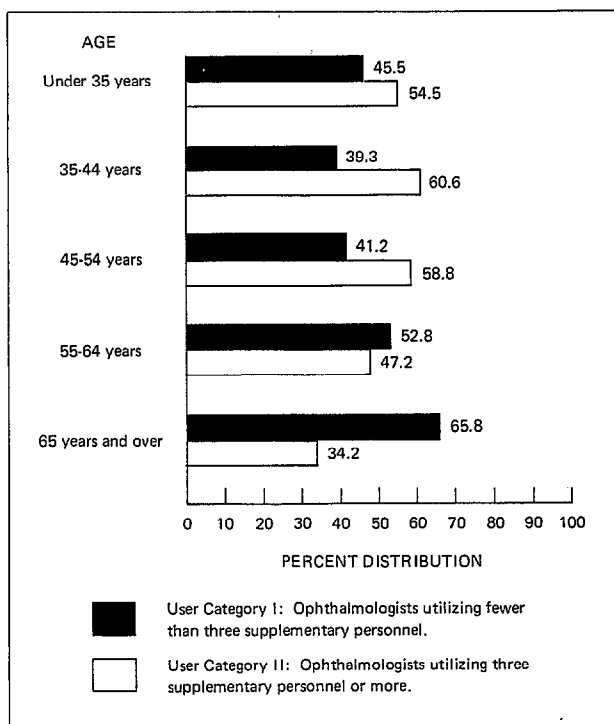


Figure 2. Percent distribution of users of supplementary personnel in User Categories I and II, by age of user: United States, 1968.

varied in direct proportion to increased clinical activity by the practitioner. As patient visits and services increased in number, so did the proportion of users who reported utilizing more than two supplementary helpers.

Table B reports utilization of supplementary personnel according to the principal type of employment engaged in by the using practitioner. The largest single number of using practitioners (5,321) reported that they were self-employed in solo practice. A clear majority of this group (62.7 percent) reported utilizing the services of fewer than three supplementary personnel. However, in every other type of employment, self-employed or salaried, ophthalmologists utilizing three personnel or more were in the majority. The most prominent of the groups utilizing three personnel or more were ophthalmologists who were self-employed in partnerships and those who were self-employed in group practice.

Table C shows the relationship between use of supplementary helpers and the nature of the patient service provided by the user. The nine patient services considered are the same as those shown in table A and figure 4. The first four of these services were, by a substantial margin, the most frequently performed. They are the professional services which one traditionally associates with the clinical role of the ophthalmologist, services which, in most cases, can only be legally performed by the medical practitioner. For purposes of reporting, these have been called "expected" services. The other five services can be performed by other vision-care professionals. For purposes of reporting, they have been called "additional" services. A direct relationship is evident between the provision of the additional services and the tendency to make increased use of supplementary personnel.

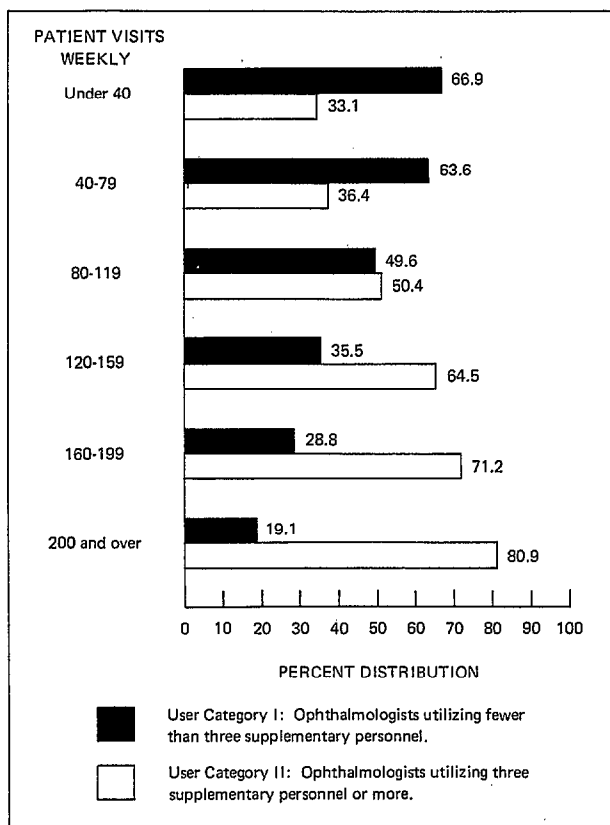


Figure 3. Percent distribution of users of supplementary personnel in User Categories I and II, by number of patient visits weekly: United States, 1968.

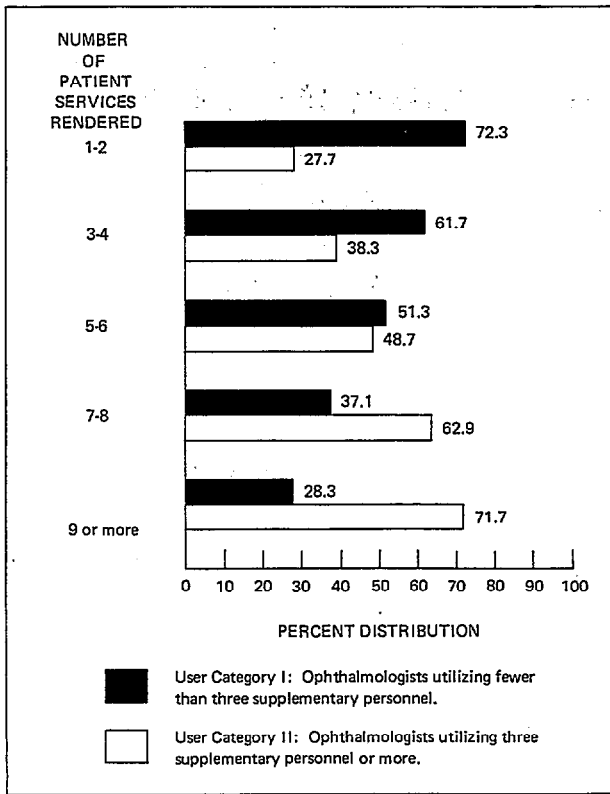


Figure 4. Percent distribution of supplementary personnel in User Categories I and II, by number of services rendered: United States, 1968.

Table B. Number of users of supplementary personnel and percent utilizing fewer than three personnel and percent utilizing three personnel or more, by user's principal type of employment: United States, 1968

User's principal type of employment	Number of users	Percent utilizing fewer than 3 personnel	Percent utilizing 3 personnel or more
<b>Self-employed:</b>			
Solo practice	5,321	62.7	37.3
Partnership	1,376	11.2	88.8
Group practice	477	12.2	87.8
Nongroup arrangement with other physicians	344	22.7	77.3
<b>Salaried:</b>			
Hospital <sup>1</sup>	130	42.2	57.8
Nonhospital <sup>2</sup>	235	23.4	76.7

<sup>1</sup> Includes nongovernment hospitals and city, county, State, and Federal government hospitals.

<sup>2</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, voluntary organizations, medical societies, associations, and so forth).

Table C. Number of users rendering patient services and percent utilizing fewer than three personnel and percent utilizing three personnel or more, by type of patient service rendered: United States, 1968

Type of patient service rendered	Number of users rendering patient service	Percent utilizing fewer than 3 personnel	Percent utilizing 3 personnel or more
<b>Expected services:</b>			
Diagnostic examination (includes tonometry)	7,847	47.4	52.6
Medical treatment	7,729	47.0	53.0
Eye surgery	7,130	44.7	55.3
Visual field examination and medical interpretation	7,451	46.7	53.3
<b>Additional services:</b>			
Fitting contact lenses	4,733	40.2	59.8
Orthoptic training	2,643	38.2	61.8
Prescribing low vision aids	4,438	42.7	57.3
Aniseikonic testing	757	38.8	61.2
Tonography	3,950	40.3	59.7

## SUPPLEMENTARY PERSONNEL UTILIZED—TYPE AND BASIS OF UTILIZATION

### General

An examination of the total utilization of supplementary personnel revealed that about

49 percent of all reports of utilization were for secretaries, receptionists, and other administrative personnel.

16 percent were for nursing personnel (RN's, LPN's, and LVN's).

12 percent were for ophthalmic medical assistants (general and refractive).

9 percent were for optical fitters (including opticians).

7 percent were for optical technicians (laboratory, ophthalmic, or contact lens technicians).

3 percent were for orthoptists.

2 percent were for other clinical assistants.

1 percent were for optometrists (performing refractions and prescribing lenses on their own authority).

An overall analysis of the basis on which supplementary personnel were utilized showed that, in order of preference, about

47 percent of all reports of utilization were for full-time, unshared personnel.

34 percent were for full-time, shared personnel.

12 percent were for part-time, unshared personnel.

7 percent were for part-time, shared personnel.

Full-time utilization was clearly preferred to part-time. About 80 percent of all reports of utilization specified the former, about 20 percent the latter.

Unshared utilization of supplementary personnel was preferred to sharing personnel with associates. About 59 percent of all reports of utilization specified the former, about 41 percent the latter.

Figure 5 shows the percentage of utilization of each type of supplementary personnel on a full-time, unshared basis.

Figure 6 offers similar information on the utilization of supplementary personnel on a full-time, shared basis; figure 7 on a part-time, unshared basis; and figure 8 on a part-time, shared basis.

### Utilization of Secretaries, Receptionists, and Other Administrative Personnel

There were 9,389 reports of utilization of secretaries, receptionists, and other administrative personnel (tables 3, 4, and 12). Full-time, unshared utilization was the most popular way of utilizing this type of personnel; the least popular was part-time, shared. In order of preference about

52 percent of the reports of utilization of secretaries, receptionists, and other administrative personnel specified utilization on a full-time, unshared basis.

26 percent specified utilization on a full-time, shared basis.

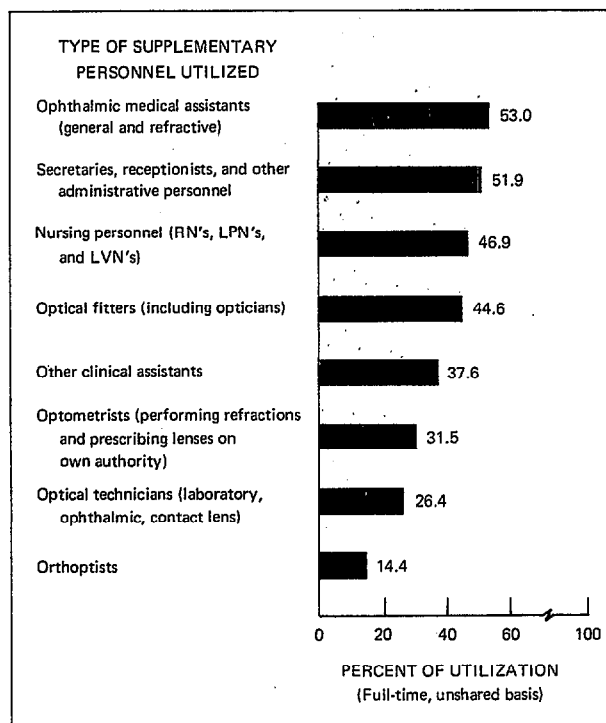


Figure 5. Percent of reports of utilization for each type of supplementary personnel specifying full-time, unshared utilization: United States, 1968.

15 percent specified utilization on a part-time, unshared basis.

7 percent specified utilization on a part-time, shared basis.

Shared utilization was generally less common for secretaries, receptionists, and other administrative personnel than it was for the other categories of supplementary personnel.

In terms of number utilized, a clear majority (73.4 percent) of the 4,873 full-time, unshared reports of utilization specified utilization of only one such helper.

In terms of age of the ophthalmologists who reported utilization of secretaries, receptionists, and other administrative personnel, the median age of those who utilized such helpers on a full-time, unshared basis was about 52 years, which was appreciably higher than the median age (45 years) of those who utilized this type of personnel on a full-time, shared basis. The tendency for sharers to be appreciably younger than non-

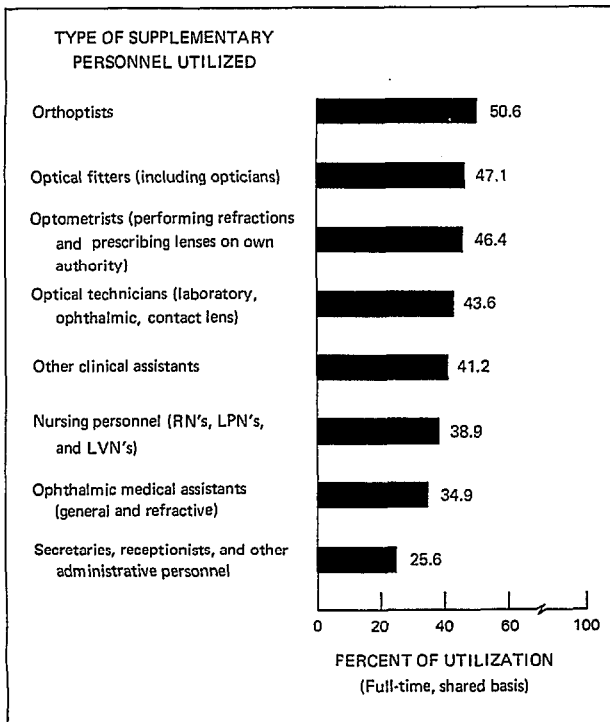


Figure 6. Percent of reports of utilization of each type of supplementary personnel specifying full-time, shared utilization: United States, 1968.

sharers appeared general for all types of supplementary personnel considered.

An analysis of the forms of employment reported by users of secretaries, receptionists, and other administrative personnel revealed that about 88 percent of ophthalmologists who used such helpers on a full-time, unshared basis were self-employed in solo practice. Of the ophthalmologists who reported using such personnel on a full-time, shared basis, the largest single group (about 49 percent of the total) was self-employed and practicing in partnerships.

### Utilization of Nursing Personnel (RN's, LPN's, and LVN's)

There were 3,101 reports of utilization of nursing personnel (RN's, LPN's, and LVN's) (tables 3, 5, and 13). Full-time, unshared utilization was the most popular way of utilizing this type of personnel; the least popular was part-time, shared. In order of preference about

47 percent of the reports of the utilization of nursing personnel specified utilization on a full-time, unshared basis.

39 percent specified utilization on a full-time, shared basis (a relatively higher proportion than the one noted for administrative personnel).

8 percent specified utilization on a part-time, unshared basis.

6 percent specified utilization on a part-time, shared basis.

In terms of the number utilized, a clear majority (about 87 percent) of the full-time, unshared reports of utilization specified utilization of only one such helper.

It is perhaps noteworthy that the shared utilization of nursing personnel was most common among ophthalmologists in the North Central Region.

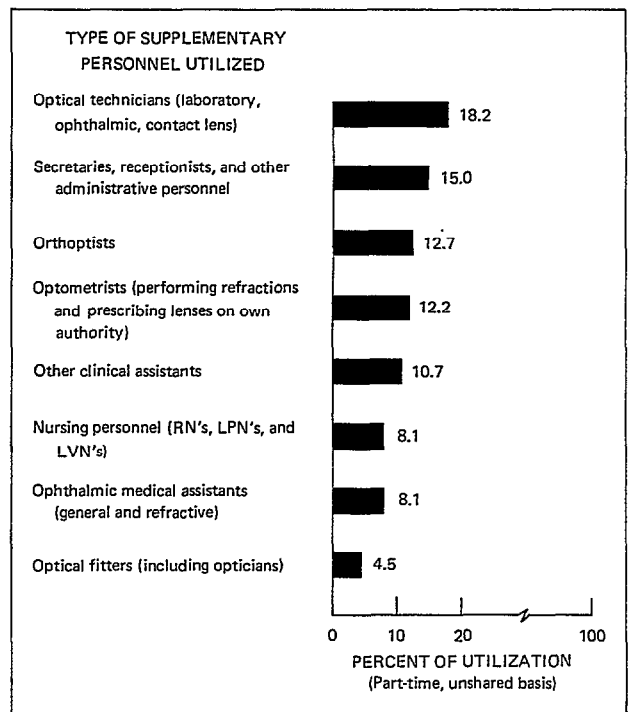


Figure 7. Percent of reports for utilization of each type of supplementary personnel specifying part-time, unshared utilization: United States, 1968.

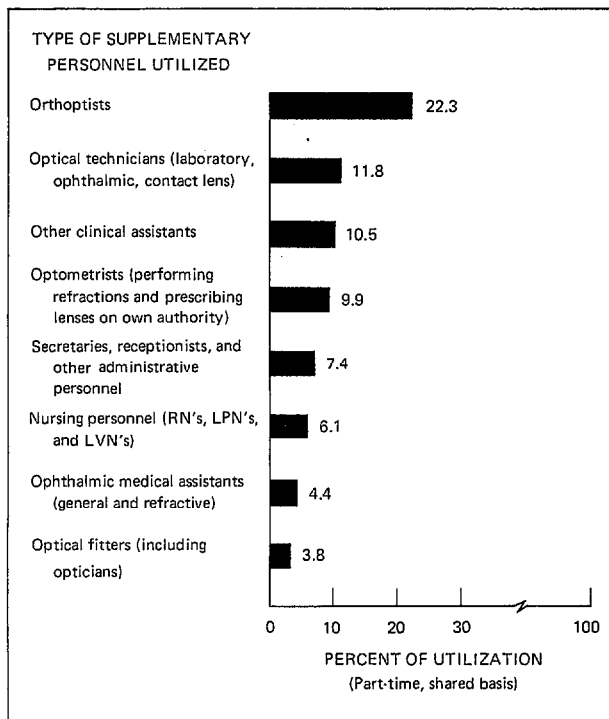


Figure 8. Percent of reports of utilization of each type of supplementary personnel specifying part-time, shared utilization: United States, 1968.

In terms of the age of ophthalmologists utilizing nursing personnel, there was a tendency—already observed in the utilization of secretaries, receptionists, and other administrative personnel—for sharers to be appreciably younger than nonsharers. For example, the median age was about 54 years for users of full-time, unshared nursing personnel and about 46 years for users of full-time, shared nursing personnel.

The majority of ophthalmologists who utilized nursing personnel on a full-time, unshared basis (about 74 percent) was self-employed in solo practice. Of those who utilized nursing personnel on a full-time, shared basis, the largest single group (about 49 percent of the total) was self-employed and practicing in partnerships.

### Utilization of Ophthalmic Medical Assistants (General and Refractive)

There were 2,268 reports of utilization of ophthalmic medical assistants (general and refractive) (tables 3, 6, and 14). Full-time, un-

shared utilization was the most popular way of utilizing this type of personnel; the least popular was part-time, shared. In order of preference about

53 percent of the reports of utilization of ophthalmic medical assistants specified utilization on a full-time, unshared basis.

35 percent specified utilization on a full-time, shared basis.

8 percent specified utilization on a part-time, unshared basis.

4 percent specified utilization on a part-time, shared basis.

Geographically, the percents of all reports of utilization of ophthalmic medical assistants were as follows:

Region	Percent
South	31.6
North Central	26.1
West	24.9
Northeast	17.5

In terms of the number utilized, the largest single group (about 43 percent) of the full-time, unshared reports of utilization specified the utilization of only one such helper.

Judging from reports of utilization, ophthalmologists who shared the services of ophthalmic medical assistants with associates tended to be younger (median age was about 44 years) than those who utilized unshared personnel (median age was 49 years).

The majority of ophthalmologists who utilized ophthalmic medical assistants on a full-time, unshared basis (about 78 percent) was self-employed in solo practice. Of those who utilized ophthalmic medical assistants on a full-time, shared basis, the largest single group (about 54 percent of the total) was self-employed and practicing in partnerships.

### Utilization of Optical Fitters (Including Opticians)

There were 1,794 reports of utilization of optical fitters (including opticians) (tables 3, 7,

and 15). Full-time, shared utilization was the most popular way of utilizing this type of personnel; the least popular was part-time, shared. In order of preference about

- 47 percent of reports of utilization of optical fitters specified utilization on a full-time, shared basis.
- 45 percent specified utilization on a full-time, unshared basis.
- 4½ percent specified utilization on a part-time, unshared basis.
- 4 percent specified utilization on a part-time, shared basis.

Geographically, the percents of all reports of utilization of optical fitters were as follows:

<i>Region</i>	<i>Percent</i>
North Central .....	31.6
South .....	30.2
West .....	26.5
Northeast .....	11.6

In terms of the number of optical fitters utilized by the typical respondent, the largest single group (about 49 percent) of the full-time, shared reports of utilization specified shared utilization of only one such helper.

As with the users of the other types of supplementary personnel discussed above, sharers of optical fitters tended to be younger than users of unshared personnel (table 15).

The majority of ophthalmologists who utilized optical fitters on a full-time, shared basis (about 52 percent of the total) was self-employed and practicing in partnerships.

### Utilization of Optical Technicians (Laboratory, Ophthalmic, or Contact Lens Technicians)

There were 1,263 reports of utilization of optical technicians (laboratory, ophthalmic, or contact lens technicians) (tables 3, 8, and 16). As noted for optical fitters, full-time, shared utilization was the most popular manner of uti-

lizing these types of optical technicians, and part-time, shared was the least popular. In order of preference about

- 44 percent of reports of utilization of optical technicians specified utilization on a full-time, shared basis.
- 26 percent specified utilization on a full-time, unshared basis.
- 18 percent specified utilization on a part-time, unshared basis—a more extensive part-time, unshared utilization than that reported for any other type of supplementary personnel.
- 12 percent specified utilization on a part-time, shared basis; this represented a more extensive part-time, shared utilization than that reported for any other type of supplementary personnel except orthoptists.

The tendency toward part-time utilization (shared and unshared) was more pronounced for these types of optical technicians than it was for any other type of supplementary personnel.

Geographically, the percents of all reports of utilization of optical technicians were as follows:

<i>Region</i>	<i>Percent</i>
North Central .....	30.8
South .....	27.3
West .....	25.5
Northeast .....	16.6

In terms of the number of optical technicians utilized by the typical user-respondent, the largest single group (about 68 percent of the full-time, shared reports of utilization) specified shared utilization of only one such helper.

As with users of all other types of supplementary personnel, ophthalmologists who shared optical technicians with their associates tended to be younger than those who did not (table 16).

About 51 percent of the total ophthalmologists who utilized optical technicians on a full-time, shared basis were self-employed and practicing in partnerships.

## Utilization of Orthoptists

There were 646 reports of utilization of orthoptists (tables 3, 9, and 17). Shared utilization (both full-time and part-time) was the most popular way of utilizing this type of personnel; unshared utilization (full-time and part-time) was markedly less common. In order of preference about

- 51 percent of reports of utilization of orthoptists specified utilization on a full-time, shared basis—a more extensive full-time, shared utilization than that reported for any other type of supplementary personnel.
- 22 percent specified utilization on a part-time, shared basis—again, a more extensive part-time, shared utilization than that reported for any other type of supplementary personnel.
- 14 percent specified utilization on a full-time, unshared basis.
- 13 percent specified utilization on a part-time, unshared basis.

Geographically, the percents of all reports of utilization of orthoptists were as follows:

<i>Region</i>	<i>Percent</i>
North Central	29.7
South	29.4
West	22.1
Northeast	18.9

In terms of the number of orthoptists utilized by the typical user, the largest single group (about 83 percent of the full-time, shared reports of utilization) specified shared utilization of only one such helper.

Showing a tendency common to users of all types of supplementary personnel, ophthalmologists who shared orthoptists with associates tended to be younger than users of unshared personnel (table 17).

The largest single group of ophthalmologists who utilized orthoptists on a full-time, shared basis (about 32 percent of the total) was self-employed and practicing in partnerships.

## Utilization of Other Clinical Assistants

There were 439 reports of utilization of other clinical assistants (tables 3, 10, and 18). Full-time, shared utilization was the most popular way of utilizing this type of personnel. Part-time, unshared and part-time, shared utilization were reported with nearly equal frequency and were the least popular methods of utilization. In order of preference about

- 41 percent of the reports of utilization of other clinical assistants specified utilization on a full-time, shared basis.
- 38 percent specified utilization on a full-time, unshared basis.
- 11 percent specified utilization on a part-time, unshared basis.
- 10 percent specified utilization on a part-time, shared basis.

Geographically, the percents of all reports of utilization of other clinical assistants were as follows:

<i>Region</i>	<i>Percent</i>
South	37.8
North Central	24.6
West	19.8
Northeast	17.5

In terms of the numbers of other clinical assistants utilized on a full-time, shared basis, about 55 percent of the reports of utilization specified one such shared helper; about 17 percent specified two; about 6 percent specified three; and a relatively high proportion (about 22 percent) specified the utilization of four or more.

The largest single group of ophthalmologists who utilized other clinical assistants on a full-time, shared basis (about 36 percent of the total) was self-employed and practicing in partnerships. It is noteworthy that the second largest group (about 28 percent of all reports of the utilization of other clinical assistants) was ophthalmologists engaged in group practice.

**Utilization of Optometrists  
(Performing Refractions and Prescribing Lenses  
on Own Authority)**

There were 222 reports of utilization of optometrists (performing refractions and prescribing lenses on own authority) (tables 3, 11, and 19). Full-time, shared utilization was the most popular manner of utilizing this type of personnel; the least popular method was part-time, shared. In order of preference about

- 46 percent of reports of utilization of optometrists specified utilization on a full-time, shared basis.
- 32 percent specified utilization on a full-time, unshared basis.
- 12 percent specified utilization on a part-time, unshared basis.
- 10 percent specified utilization on a part-time, shared basis.

Geographically, the percents of all reports of utilization of optometrists were as follows:

<i>Region</i>	<i>Percent</i>
North Central .....	37.4
West .....	33.3
Northeast .....	22.1
South .....	7.2

In terms of the numbers of optometrists utilized on a full-time, shared basis, a clear majority

of about 81 percent of the reports of utilization specified only one such helper.

Of ophthalmologists who utilized optometrists on a full-time, shared basis, the largest single group of reports of utilization (about 49 percent of the total) was from ophthalmologists who were self-employed and engaged in group practice.

**ASSOCIATES SHARING THE SERVICES OF  
SUPPLEMENTARY PERSONNEL**

About 35 percent, or 2,749, of all users of supplementary personnel reported that they shared the services of these personnel with associates (tables 20 and 21). In professional character, the associates were almost all physicians and, in most instances, these physicians were other ophthalmologists.

The number of associates most frequently reported was two. There were no pronounced regional variations from this preference.

Age medians for ophthalmologists who shared personnel varied from about 50 years for ophthalmologists who shared personnel with only one associate to about 46 years for ophthalmologists who shared personnel with two associates or more.

Among sharing ophthalmologists, the largest single group (about 54 percent of the total) was composed of two associates engaged in partnership practice. Group practice was the preferred form only when the number of sharing associates was five or more.



## LIST OF DETAILED TABLES

		Page
Table 1.	Number and percent distribution of clinical practitioners of ophthalmology who utilize one or more types of supplementary personnel by number of supplementary personnel utilized, according to area of practice: United States, 1968 . . . . .	14
2.	Number and percent distribution of clinical practitioners of ophthalmology who utilize one or more types of supplementary personnel by number of supplementary personnel utilized, according to selected characteristics of the user: United States, 1968 . . . . .	15
3.	Number of clinical practitioners of ophthalmology who utilize supplementary personnel and number of supplementary personnel utilized, by type of supplementary personnel and basis of utilization: United States, 1968 . . . . .	16
4.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize secretaries, receptionists, and other administrative personnel, by geographic location: United States, 1968 . . . . .	17
5.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize nursing personnel (RN's, LPN's, and LVN's), by geographic location: United States, 1968 . . . . .	18
6.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize ophthalmic medical assistants (general and refractive), by geographic location: United States, 1968 . . . . .	19
7.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical fitters (including opticians), by geographic location: United States, 1968 . . . . .	20
8.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical technicians (laboratory, ophthalmic, or contact lens technicians), by geographic location: United States, 1968 . . . . .	21
9.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize orthoptists, by geographic location: United States, 1968 . . . . .	22
10.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize other clinical assistants, by geographic location: United States, 1968 . . . . .	23
11.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optometrists (performing refractions and prescribing lenses on own authority), by geographic location: United States, 1968 . . . . .	24
12.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize secretaries, receptionists, and other administrative personnel, by selected characteristics of the user: United States, 1968 . . . . .	25
13.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize nursing personnel (RN's, LPN's, and LVN's), by selected characteristics of the user: United States, 1968 . . . . .	26
14.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize ophthalmic medical assistants (general and refractive), by selected characteristics of the user: United States, 1968 . . . . .	27
15.	Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical fitters (including opticians), by selected characteristics of the user: United States, 1968 . . . . .	28

LIST OF DETAILED TABLES—Con.

	Page
Table 16. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical technicians (laboratory, ophthalmic, or contact lens technicians), by selected characteristics of the user: United States, 1968 . . . . .	29
17. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize orthoptists, by selected characteristics of the user: United States, 1968 . . . . .	30
18. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize other clinical assistants, by selected characteristics of the user: United States, 1968 . . . . .	31
19. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optometrists (performing refractions and prescribing lenses on own authority), by selected characteristics of the user: United States, 1968 . . . . .	32
20. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, number of practitioners who share the services of supplementary personnel with associates, and number of associates with whom supplementary personnel are shared, by geographic location: United States, 1968 . . . . .	33
21. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, number of practitioners who share the services of supplementary personnel with associates, and number of associates with whom supplementary personnel are shared, by selected characteristics of the practitioner: United States, 1968 . . . . .	34

Table 1. Number and percent distribution of clinical practitioners of ophthalmology who utilize one or more types of supplementary personnel by number of supplementary personnel utilized, according to area of practice: United States, 1968

Area	Number of clinical practitioners of ophthalmology	Total, practitioners utilizing supplementary personnel	Number of supplementary personnel utilized				Total, practitioners utilizing supplementary personnel	Number of supplementary personnel utilized			
			1 person	2 persons	3 persons	4 persons or more		1 person	2 persons	3 persons	4 persons or more
United States . . . . .	8,327	7,882	1,763	1,971	1,228	2,920	100.0	22.4	25.0	15.6	37.0
Alabama . . . . .	84	83	11	23	17	32	100.0	13.3	28.0	20.0	38.7
Alaska . . . . .	5	5	#	#	-	3	100.0	#	#	-	60.0
Arizona . . . . .	78	76	20	17	10	30	100.0	26.4	22.2	12.5	38.9
Arkansas . . . . .	41	41	3	9	7	21	100.0	7.9	21.1	18.4	52.6
California . . . . .	1,043	998	174	235	180	408	100.0	17.5	23.6	18.0	40.9
Colorado . . . . .	118	114	23	32	17	43	100.0	20.2	27.5	14.7	37.6
Connecticut . . . . .	150	144	50	41	18	34	100.0	34.9	28.6	12.7	23.8
Delaware . . . . .	17	17	3	5	5	5	100.0	20.0	26.7	26.7	26.7
District of Columbia . . . . .	75	71	10	19	14	29	100.0	14.0	26.3	19.3	40.4
Florida . . . . .	292	281	55	59	46	121	100.0	19.7	20.9	16.5	43.0
Georgia . . . . .	138	134	24	32	24	53	100.0	18.2	24.0	18.2	39.7
Hawaii . . . . .	30	29	9	4	4	11	100.0	30.8	15.4	15.4	38.5
Idaho . . . . .	34	33	8	10	3	12	100.0	23.3	30.0	10.0	36.7
Illinois . . . . .	415	386	70	102	63	151	100.0	18.2	26.5	16.4	39.0
Indiana . . . . .	170	162	26	44	31	61	100.0	16.3	27.0	19.1	37.6
Iowa . . . . .	99	95	11	19	17	49	100.0	11.3	20.0	17.5	51.3
Kansas . . . . .	72	69	8	22	14	26	100.0	10.9	31.3	20.3	37.5
Kentucky . . . . .	90	87	18	19	15	35	100.0	20.7	22.0	17.1	40.2
Louisiana . . . . .	149	144	15	35	26	68	100.0	10.6	24.4	17.9	47.2
Maine . . . . .	39	37	15	11	4	7	100.0	40.0	28.6	11.4	20.0
Maryland . . . . .	155	146	40	53	18	35	100.0	27.3	36.4	12.4	24.0
Massachusetts . . . . .	269	250	70	82	19	79	100.0	27.9	32.9	7.8	31.5
Michigan . . . . .	333	319	55	54	48	162	100.0	17.2	16.8	15.1	50.9
Minnesota . . . . .	147	144	22	25	18	79	100.0	15.0	17.3	12.8	54.9
Mississippi . . . . .	59	58	6	11	14	27	100.0	11.1	18.5	24.1	46.3
Missouri . . . . .	176	169	28	38	36	67	100.0	16.4	22.6	21.4	39.6
Montana . . . . .	39	38	8	7	9	13	100.0	22.2	19.4	25.0	33.3
Nebraska . . . . .	54	54	8	11	10	25	100.0	15.6	20.0	17.8	46.7
Nevada . . . . .	16	16	#	#	4	7	100.0	#	#	26.7	46.7
New Hampshire . . . . .	27	26	7	6	5	7	100.0	28.0	24.0	20.0	28.0
New Jersey . . . . .	299	255	102	62	31	60	100.0	40.0	24.3	12.2	23.5
New Mexico . . . . .	44	44	12	11	9	11	100.0	28.2	25.6	20.5	25.6
New York . . . . .	980	893	326	242	111	214	100.0	36.5	27.1	12.4	24.0
North Carolina . . . . .	167	161	28	46	20	67	100.0	17.1	28.8	12.3	41.8
North Dakota . . . . .	20	20	#	4	#	14	100.0	#	21.1	#	68.4
Ohio . . . . .	382	366	93	89	58	126	100.0	25.3	24.4	15.8	34.5
Oklahoma . . . . .	95	91	21	24	18	29	100.0	22.9	26.5	19.3	31.3
Oregon . . . . .	108	107	18	27	19	42	100.0	17.2	25.3	18.2	39.4
Pennsylvania . . . . .	548	492	143	127	78	144	100.0	29.1	25.7	15.8	29.3
Rhode Island . . . . .	32	25	11	7	#	#	100.0	41.7	29.2	#	#
South Carolina . . . . .	70	68	17	10	6	35	100.0	25.0	15.0	8.3	51.7
South Dakota . . . . .	22	21	3	7	4	6	100.0	15.0	35.0	20.0	30.0
Tennessee . . . . .	127	123	22	26	18	57	100.0	17.9	21.4	14.3	46.4
Texas . . . . .	396	385	44	105	73	164	100.0	11.3	27.3	18.9	42.4
Utah . . . . .	47	46	9	11	10	15	100.0	20.5	25.0	22.7	31.8
Vermont . . . . .	18	15	7	4	#	#	100.0	46.7	26.7	#	#
Virginia . . . . .	160	152	38	55	17	41	100.0	25.0	36.4	11.4	27.3
Washington . . . . .	155	154	26	38	20	70	100.0	17.0	24.8	12.8	45.4
West Virginia . . . . .	61	60	13	18	7	22	100.0	22.2	29.6	11.1	37.0
Wisconsin . . . . .	168	162	24	25	25	88	100.0	14.7	15.4	15.4	54.5
Wyoming . . . . .	16	16	4	#	#	7	100.0	26.7	#	#	46.7

# Data suppressed to comply with confidentiality requirements.

Table 2. Number and percent distribution of clinical practitioners of ophthalmology who utilize one or more types of supplementary personnel by number of supplementary personnel utilized, according to selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Total, practitioners utilizing supplementary personnel	Number of supplementary personnel utilized				Total, practitioners utilizing supplementary personnel	Number of supplementary personnel utilized			
			1 person	2 persons	3 persons	4 persons or more		1 person	2 persons	3 persons	4 persons or more
	Number of clinical practitioners						Percent distribution				
All practitioners	8,327	7,882	1,763	1,971	1,228	2,920	100.0	22.4	25.0	15.6	37.0
Age:											
Under 35 years	781	746	184	156	105	302	100.0	24.6	20.9	14.1	40.4
35-44 years	2,222	2,193	343	519	349	981	100.0	15.6	23.7	15.9	44.7
45-54 years	1,927	1,868	311	459	321	777	100.0	16.6	24.6	17.2	41.6
55-64 years	2,153	2,009	502	558	320	629	100.0	25.0	27.8	15.9	31.3
65 years and over	1,244	1,067	424	279	133	232	100.0	39.7	26.1	12.5	21.7
Sex:											
Male	8,106	7,680	1,699	1,924	1,203	2,854	100.0	22.1	25.1	15.7	37.2
Female	221	202	64	47	26	65	100.0	31.6	23.3	12.7	32.3
Number of States licensed in:											
1 State	4,901	4,407	1,044	1,127	669	1,567	100.0	23.7	25.6	15.2	35.5
2 States or more	3,426	3,475	719	844	559	1,353	100.0	20.7	24.3	16.1	38.9
Number of eye patient visits weekly:											
Under 40 visits	978	774	340	178	62	194	100.0	43.9	23.0	8.0	25.1
40-79 visits	1,983	1,845	663	509	250	422	100.0	36.0	27.6	13.6	22.9
80-119 visits	2,211	2,156	465	615	364	722	100.0	21.1	28.5	16.9	33.5
120-159 visits	2,041	2,010	244	471	373	921	100.0	12.1	23.4	18.6	45.8
160-199 visits	512	504	33	112	90	269	100.0	6.6	22.2	17.8	53.4
200 visits and over	603	594	28	86	89	391	100.0	4.7	14.4	15.0	65.9
Number of office locations:											
0-1 office <sup>1</sup>	7,232	6,849	1,568	1,741	1,067	2,473	100.0	22.9	25.4	15.6	36.1
2 offices	891	842	161	192	137	352	100.0	19.1	22.8	16.2	41.8
3 offices	132	122	25	27	14	56	100.0	20.2	22.1	11.9	45.8
4 offices or more	72	69	9	11	10	39	100.0	12.9	16.2	14.7	56.2
Principal form of employment:											
Self-employed:											
Solo practice	5,695	5,321	1,623	1,712	925	1,062	100.0	30.5	32.2	17.4	20.0
Partnership	1,385	1,376	45	109	172	1,049	100.0	3.2	8.0	12.5	76.3
Group practice	483	477	23	35	34	384	100.0	4.8	7.3	7.2	80.6
Nongroup arrangement with other physicians	352	344	16	62	60	206	100.0	4.6	18.2	17.4	59.9
Salaried:											
Hospital <sup>2</sup>	153	130	36	19	12	63	100.0	27.6	14.6	9.4	48.4
Nonhospital <sup>3</sup>	260	235	21	34	25	155	100.0	9.1	14.3	10.6	66.1
Number of patient services rendered:											
1-2 services	213	161	71	45	10	35	100.0	44.4	27.9	6.2	21.5
3-4 services	1,439	1,273	450	336	189	298	100.0	35.4	26.4	14.9	23.4
5-6 services	3,550	3,385	790	947	570	1,078	100.0	23.3	28.0	16.8	31.9
7-8 services	2,643	2,586	393	588	398	1,228	100.0	15.2	21.9	15.4	47.5
9-10 services	483	477	59	76	61	281	100.0	12.3	16.0	12.8	58.9
Type of patient service rendered:											
Diagnostic examination (includes tonometry)	8,282	7,847	1,755	1,961	1,223	2,907	100.0	22.4	25.0	15.6	37.1
Medical treatment	8,154	7,729	1,707	1,927	1,206	2,889	100.0	22.1	24.9	15.6	37.4
Eye surgery	7,400	7,130	1,414	1,772	1,160	2,785	100.0	19.8	24.9	16.3	39.1
Visual field examination and medical interpretation	7,802	7,451	1,612	1,867	1,169	2,803	100.0	21.6	25.1	15.7	37.6
Fitting contact lenses	4,834	4,733	793	1,107	771	2,062	100.0	16.8	23.4	16.3	43.6
Orthoptic training	2,710	2,643	430	581	378	1,254	100.0	16.3	22.0	14.3	47.4
Prescribing low vision aids	4,571	4,438	840	1,055	683	1,860	100.0	18.9	23.8	15.4	41.9
Aniseikonic testing	786	757	140	154	106	357	100.0	18.5	20.4	14.0	47.2
Tonography	4,148	3,950	716	876	611	1,747	100.0	18.1	22.2	15.5	44.2
Primary clinical specialty:											
General ophthalmology (medical and surgical)	7,956	7,533	1,702	1,905	1,187	2,740	100.0	22.6	25.3	15.8	36.4
Corneal surgery	32	32	2	3	3	23	100.0	7.0	10.6	10.5	71.8
Retinal surgery	95	94	19	15	11	49	100.0	20.2	15.9	11.9	52.1
Pediatric ophthalmology	69	69	7	10	9	43	100.0	9.8	14.4	13.3	62.5
Ophthalmic pathology	14	11	-	2	1	8	100.0	-	20.1	9.4	70.6
Neuro-ophthalmology	22	21	7	2	5	8	100.0	31.4	10.7	21.4	36.5
Other	138	121	27	33	12	49	100.0	21.9	27.5	10.1	40.5

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 3. Number of clinical practitioners of ophthalmology who utilize supplementary personnel and number of supplementary personnel utilized, by type of supplementary personnel and basis of utilization: United States, 1968

Type of supplementary personnel utilized and basis of utilization	Number of practitioners utilizing supplementary personnel	Number of supplementary personnel utilized			
		1 person	2 persons	3 persons	4 persons or more
Number of clinical practitioners					
<b>Secretaries, receptionists, and other administrative personnel:</b>					
Full-time unshared .....	4,873	3,577	1,017	195	85
Full-time shared .....	2,405	574	586	438	807
Part-time unshared .....	1,413	1,159	201	40	13
Part-time shared .....	698	473	128	51	45
<b>Nursing personnel (RN's, LPN's, and LVN's):</b>					
Full-time unshared .....	1,455	1,265	144	25	21
Full-time shared .....	1,206	616	296	102	191
Part-time unshared .....	251	219	21	6	6
Part-time shared .....	189	136	32	7	15
<b>Ophthalmic medical assistants (general and refractive):</b>					
Full-time unshared .....	1,201	969	184	25	22
Full-time shared .....	784	377	186	106	116
Part-time unshared .....	184	148	27	7	2
Part-time shared .....	99	68	19	7	6
<b>Optical fitters (including opticians):</b>					
Full-time unshared .....	800	703	76	18	3
Full-time shared .....	845	412	245	125	63
Part-time unshared .....	80	71	4	2	2
Part-time shared .....	69	54	8	1	6
<b>Optical technicians (laboratory, ophthalmic, or contact lens technicians):</b>					
Full-time unshared .....	333	282	37	9	6
Full-time shared .....	551	376	111	21	42
Part-time unshared .....	230	215	13	1	1
Part-time shared .....	149	133	12	4	-
<b>Orthoptists:</b>					
Full-time unshared .....	93	89	4	-	-
Full-time shared .....	327	271	33	15	8
Part-time unshared .....	82	79	2	-	-
Part-time shared .....	144	136	6	-	2
<b>Other clinical assistants:</b>					
Full-time unshared .....	165	138	14	5	7
Full-time shared .....	181	100	31	11	39
Part-time unshared .....	47	39	8	-	-
Part-time shared .....	46	41	1	1	2
<b>Optometrists (performing refractions and prescribing lenses on own authority):</b>					
Full-time unshared .....	70	57	11	-	2
Full-time shared .....	103	52	11	16	23
Part-time unshared .....	27	21	4	1	-
Part-time shared .....	22	11	2	4	5

Table 4. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize secretaries, receptionists, and other administrative personnel, by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of secretaries, receptionists, and other administrative personnel			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
United States .....	8,327	7,882	4,873	2,405	1,413	698
<b>Geographic region:</b>						
Northeast .....	2,362	2,136	1,365	453	522	172
North Central .....	2,058	1,968	1,131	704	320	232
South .....	2,175	2,103	1,371	682	290	136
West .....	1,733	1,676	1,006	566	282	157
<b>Geographic division:</b>						
New England .....	535	496	335	114	123	23
Middle Atlantic .....	1,827	1,640	1,031	339	398	150
East North Central .....	1,468	1,396	805	470	245	157
West North Central .....	590	571	326	234	75	75
South Atlantic .....	1,134	1,091	706	342	175	74
East South Central .....	360	351	238	110	39	25
West South Central .....	680	661	427	230	75	37
Mountain .....	392	383	247	116	55	35
Pacific .....	1,341	1,292	758	450	226	122
<b>Standard Federal administrative region:<sup>1</sup></b>						
Region I .....	535	496	335	114	123	23
Region II .....	1,279	1,148	709	246	293	114
Region III .....	1,016	938	608	232	184	71
Region IV .....	1,027	995	658	313	135	64
Region V .....	1,615	1,539	874	545	258	181
Region VI .....	725	705	461	239	83	40
Region VII .....	401	387	231	148	55	51
Region VIII .....	262	255	157	77	40	22
Region IX .....	1,167	1,119	652	389	193	116
Region X .....	302	299	192	101	47	17

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 5. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize nursing personnel (RN's, LPN's, and LVN's), by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of nursing personnel (RN's, LPN's, and LVN's)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
United States .....	8,327	7,882	1,455	1,206	251	189
Geographic region:						
Northeast .....	2,362	2,136	275	190	74	40
North Central .....	2,058	1,968	408	401	81	63
South .....	2,175	2,103	448	343	47	36
West .....	1,733	1,676	325	272	49	50
Geographic division:						
New England .....	535	496	62	44	18	6
Middle Atlantic .....	1,827	1,640	213	146	56	35
East North Central .....	1,468	1,396	284	276	65	44
West North Central .....	590	571	124	125	16	19
South Atlantic .....	1,134	1,091	242	174	27	16
East South Central .....	360	351	68	50	8	7
West South Central .....	680	661	138	119	12	14
Mountain .....	392	383	75	53	8	9
Pacific .....	1,341	1,292	249	219	41	41
Standard Federal administrative region: <sup>1</sup>						
Region I .....	535	496	62	44	18	6
Region II .....	1,279	1,148	123	92	32	26
Region III .....	1,016	938	158	123	33	13
Region IV .....	1,027	995	243	158	24	16
Region V .....	1,615	1,539	310	319	67	52
Region VI .....	725	705	147	124	12	14
Region VII .....	401	387	83	76	9	8
Region VIII .....	262	255	62	33	7	5
Region IX .....	1,167	1,119	203	189	34	36
Region X .....	302	299	66	51	11	10

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 6. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize ophthalmic medical assistants (general and refractive), by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of ophthalmic medical assistants (general and refractive)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
United States .....	8,327	7,882	1,201	784	184	99
Geographic region:						
Northeast .....	2,362	2,136	204	106	57	30
North Central .....	2,058	1,968	287	231	48	26
South .....	2,175	2,103	399	256	44	17
West .....	1,733	1,676	310	192	35	27
Geographic division:						
New England .....	535	496	40	34	6	8
Middle Atlantic .....	1,827	1,640	164	71	51	22
East North Central .....	1,468	1,396	190	137	35	15
West North Central .....	590	571	97	94	13	11
South Atlantic .....	1,134	1,091	163	114	22	7
East South Central .....	360	351	73	53	9	5
West South Central .....	680	661	163	88	13	4
Mountain .....	392	383	57	29	5	1
Pacific .....	1,341	1,292	253	164	30	25
Standard Federal administrative region: <sup>1</sup>						
Region I .....	535	496	40	34	6	8
Region II .....	1,279	1,148	103	49	34	18
Region III .....	1,016	938	106	55	27	6
Region IV .....	1,027	995	192	133	21	10
Region V .....	1,615	1,539	206	167	39	16
Region VI .....	725	705	174	88	13	4
Region VII .....	401	387	73	61	7	8
Region VIII .....	262	255	37	22	5	1
Region IX .....	1,167	1,119	225	136	29	22
Region X .....	302	299	45	36	2	3

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.



Table 7. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical fitters (including opticians), by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of optical fitters (including opticians)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
	Number of clinical practitioners					
United States .....	8,327	7,882	800	845	80	69
Geographic region:						
Northeast .....	2,362	2,136	110	67	20	12
North Central .....	2,058	1,968	234	272	34	27
South .....	2,175	2,103	249	271	10	11
West .....	1,733	1,676	207	235	15	19
Geographic division:						
New England .....	535	496	27	12	4	3
Middle Atlantic .....	1,827	1,640	84	55	16	9
East North Central .....	1,468	1,396	182	210	29	17
West North Central .....	590	571	52	62	6	10
South Atlantic .....	1,134	1,091	97	124	4	6
East South Central .....	360	351	32	43	4	2
West South Central .....	680	661	120	105	2	3
Mountain .....	392	383	51	52	2	4
Pacific .....	1,341	1,292	156	183	13	14
Standard Federal administrative region: <sup>1</sup>						
Region I .....	535	496	27	12	4	3
Region II .....	1,279	1,148	36	28	9	9
Region III .....	1,016	938	66	49	9	1
Region IV .....	1,027	995	110	145	5	6
Region V .....	1,615	1,539	190	224	28	19
Region VI .....	725	705	127	108	2	3
Region VII .....	401	387	36	42	4	7
Region VIII .....	262	255	34	36	3	-
Region IX .....	1,167	1,119	128	148	9	17
Region X .....	302	299	46	51	4	1

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 8. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical technicians (laboratory, ophthalmic, or contact lens technicians), by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of optical technicians (laboratory, ophthalmic, or contact lens technicians)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
	Number of clinical practitioners					
United States .....	8,327	7,882	333	551	230	149
Geographic region:						
Northeast .....	2,362	2,136	51	47	73	39
North Central .....	2,058	1,968	89	195	56	49
South .....	2,175	2,103	92	172	50	31
West .....	1,733	1,676	102	137	52	31
Geographic division:						
New England .....	535	496	8	17	9	4
Middle Atlantic .....	1,827	1,640	44	30	64	35
East North Central .....	1,468	1,396	70	132	38	43
West North Central .....	590	571	19	64	18	5
South Atlantic .....	1,134	1,091	39	86	25	21
East South Central .....	360	351	13	27	8	4
West South Central .....	680	661	39	59	17	6
Mountain .....	392	383	33	26	15	8
Pacific .....	1,341	1,292	68	110	38	22
Standard Federal administrative region: <sup>1</sup>						
Region I .....	535	496	8	17	9	4
Region II .....	1,279	1,148	35	22	41	28
Region III .....	1,016	938	15	22	33	20
Region IV .....	1,027	995	45	100	21	13
Region V .....	1,615	1,539	73	167	40	46
Region VI .....	725	705	46	58	17	6
Region VII .....	401	387	10	27	13	3
Region VIII .....	262	255	20	20	14	5
Region IX .....	1,167	1,119	56	86	31	21
Region X .....	302	299	22	33	8	4

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 9. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize orthoptists, by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of orthoptists			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
United States .....	8,327	7,882	93	327	82	144
<b>Geographic region:</b>						
Northeast .....	2,362	2,136	26	47	18	31
North Central .....	2,058	1,968	22	114	17	39
South .....	2,175	2,103	28	101	21	40
West .....	1,733	1,676	17	66	26	34
<b>Geographic division:</b>						
New England .....	535	496	4	13	4	10
Middle Atlantic .....	1,827	1,640	21	35	13	21
East North Central .....	1,468	1,396	15	76	16	30
West North Central .....	590	571	7	37	1	9
South Atlantic .....	1,134	1,091	15	50	13	28
East South Central .....	360	351	4	10	3	8
West South Central .....	680	661	9	41	4	4
Mountain .....	392	383	3	20	2	2
Pacific .....	1,341	1,292	14	45	24	32
<b>Standard Federal administrative region:<sup>1</sup></b>						
Region I .....	535	496	4	13	4	10
Region II .....	1,279	1,148	13	24	10	13
Region III .....	1,016	938	12	24	10	14
Region IV .....	1,027	995	14	47	8	28
Region V .....	1,615	1,539	15	98	17	32
Region VI .....	725	705	10	42	4	4
Region VII .....	401	387	7	14	-	5
Region VIII .....	262	255	1	13	2	1
Region IX .....	1,167	1,119	7	38	19	33
Region X .....	302	299	8	14	5	-

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 10. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize other clinical assistants, by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of other clinical assistants			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
United States .....	8,327	7,882	165	181	47	46
Geographic region:						
Northeast .....	2,362	2,136	23	24	18	12
North Central .....	2,058	1,968	40	51	8	9
South .....	2,175	2,103	70	70	11	15
West .....	1,733	1,676	31	36	10	10
Geographic division:						
New England .....	535	496	6	5	7	1
Middle Atlantic .....	1,827	1,640	18	19	11	11
East North Central .....	1,468	1,396	28	26	3	5
West North Central .....	590	571	12	25	4	3
South Atlantic .....	1,134	1,091	21	32	5	8
East South Central .....	360	351	19	12	3	4
West South Central .....	680	661	30	26	3	2
Mountain .....	392	383	9	7	1	2
Pacific .....	1,341	1,292	22	29	9	8
Standard Federal administrative region: <sup>1</sup>						
Region I .....	535	496	6	5	7	1
Region II .....	1,279	1,148	8	13	10	10
Region III .....	1,016	938	16	15	2	6
Region IV .....	1,027	995	35	34	6	7
Region V .....	1,615	1,539	31	33	5	5
Region VI .....	725	705	35	26	3	2
Region VII .....	401	387	10	16	1	2
Region VIII .....	262	255	2	7	2	2
Region IX .....	1,167	1,119	21	20	7	4
Region X .....	302	299	3	10	2	4

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 11. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optometrists (performing refractions and prescribing lenses on own authority), by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of optometrists (performing refractions and prescribing lenses on own authority)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
	Number of clinical practitioners					
United States .....	8,327	7,882	70	103	27	22
Geographic region:						
Northeast .....	2,362	2,136	11	19	12	7
North Central .....	2,058	1,968	33	34	10	6
South .....	2,175	2,103	6	7	2	1
West .....	1,733	1,676	20	43	2	9
Geographic division:						
New England .....	535	496	6	10	7	1
Middle Atlantic .....	1,827	1,640	6	9	6	6
East North Central .....	1,468	1,396	27	23	8	4
West North Central .....	590	571	6	10	2	1
South Atlantic .....	1,134	1,091	3	6	2	1
East South Central .....	360	351	2	1	-	-
West South Central .....	680	661	-	-	-	-
Mountain .....	392	383	1	2	-	-
Pacific .....	1,341	1,292	19	41	2	9
Standard Federal administrative region: <sup>1</sup>						
Region I .....	535	496	6	10	7	1
Region II .....	1,279	1,148	3	5	6	6
Region III .....	1,016	938	2	5	-	1
Region IV .....	1,027	995	5	4	2	-
Region V .....	1,615	1,539	28	23	8	4
Region VI .....	725	705	-	-	-	-
Region VII .....	401	387	4	7	2	1
Region VIII .....	262	255	1	4	-	-
Region IX .....	1,167	1,119	19	35	1	9
Region X .....	302	299	1	6	1	-

<sup>1</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 12. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize secretaries, receptionists, and other administrative personnel, by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of secretaries, receptionists, and other administrative personnel			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners .....	8,327	7,882	4,873	2,405	1,413	698
<b>Age:</b>						
Under 35 years .....	781	746	346	362	84	99
35-44 years .....	2,222	2,193	1,283	812	416	269
45-54 years .....	1,927	1,868	1,193	552	357	154
55-64 years .....	2,153	2,009	1,368	461	382	112
65 years and over .....	1,244	1,067	683	219	174	62
<b>Sex:</b>						
Male .....	8,106	7,680	4,778	2,332	1,369	673
Female .....	221	202	95	73	44	25
<b>Number of States licensed in:</b>						
1 State .....	4,901	4,407	2,729	1,292	802	369
2 States or more .....	3,426	3,475	2,144	1,113	611	328
<b>Number of eye patient visits weekly:</b>						
Under 40 visits .....	978	774	442	188	143	46
40-79 visits .....	1,983	1,845	1,174	419	315	120
80-119 visits .....	2,211	2,156	1,298	697	371	199
120-159 visits .....	2,041	2,010	1,258	700	386	201
160-199 visits .....	512	504	325	176	101	64
200 visits and over .....	603	594	376	224	96	68
<b>Number of office locations:</b>						
0-1 office <sup>1</sup> .....	7,232	6,849	4,278	2,050	1,164	569
2 offices .....	891	842	501	285	210	101
3 offices .....	132	122	57	45	25	15
4 offices or more .....	72	69	37	26	15	13
<b>Principal form of employment:</b>						
<b>Self-employed:</b>						
Solo practice .....	5,695	5,321	4,275	355	1,269	130
Partnership .....	1,385	1,376	240	1,187	57	371
Group practice .....	483	477	139	366	27	73
Nongroup arrangement with other physicians .....	352	344	72	282	27	86
<b>Salaried:</b>						
Hospital <sup>2</sup> .....	153	130	49	65	9	16
Nonhospital <sup>3</sup> .....	260	235	98	150	25	22
<b>Number of patient services rendered:</b>						
1-2 services .....	213	161	92	36	31	8
3-4 services .....	1,439	1,273	791	297	254	82
5-6 services .....	3,550	3,385	2,204	914	620	261
7-8 services .....	2,643	2,586	1,501	968	438	305
9-10 services .....	483	477	286	191	70	42
<b>Type of patient services rendered:</b>						
Diagnostic examination (includes tonometry) .....	8,282	7,847	4,853	2,392	1,408	693
Medical treatment .....	8,154	7,729	4,781	2,371	1,384	696
Eye surgery .....	7,400	7,130	4,404	2,263	1,295	659
Visual field examination and medical interpretation .....	7,802	7,451	4,623	2,291	1,335	672
Fitting contact lenses .....	4,834	4,733	2,889	1,584	841	483
Orthoptic training .....	2,710	2,643	1,527	984	440	296
Prescribing low vision aids .....	4,571	4,438	2,720	1,499	745	437
Aniseikonic testing .....	786	757	472	249	127	61
Tonography .....	4,148	3,950	2,371	1,367	618	372
<b>Primary clinical specialty:</b>						
General ophthalmology (medical and surgical) .....	7,956	7,533	4,705	2,247	1,351	656
Corneal surgery .....	32	32	13	18	4	6
Retinal surgery .....	95	94	47	47	12	12
Pediatric ophthalmology .....	69	69	31	36	14	11
Ophthalmic pathology .....	14	11	7	6	3	1
Neuro-ophthalmology .....	22	21	13	6	2	2
Other .....	138	121	57	47	26	9

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 13. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize nursing personnel (RN's, LPN's, and LVN's), by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of nursing personnel (RN's, LPN's, and LVN's)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners .....	8,327	7,882	1,455	1,206	251	189
Age:						
Under 35 years .....	781	746	52	178	12	17
35-44 years .....	2,222	2,193	336	390	68	71
45-54 years .....	1,927	1,868	392	288	61	53
55-64 years .....	2,153	2,009	466	241	74	39
65 years and over .....	1,244	1,067	210	109	36	9
Sex:						
Male .....	8,106	7,680	1,432	1,171	245	181
Female .....	221	202	23	35	6	8
Number of States licensed in:						
1 State .....	4,901	4,407	809	627	141	122
2 States or more .....	3,426	3,475	646	578	110	67
Number of eye patient visits weekly:						
Under 40 visits .....	978	774	109	107	41	20
40-79 visits .....	1,983	1,845	321	210	48	33
80-119 visits .....	2,211	2,156	324	330	54	52
120-159 visits .....	2,041	2,010	413	340	63	57
160-199 visits .....	512	504	129	97	26	10
200 visits and over .....	603	594	160	123	20	17
Number of office locations:						
0-1 office <sup>1</sup> .....	7,232	6,849	1,311	1,033	217	150
2 offices .....	891	842	107	128	27	27
3 offices .....	132	122	20	29	6	9
4 offices or more .....	72	69	18	15	1	3
Principal form of employment:						
Self-employed:						
Solo practice .....	5,695	5,321	1,076	138	210	31
Partnership .....	1,385	1,376	172	588	12	87
Group practice .....	483	477	135	232	12	34
Nongroup arrangement with other physicians .....	352	344	32	101	6	13
Salaried:						
Hospital <sup>2</sup> .....	153	130	19	41	4	7
Nonhospital <sup>3</sup> .....	260	235	21	105	7	17
Number of patient services rendered:						
1-2 services .....	213	161	22	19	3	4
3-4 services .....	1,439	1,273	221	143	54	23
5-6 services .....	3,550	3,385	620	426	109	63
7-8 services .....	2,643	2,586	490	513	69	77
9-10 services .....	483	477	102	105	15	21
Type of patient service rendered:						
Diagnostic examination (includes tonometry) .....	8,282	7,847	1,448	1,198	249	187
Medical treatment .....	8,154	7,729	1,434	1,188	251	187
Eye surgery .....	7,400	7,130	1,331	1,134	224	174
Visual field examination and medical interpretation .....	7,802	7,451	1,380	1,141	233	180
Fitting contact lenses .....	4,834	4,733	860	789	141	122
Orthoptic training .....	2,710	2,643	501	524	78	88
Prescribing low vision aids .....	4,571	4,438	844	751	131	110
Aniseikonic testing .....	786	757	155	140	27	22
Tonography .....	4,148	3,950	828	742	125	118
Primary clinical specialty:						
General ophthalmology (medical and surgical) .....	7,956	7,533	1,412	1,110	238	171
Corneal surgery .....	32	32	4	8	-	1
Retinal surgery .....	95	94	13	36	2	8
Pediatric ophthalmology .....	69	69	10	21	1	6
Ophthalmic pathology .....	14	11	1	3	-	-
Neuro-ophthalmology .....	22	21	1	5	-	1
Other .....	138	121	13	22	9	2

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 14. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize ophthalmic medical assistants (general and refractive), by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of ophthalmic medical assistants (general and refractive)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners .....	8,327	7,882	1,201	784	184	99
<b>Age:</b>						
Under 35 years .....	781	746	80	115	9	21
35-44 years .....	2,222	2,193	369	292	68	34
45-54 years .....	1,927	1,868	335	194	44	22
55-64 years .....	2,153	2,009	310	129	51	17
65 years and over .....	1,244	1,067	106	54	12	6
<b>Sex:</b>						
Male .....	8,106	7,680	1,175	772	178	96
Female .....	221	202	26	12	6	3
<b>Number of States licensed in:</b>						
1 State .....	4,901	4,407	677	395	100	52
2 States or more .....	3,426	3,475	523	390	84	47
<b>Number of eye patient visits weekly:</b>						
Under 40 visits .....	978	774	49	62	11	5
40-79 visits .....	1,983	1,845	178	124	32	19
80-119 visits .....	2,211	2,156	346	210	55	32
120-159 visits .....	2,041	2,010	380	228	59	25
160-199 visits .....	512	504	93	58	12	8
200 visits and over .....	603	594	155	103	14	10
<b>Number of office locations:</b>						
0-1 office <sup>1</sup> .....	7,232	6,849	1,068	678	156	76
2 offices .....	891	842	108	80	23	18
3 offices .....	132	122	16	10	3	1
4 offices or more .....	72	69	9	17	2	4
<b>Principal form of employment:</b>						
<b>Self-employed:</b>						
Solo practice .....	5,695	5,321	931	61	147	23
Partnership .....	1,385	1,376	130	426	19	44
Group practice .....	483	477	66	134	7	9
Nongroup arrangement with other physicians .....	352	344	42	82	3	14
<b>Salaried:</b>						
Hospital <sup>2</sup> .....	153	130	15	23	4	2
Nonhospital <sup>3</sup> .....	260	235	17	59	3	7
<b>Number of patient services rendered:</b>						
1-2 services .....	213	161	7	10	2	-
3-4 services .....	1,439	1,273	110	65	28	3
5-6 services .....	3,550	3,385	466	242	82	37
7-8 services .....	2,643	2,586	509	380	60	50
9-10 services .....	483	477	108	88	12	9
<b>Type of patient service rendered:</b>						
Diagnostic examination (includes tonometry) .....	8,282	7,847	1,197	780	183	99
Medical treatment .....	8,154	7,729	1,184	777	182	99
Eye surgery .....	7,400	7,130	1,153	751	175	98
Visual field examination and medical interpretation .....	7,802	7,451	1,171	757	177	97
Fitting contact lenses .....	4,834	4,733	884	567	113	76
Orthoptic training .....	2,710	2,643	507	385	73	45
Prescribing low vision aids .....	4,571	4,438	791	545	101	73
Aniseikonic testing .....	786	757	139	95	19	10
Tonography .....	4,148	3,950	671	536	77	60
<b>Primary clinical specialty:</b>						
General ophthalmology (medical and surgical) .....	7,956	7,533	1,163	721	179	92
Corneal surgery .....	32	32	3	6	1	-
Retinal surgery .....	95	94	12	19	-	2
Pediatric ophthalmology .....	69	69	8	6	1	3
Ophthalmic pathology .....	14	11	-	4	-	-
Neuro-ophthalmology .....	22	21	2	5	-	-
Other .....	138	121	12	23	2	1

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).



Table 15. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical fitters (including opticians), by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of optical fitters (including opticians)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners	8,327	7,882	800	845	80	69
<b>Age:</b>						
Under 35 years	781	746	36	113	4	14
35-44 years	2,222	2,193	222	302	20	25
45-54 years	1,927	1,868	233	219	17	10
55-64 years	2,153	2,009	234	152	31	16
65 years and over	1,244	1,067	75	59	7	4
<b>Sex:</b>						
Male	8,106	7,680	789	828	79	66
Female	221	202	11	17	1	3
<b>Number of States licensed in:</b>						
1 State	4,901	4,407	466	460	35	35
2 States or more	3,426	3,475	334	385	45	34
<b>Number of eye patient visits weekly:</b>						
Under 40 visits	978	774	31	38	5	9
40-79 visits	1,983	1,845	137	113	24	21
80-119 visits	2,211	2,156	196	249	20	9
120-159 visits	2,041	2,010	262	294	15	22
160-199 visits	512	504	72	68	7	5
200 visits and over	603	594	103	83	9	3
<b>Number of office locations:</b>						
0-1 office <sup>1</sup>	7,232	6,849	729	755	71	55
2 offices	891	842	57	71	8	12
3 offices	132	122	12	10	1	2
4 offices or more	72	69	2	9	-	-
<b>Principal form of employment:</b>						
<b>Self-employed:</b>						
Solo practice	5,696	5,321	672	127	69	14
Partnership	1,385	1,376	68	437	5	28
Group practice	483	477	40	156	2	6
Nongroup arrangement with other physicians	352	344	14	74	1	8
<b>Salaried:</b>						
Hospital <sup>2</sup>	153	130	1	16	-	3
Nonhospital <sup>3</sup>	260	235	6	35	3	10
<b>Number of patient services rendered:</b>						
1-2 services	213	161	11	10	-	-
3-4 services	1,439	1,273	77	55	19	4
5-6 services	3,550	3,385	332	284	31	25
7-8 services	2,643	2,586	316	415	26	32
9-10 services	483	477	64	80	3	8
<b>Type of patient service rendered:</b>						
Diagnostic examination (includes tonometry)	8,282	7,847	797	841	80	69
Medical treatment	8,154	7,729	788	840	80	69
Eye surgery	7,400	7,130	747	818	77	68
Visual field examination and medical interpretation	7,802	7,451	763	816	74	69
Fitting contact lenses	4,834	4,733	632	675	45	54
Orthoptic training	2,710	2,643	276	407	25	35
Prescribing low vision aids	4,571	4,438	499	573	43	47
Aniseikonic testing	786	757	91	98	8	7
Tonography	4,148	3,950	435	509	34	41
<b>Primary clinical specialty:</b>						
General ophthalmology (medical and surgical)	7,956	7,533	785	814	78	61
Corneal surgery	32	32	2	5	1	-
Retinal surgery	95	94	1	8	-	4
Pediatric ophthalmology	69	69	1	9	1	1
Ophthalmic pathology	14	11	2	1	-	-
Neuro-ophthalmology	22	21	-	1	-	1
Other	138	121	9	8	-	1

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 16. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optical technicians (laboratory, ophthalmic, or contact lens technicians), by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of optical technicians (laboratory, ophthalmic, or contact lens technicians)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners	8,327	7,882	333	551	230	149
Age:						
Under 35 years	781	746	17	66	18	18
35-44 years	2,222	2,193	78	182	87	57
45-54 years	1,927	1,868	101	157	63	33
55-64 years	2,153	2,009	96	109	51	32
65 years and over	1,244	1,067	42	36	11	9
Sex:						
Male	8,106	7,680	330	537	225	139
Female	221	202	3	13	6	10
Number of States licensed in:						
1 State	4,901	4,407	185	296	108	78
2 States or more	3,426	3,475	149	255	123	71
Number of eye patient visits weekly:						
Under 40 visits	978	774	11	25	4	11
40-79 visits	1,983	1,845	59	71	36	24
80-119 visits	2,211	2,156	75	154	73	48
120-159 visits	2,041	2,010	103	192	73	42
160-199 visits	512	504	29	43	25	12
200 visits and over	603	594	57	66	19	11
Number of office locations:						
0-1 office <sup>1</sup>	7,232	6,849	285	485	198	131
2 offices	891	842	42	45	30	17
3 offices	132	122	3	10	1	-
4 offices or more	72	69	2	10	1	1
Principal form of employment:						
Self-employed:						
Solo practice	5,695	5,321	249	72	201	38
Partnership	1,385	1,376	41	283	16	72
Group practice	483	477	25	119	7	11
Nongroup arrangement with other physicians	352	344	9	38	3	18
Salaried:						
Hospital <sup>2</sup>	153	130	2	10	-	3
Nonhospital <sup>3</sup>	260	235	7	28	3	7
Number of patient services rendered:						
1-2 services	213	161	2	5	1	-
3-4 services	1,439	1,273	29	30	17	18
5-6 services	3,550	3,385	121	158	105	52
7-8 services	2,643	2,586	131	285	93	64
9-10 services	483	477	50	73	15	15
Type of patient service rendered:						
Diagnostic examination (includes tonometry)	8,282	7,847	330	548	230	149
Medical treatment	8,154	7,729	328	547	228	149
Eye surgery	7,400	7,130	318	539	224	145
Visual field examination and medical interpretation	7,802	7,451	321	532	225	145
Fitting contact lenses	4,834	4,733	271	450	190	114
Orthoptic training	2,710	2,643	132	300	88	75
Prescribing low vision aids	4,571	4,438	219	385	142	97
Aniseikonic testing	786	757	63	78	22	16
Tonography	4,148	3,950	210	377	103	75
Primary clinical specialty:						
General ophthalmology (medical and surgical)	7,956	7,533	321	514	220	145
Corneal surgery	32	32	3	8	2	-
Retinal surgery	95	94	-	9	2	1
Pediatric ophthalmology	69	69	4	8	4	2
Ophthalmic pathology	14	11	1	1	-	-
Neuro-ophthalmology	22	21	-	3	-	-
Other	138	121	3	8	1	1

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 17. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize orthoptists, by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of orthoptists			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners	8,327	7,882	93	327	82	144
Age:						
Under 35 years	781	746	5	57	7	20
35-44 years	2,222	2,193	29	127	25	73
45-54 years	1,927	1,868	21	76	29	21
55-64 years	2,153	2,009	26	51	17	23
65 years and over	1,244	1,067	14	15	4	8
Sex:						
Male	8,106	7,680	89	321	78	137
Female	221	202	5	6	3	7
Number of States licensed in:						
1 State	4,901	4,407	58	146	40	73
2 States or more	3,426	3,475	36	180	41	72
Number of eye patient visits weekly:						
Under 40 visits	978	774	5	37	4	10
40-79 visits	1,983	1,845	11	53	15	28
80-119 visits	2,211	2,156	21	82	24	46
120-159 visits	2,041	2,010	27	97	22	38
160-199 visits	512	504	11	20	4	7
200 visits and over	603	594	18	37	12	16
Number of office locations:						
0-1 office <sup>1</sup>	7,232	6,849	72	270	66	111
2 offices	891	842	16	40	12	28
3 offices	132	122	3	11	1	3
4 offices or more	72	69	2	5	2	2
Principal form of employment:						
Self-employed:						
Solo practice	5,695	5,321	61	35	65	33
Partnership	1,385	1,376	13	104	6	63
Group practice	483	477	7	92	3	18
Nongroup arrangement with other physicians	352	344	2	22	1	14
Salaried:						
Hospital <sup>2</sup>	153	130	1	16	1	2
Nonhospital <sup>3</sup>	260	235	9	58	5	14
Number of patient services rendered:						
1-2 services	213	161	3	3	-	2
3-4 services	1,439	1,273	2	21	8	17
5-6 services	3,550	3,385	24	63	21	25
7-8 services	2,643	2,586	41	185	42	76
9-10 services	483	477	22	54	10	24
Type of patient service rendered:						
Diagnostic examination (includes tonometry)	8,282	7,847	91	322	82	144
Medical treatment	8,154	7,729	91	324	81	143
Eye surgery	7,400	7,130	90	317	81	135
Visual field examination and medical interpretation	7,802	7,451	89	309	81	137
Fitting contact lenses	4,834	4,733	67	256	56	112
Orthoptic training	2,710	2,643	76	260	63	104
Prescribing low vision aids	4,571	4,438	69	235	50	101
Aniseikonic testing	786	757	19	49	8	24
Tonography	4,148	3,950	60	228	49	94
Primary clinical specialty:						
General ophthalmology (medical and surgical)	7,956	7,533	80	283	74	127
Corneal surgery	32	32	2	2	1	2
Retinal surgery	95	94	-	6	1	2
Pediatric ophthalmology	69	69	10	17	6	8
Ophthalmic pathology	14	11	-	2	-	-
Neuro-ophthalmology	22	21	-	6	-	3
Other	138	121	1	11	-	1

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 18. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize other clinical assistants, by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of other clinical assistants			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners .....	8,327	7,882	165	181	47	46
Age:						
Under 35 years .....	781	746	10	22	2	6
35-44 years .....	2,222	2,193	47	73	11	17
45-54 years .....	1,927	1,868	49	45	15	11
55-64 years .....	2,153	2,009	49	34	14	10
65 years and over .....	1,244	1,067	10	7	3	2
Sex:						
Male .....	8,106	7,680	163	176	47	44
Female .....	221	202	2	5	-	1
Number of States licensed in:						
1 State .....	4,901	4,407	89	92	20	29
2 States or more .....	3,426	3,475	76	89	27	17
Number of eye patient visits weekly:						
Under 40 visits .....	978	774	23	30	3	8
40-79 visits .....	1,983	1,845	29	20	7	12
80-119 visits .....	2,211	2,156	35	59	17	14
120-159 visits .....	2,041	2,010	43	40	13	11
160-199 visits .....	512	504	17	18	-	-
200 visits and over .....	603	594	18	14	7	-
Number of office locations:						
0-1 office <sup>1</sup> .....	7,232	6,849	140	153	32	39
2 offices .....	891	842	21	23	14	7
3 offices .....	132	122	3	1	-	-
4 offices or more .....	72	69	-	3	-	-
Principal form of employment:						
Self-employed:						
Solo practice .....	5,695	5,321	112	14	38	8
Partnership .....	1,385	1,376	18	66	3	20
Group practice .....	483	477	8	51	1	7
Nongroup arrangement with other physicians .....	352	344	7	12	1	5
Salaried:						
Hospital <sup>2</sup> .....	153	130	6	5	-	1
Nonhospital <sup>3</sup> .....	260	235	16	33	3	6
Number of patient services rendered:						
1-2 services .....	213	161	9	4	2	2
3-4 services .....	1,439	1,273	17	21	5	6
5-6 services .....	3,550	3,385	64	49	18	13
7-8 services .....	2,643	2,586	57	76	19	21
9-10 services .....	483	477	19	31	2	3
Type of patient service rendered:						
Diagnostic examination (includes tonometry) .....	8,282	7,847	161	180	47	46
Medical treatment .....	8,154	7,729	157	178	44	45
Eye surgery .....	7,400	7,130	147	170	45	41
Visual field examination and medical interpretation .....	7,802	7,451	150	162	43	42
Fitting contact lenses .....	4,834	4,733	107	125	29	30
Orthoptic training .....	2,710	2,643	58	91	18	22
Prescribing low vision aids .....	4,571	4,438	99	130	22	30
Aniseikonic testing .....	786	757	24	26	2	2
Tonography .....	4,148	3,950	104	112	24	27
Primary clinical specialty:						
General ophthalmology (medical and surgical) .....	7,956	7,533	147	159	42	41
Corneal surgery .....	32	32	1	3	-	-
Retinal surgery .....	95	94	6	3	2	-
Pediatric ophthalmology .....	69	69	1	3	-	1
Ophthalmic pathology .....	14	11	1	-	-	-
Neuro-ophthalmology .....	22	21	2	3	-	-
Other .....	138	121	7	9	2	3

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 19. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, the number who utilize optometrists (performing refractions and prescribing lenses on own authority), by selected characteristics of the user: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Basis of utilization of optometrists (performing refractions and prescribing lenses on own authority)			
			Full-time unshared	Full-time shared	Part-time unshared	Part-time shared
Number of clinical practitioners						
All clinical practitioners .....	8,327	7,992	70	103	27	22
<b>Age:</b>						
Under 35 years .....	781	746	2	11	-	3
35-44 years .....	2,222	2,193	18	39	7	7
45-54 years .....	1,927	1,868	22	27	9	3
55-64 years .....	2,153	2,009	21	18	8	6
65 years and over .....	1,244	1,067	7	8	3	3
<b>Sex:</b>						
Male .....	8,106	7,680	69	96	26	22
Female .....	221	202	1	7	1	-
<b>Number of States licensed in:</b>						
1 State .....	4,901	4,407	40	55	17	12
2 States or more .....	3,426	3,475	30	48	10	10
<b>Number of eye patient visits weekly:</b>						
Under 40 visits .....	978	774	4	6	2	-
40-79 visits .....	1,983	1,845	9	19	3	3
80-119 visits .....	2,211	2,156	16	25	8	10
120-159 visits .....	2,041	2,010	17	33	5	4
160-199 visits .....	512	504	7	8	2	2
200 visits and over .....	603	594	18	12	7	2
<b>Number of office locations:</b>						
0-1 office <sup>1</sup> .....	7,232	6,849	57	86	16	18
2 offices .....	891	842	13	11	6	2
3 offices .....	132	122	-	2	4	1
4 offices or more .....	72	69	-	3	1	1
<b>Principal form of employment:</b>						
<b>Self-employed:</b>						
Solo practice .....	5,696	5,321	50	12	24	2
Partnership .....	1,385	1,376	4	28	-	9
Group practice .....	483	477	11	50	1	9
Nongroup arrangement with other physicians .....	352	344	2	3	-	1
<b>Salaried:</b>						
Hospital <sup>2</sup> .....	153	130	1	7	2	-
Nonhospital <sup>3</sup> .....	260	235	1	2	-	1
<b>Number of patient services rendered:</b>						
1-2 services .....	213	161	-	2	-	-
3-4 services .....	1,439	1,273	7	18	2	4
5-6 services .....	3,550	3,385	22	42	16	4
7-8 services .....	2,643	2,586	32	32	7	8
9-10 services .....	483	477	9	9	2	1
<b>Type of patient service rendered:</b>						
Diagnostic examination (includes tonometry) .....	8,282	7,847	70	103	27	22
Medical treatment .....	8,154	7,729	69	102	26	22
Eye surgery .....	7,400	7,130	67	99	26	22
Visual field examination and medical interpretation .....	7,802	7,451	69	93	27	22
Fitting contact lenses .....	4,834	4,733	55	56	16	14
Orthoptic training .....	2,710	2,643	29	41	8	9
Prescribing low vision aids .....	4,571	4,438	47	57	15	10
Aniseikonic testing .....	786	757	11	12	4	1
Tonography .....	4,148	3,950	50	60	12	12
<b>Primary clinical specialty:</b>						
General ophthalmology (medical and surgical) .....	7,956	7,533	68	92	27	22
Corneal surgery .....	32	32	-	3	-	-
Retinal surgery .....	95	94	-	5	-	-
Pediatric ophthalmology .....	69	69	-	2	-	-
Ophthalmic pathology .....	14	11	1	-	-	-
Neuro-ophthalmology .....	22	21	-	-	-	-
Other .....	138	121	1	-	-	-

<sup>1</sup> Only 13 respondents reported no office location.

<sup>2</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>3</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

Table 20. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, number of practitioners who share the services of supplementary personnel with associates, and number of associates with whom supplementary personnel are shared, by geographic location: United States, 1968

Geographic location	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Number of practitioners who share supplementary personnel with associates <sup>1</sup>	Number of associates with whom supplementary personnel are shared			
				1 associate	2 associates	3-4 associates	5 associates or more
Number of clinical practitioners							
United States . . . . .	8,327	7,882	2,749	189	1,235	852	473
Geographic region:							
Northeast . . . . .	2,362	2,136	543	41	256	161	85
North Central . . . . .	2,058	1,968	799	63	337	244	155
South . . . . .	2,175	2,103	775	53	341	254	127
West . . . . .	1,733	1,676	631	32	301	193	105
Geographic division:							
New England . . . . .	535	496	126	7	48	38	33
Middle Atlantic . . . . .	1,827	1,640	417	35	208	123	52
East North Central . . . . .	1,468	1,396	539	46	230	168	96
West North Central . . . . .	590	571	259	17	107	76	59
South Atlantic . . . . .	1,134	1,091	389	30	162	134	63
East South Central . . . . .	360	351	129	9	53	43	24
West South Central . . . . .	680	661	258	15	126	77	41
Mountain . . . . .	392	383	127	13	66	37	12
Pacific . . . . .	1,341	1,292	504	19	236	156	94
Standard Federal administrative region: <sup>2</sup>							
Region I . . . . .	535	496	126	7	48	38	33
Region II . . . . .	1,279	1,148	303	22	155	90	35
Region III . . . . .	1,016	938	278	23	123	86	43
Region IV . . . . .	1,027	995	355	26	146	121	59
Region V . . . . .	1,615	1,539	619	48	265	185	122
Region VI . . . . .	725	705	267	15	131	80	42
Region VII . . . . .	401	387	167	12	69	54	30
Region VIII . . . . .	262	255	84	7	34	31	10
Region IX . . . . .	1,167	1,119	435	22	215	126	71
Region X . . . . .	302	299	114	3	49	36	25

<sup>1</sup> Of "associates" who share the services of supplementary personnel, over 95 percent are reported to be physicians; in the great majority of cases (again more than 95 percent of cases), they are other ophthalmologists.

<sup>2</sup> Explanation of standard Federal administrative regions and States within each region is contained in appendix II.

Table 21. Number of clinical practitioners of ophthalmology and number who utilize one or more types of supplementary personnel and, of these, number of practitioners who share the services of supplementary personnel with associates, and number of associates with whom supplementary personnel are shared, by selected characteristics of the practitioner: United States, 1968

Characteristic	Number of clinical practitioners of ophthalmology	Number of practitioners utilizing supplementary personnel	Number of practitioners who share supplementary personnel with associates <sup>1</sup>	Number of associates with whom supplementary personnel are shared			
				1 associate	2 associates	3-4 associates	5 associates or more
Number of clinical practitioners							
All clinical practitioners .....	8,327	7,882	2,749	189	1,235	852	473
<b>Age:</b>							
Under 35 years .....	781	746	405	23	187	121	74
35-44 years .....	2,222	2,193	926	43	426	295	162
45-54 years .....	1,927	1,868	630	53	261	191	125
55-64 years .....	2,153	2,009	538	41	236	166	95
65 years and over .....	1,244	1,067	246	28	124	77	17
<b>Sex:</b>							
Male .....	8,106	7,680	2,665	186	1,195	822	462
Female .....	221	202	83	3	40	29	11
<b>Number of States licensed in:</b>							
1 State .....	4,901	4,407	1,478	110	679	458	231
2 States or more .....	3,426	3,475	1,272	79	557	394	242
<b>Number of eye patient visits weekly:</b>							
Under 40 visits .....	978	774	221	19	75	61	66
40-79 visits .....	1,983	1,845	507	41	213	147	106
80-119 visits .....	2,211	2,156	782	50	370	249	113
120-159 visits .....	2,041	2,010	786	51	353	243	139
160-199 visits .....	512	504	202	13	95	65	29
200 visits and over .....	603	594	251	14	129	87	21
<b>Number of office locations:</b>							
0-1 office <sup>2</sup> .....	7,232	6,849	2,324	164	1,066	719	375
2 offices .....	891	842	332	19	141	98	74
3 offices .....	132	122	60	5	19	18	18
4 offices or more .....	72	69	35	1	10	17	7
<b>Principal form of employment:</b>							
<b>Self-employed:</b>							
Solo practice .....	5,695	5,321	536	68	271	129	68
Partnership .....	1,385	1,376	1,251	76	670	381	124
Group practice .....	483	477	398	15	79	163	141
Nongroup arrangement with other physicians .....	352	344	301	18	178	87	18
<b>Salaried:</b>							
Hospital <sup>3</sup> .....	153	130	85	9	13	20	43
Nonhospital <sup>4</sup> .....	260	235	178	3	25	71	79
<b>Number of patient services rendered:</b>							
1-2 services .....	213	161	39	4	17	15	3
3-4 services .....	1,439	1,273	345	39	147	95	64
5-6 services .....	3,550	3,385	1,038	79	498	300	161
7-8 services .....	2,643	2,586	1,111	60	498	363	200
9-10 services .....	483	477	215	7	85	79	44
<b>Type of patient service rendered:</b>							
Diagnostic examination (includes tonometry) .....	8,282	7,847	2,736	187	1,233	844	472
Medical treatment .....	8,154	7,729	2,708	183	1,220	836	469
Eye surgery .....	7,400	7,130	2,584	170	1,166	797	451
Visual field examination and medical interpretation .....	7,802	7,451	2,615	174	1,182	810	449
Fitting contact lenses .....	4,834	4,733	1,808	103	860	561	294
Orthoptic training .....	2,710	2,643	1,124	55	467	400	202
Prescribing low vision aids .....	4,571	4,438	1,709	98	778	535	298
Aniseikonic testing .....	786	757	278	15	126	83	54
Tonography .....	4,148	3,950	1,563	94	637	527	305
<b>Primary clinical specialty:</b>							
General ophthalmology (medical and surgical) .....	7,956	7,533	2,565	176	1,184	790	415
Corneal surgery .....	32	32	22	1	6	7	8
Retinal surgery .....	95	94	54	2	16	18	18
Pediatric ophthalmology .....	69	69	43	4	17	15	7
Ophthalmic pathology .....	14	11	6	-	-	4	2
Neuro-ophthalmology .....	22	21	10	-	-	2	8
Other .....	138	121	50	6	13	15	16

<sup>1</sup> Of "associates" who share the services of supplementary personnel, over 95 percent are reported to be physicians; in the great majority of cases (again, more than 95 percent of cases), they are other ophthalmologists.

<sup>2</sup> Only 13 respondents reported no office location.

<sup>3</sup> Includes nongovernment hospitals and city, county, State, and Federal hospitals.

<sup>4</sup> Includes medical schools; city, county, State, and Federal agencies; and other (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

## APPENDIX I

### TECHNICAL NOTES

#### Data Collection

Most of the statistical information used in this report is the product of a survey of ophthalmologists conducted by the National Center for Health Statistics between May and December 1968. This was a part of a general survey of eye-care manpower which sought information on four groups: ophthalmologists (both doctors of medicine and doctors of osteopathy), optometrists, opticianry establishments, and dispensing opticians.

In advance of the actual survey of ophthalmologists, prominent ophthalmological associations received copies of the proposed questionnaires and survey plan. A number of government agencies—Federal, State, and local—were also contacted. Recommendations received from these advisory sources were used to modify the survey plan and questionnaires.

An announcement of the survey was published by the *Eye, Ear, Nose, and Throat Monthly*, *The Ophthalmologist*, and the newsletter of the American Osteopathic Association. The American Association of Ophthalmology cooperated by sending a letter to each of its members, urging their participation.

A total of 10,302 ophthalmologists comprised the survey universe, a figure which included both doctors of medicine (M.D.'s) and doctors of osteopathy (D.O.'s). M.D. ophthalmologists surveyed included all those who had reported to the American Medical Association that ophthalmology was their primary or secondary specialty. Of the 10,102 M.D. ophthalmologists surveyed, 9,020 (89.2 percent) listed ophthalmology as their primary specialty, while 1,082 (10.7 percent) designated it as their secondary specialty.

D.O. ophthalmologists included in the survey universe were all doctors of osteopathy who had reported to the American Osteopathic Association that they devoted any time whatever to ophthalmology. Of the 200 D.O. ophthalmologists surveyed, 17 (8.5 percent) had reported that they devoted 75 percent or more of their workweek to ophthalmology. An additional 21 (10.5 percent) reported between 50 and 75 percent, while the remaining 145 (72.5 percent) apparently devoted under 25 percent of their workweek to ophthalmological activities.

A pretest was conducted by the National Center for Health Statistics during the 1-month period May 31 to July 3, 1968. Questionnaires were mailed to two M.D. ophthalmologists in each State and the District of Columbia. Twenty-five D.O. ophthalmologists were selected at random and mailed questionnaires. A 90.5-percent response to the pretest was achieved and, based on an analysis of this pretest response, certain minor alterations were made in the M.D. questionnaire and the D.O. questionnaire. The revised questionnaires, as they were used in final form, appear in appendix III.

In the remaining months of 1968, the main body of the ophthalmologist universe was surveyed. The collection of data for the survey was accomplished under contract with the U.S. Bureau of the Census. This agency was responsible for the mailings of the questionnaires, receipt and control of the responses, and for followup whenever incomplete or inadequate questionnaires were returned or whenever a questionnaire was not returned. Three mailings were used in an attempt to elicit a response, the first two by first-class mail, the last by certified mail. All three mailings were made in every case where a return was not received.



In addition to the mailings, telephone contacts and personal interviews were also used. They were employed in cases of nonresponse or refusal, as well as in cases of questionnaires which had been only partially completed.

After all contact efforts, a response rate of 92.7 percent was achieved.

In addition to the information obtained directly from the survey respondents, the reports on ophthalmologist manpower also use supplementary information supplied by the American Medical Association and the American Osteopathic Association for such characteristics as sex, chronological age, age at graduation, and certification by specialty boards.

### Processing of Data

A preliminary edit was undertaken at the time of the return of the survey questionnaires. This was done to insure completeness of the responses. The information from the questionnaires was then coded, punched, and placed on computer tape.

During the cleanup and editing phases of the processing, an elaborate series of checks and cross-checks were made, chiefly to confirm accuracy of response and to correct coding and punching errors that occurred, but also to insure consistency between related items.

Table I shows the overall response to the survey. Of the total 10,302 M.D. and D.O. ophthalmologists included in the original survey universe, 1,245 (12.1 percent) were eliminated in processing as out of scope for the purposes of reporting. These out of scopes included: 133 respondents who were either practicing ophthalmology in foreign countries or not engaged at all in the practice of ophthalmology; 233 uniformed ophthalmologists (in the Army, Navy, Air Force, and U.S. Public Health Service); and 879 students in ophthalmology residency programs (both civilian and military). Data reported, then, are for civilian (nonuniformed) ophthalmologists who had completed their training requirements and were formally qualified to practice. In number, this group amounted to 9,057 ophthalmologists, or 87.9 percent of the original universe.

A total of 8,136, or 90.0 percent of the 9,057, responded to the survey with usable

questionnaires. The remainder was composed of 675 nonrespondents (i.e., no questionnaires returned, reason unspecified); 186 post-master returns; and 60 nonrespondents, deceased; or 7.5 percent, 1.8 percent, and 0.6 percent, respectively.

Of these 8,136 usable questionnaires (good responses), 7,741 (95.1 percent) specified an active status, while 395 reported that they were either retired or not currently engaged in ophthalmological activities although nonretired.

### Adjustments

Two types of adjustment were applied to the survey responses.

The first was an adjustment for partial nonresponse within the questionnaire; for example, leaving one item unanswered. In such cases, omitted items were randomly assigned the response obtained from respondents with similar characteristics, and the total response figure for the item was adjusted to include this "imputation." As may be seen in table II, the need for this type of adjustment was minimal; the partial nonresponse rate was less than 4 percent for all items considered in this report except for the questions as to patient visits and patients seen per week. To the question, "In your CLINICAL OPHTHALMOLOGY practice, APPROXIMATELY how many EYE patient VISITS do you have during a typical week? (Include office and hospital outpatient visits)," there was a nonresponse rate of 7.6 percent. It is possible that this was in part due to the need to make a quantified estimate based on an arbitrary judgment of typicality. To the question, "APPROXIMATELY how many EYE PATIENTS does this represent? (Patients with multiple visits should be counted only once.)," there was a nonresponse rate of 7.8 percent. Here, the respondent was asked to make a quantified estimate which is itself a second-order derivation from another quantified estimate. This rather difficult requirement may have caused this item to exhibit a higher nonresponse rate than any other in the questionnaire.

In addition to the adjustment for item nonresponse, an adjustment was also made for total nonresponse, i.e., for nonavailability of the entire questionnaire. This "inflation" factor was

Table I. Preadjustment frequency and percent distribution of survey population by type of respondent or nonrespondent: United States, 1968

Type of respondent or nonrespondent	Number	Percent of total
Total questionnaires mailed	10,302	100.0
Out of scopes:		
Not practicing in the United States or not engaged at all in ophthalmological activities	133	1.3
Uniformed ophthalmologists	233	2.3
Student residents	879	8.5
Civilian, formally qualified ophthalmologists	9,057	87.9
Civilian, formally qualified ophthalmologists	9,057	100.0
Nonavailable questionnaires:		
Nonrespondents (reason unspecified)	675	7.5
Postmaster returns	186	1.8
Nonrespondents (deceased)	60	0.6
Good responses	8,136	90.0
Good responses	8,136	100.0
Active ophthalmologists	7,741	95.1
Inactive ophthalmologists	395	4.9

Table II. Percent of active ophthalmologists responding to selected questions on survey questionnaires: United States, 1968

Selected questions	Percent
Activity status	100.0
States licensed in	97.4
Principal form of employment	98.1
Weeks per year usually worked	96.6
Hours per week usually worked	96.4
Clinical and nonclinical activities	97.1
Primary clinical activity (ophthalmological specialty)	96.9
Use of supplementary personnel	97.0
Patient services rendered	97.2
Number of office locations	96.8
Visits by eye patients per week	92.4
Number of eye patients seen weekly	92.2
Associates sharing supplementary personnel	98.2
Physicians sharing supplementary personnel	98.2
Ophthalmologists sharing supplementary personnel	98.2

established from the ratio of total ophthalmologists in a civilian, formally qualified status to the number of usable (good) responses obtained. The national inflation factor was, therefore, 9,057:8,136, or 1 + .113. Applied to the 7,741 active, good respondents cited above, it produced a weighted, national estimate of 8,616 ophthalmologists who were active, nonuniformed, and formally qualified in the United States in 1968.

#### The User of Supplementary Personnel—A Subuniverse

Of these 8,616 active ophthalmologists, a weighted estimate of 8,327 engaged in clinical practice in the sense that they devoted some

portion of their time per week—however small that portion—to the direct diagnosis and treatment of eye patients (established by question 9 of the M.D. questionnaire and question 11 of the D.O. questionnaire, see appendix III). From these 8,327 clinical practitioners, the responses to question 14 of the M.D. questionnaire and question 16 of the D.O. questionnaire further isolated a “user” subuniverse; i.e., 7,882

respondents who reported that they were assisted by supplementary personnel. It is these 7,882 users of supplementary personnel and their cumulative reports of utilization for each of eight types of supplementary personnel, according to each of the four bases of utilization, which supply the statistical base for most of the tables and textual commentary that appear in this report.

## APPENDIX II

### DEFINITIONS OF TERMS

#### Demographic Terms

*Age.*—Refers to the respondent's age in 1968. In all cases, it is calculated as the difference between 1968 and respondent's year of birth.

*Geographic area.*—The United States (the 50 States and the District of Columbia) is divided into four census regions and nine census divisions, and into 10 Standard Federal Administrative Regions as follows:

<i>Census Regions and divisions</i>	<i>States included</i>
<b>Northeast</b>	
New England .....	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Middle Atlantic .....	New Jersey, New York, Pennsylvania
<b>North Central</b>	
East North Central .....	Illinois, Indiana, Michigan, Ohio, Wisconsin
West North Central .....	Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
<b>South</b>	
East South Central .....	Alabama, Kentucky, Mississippi, Tennessee
West South Central .....	Arkansas, Louisiana, Oklahoma, Texas
South Atlantic .....	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia
<b>West</b>	
Mountain .....	Arizona, Colorado, Idaho, Montana, New Mexico, Nevada, Utah, Wyoming
Pacific .....	Alaska, California, Hawaii, Oregon, Washington

<i>Standard Federal Administrative Regions</i>	<i>States included</i>
Region I .....	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
Region II .....	New York, New Jersey
Region III .....	Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia
Region IV .....	Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee
Region V .....	Illinois, Indiana, Minnesota, Michigan, Ohio, Wisconsin
Region VI .....	Arkansas, Louisiana, New Mexico, Oklahoma, Texas
Region VII .....	Iowa, Kansas, Missouri, Nebraska
Region VIII .....	Colorado, Montana, North Dakota, South Dakota
Region IX .....	Arizona, California, Hawaii, Nevada
Region X .....	Alaska, Idaho, Oregon, Washington

*United States.*—The 50 States and the District of Columbia.

#### Terms Relating to Ophthalmology

*Administration.*—As defined in the survey questionnaires, duties with professional associations, hospital medical staffs, etc. Administrative duties related to the medical care of the ophthalmologist's own patients are excluded from this kind of activity and included under specific clinical activity engaged in.

*Associates.*—As used in this report, signifies all medical professionals, and other professionals in medically related fields, such as optometrists.

*Clinical.*—Signifies professional activity characterized by direct patient care.

*Group practice.*—The delivery of medical services by three or more physicians formally organized to provide medical care, consultation, diagnosis, and/or treatment through the joint use of equipment and personnel, and with the income from medical practice distributed in accordance with methods previously determined by members of the group.

*Hospital employment.*—Salaried employment by nongovernmental hospitals and by city, county, State, and Federal hospitals.

*Nonhospital employment.*—Salaried employment by medical school (or parent university); city, county, State, and Federal Governments (other than hospitals); and by “other” employ-

ers (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, and so forth).

*Oculist.*—Used interchangeably with “ophthalmologist.”

*Ophthalmologist.*—A physician who specializes in ophthalmology, that branch of medical science dealing with the structure, functions, and diseases of the eye.

*Optometrist.*—A specialist in optometry, the profession of examining the eye for defects and faults of refraction and prescribing correctional lenses or exercises.

*Otolaryngologist.*—Used interchangeably with “otorhinolaryngologist”; signifies a medical specialist who diagnoses and treats diseases of the ear, nose, and throat.

# APPENDIX III SURVEY QUESTIONNAIRES DOCTOR OF MEDICINE QUESTIONNAIRE

PHS-T407-1  
REV. 8-68

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS  
ACTING AS COLLECTING AGENT FOR THE  
U.S. PUBLIC HEALTH SERVICE

Form Approved  
Budget Bureau No. 68-568028

CONFIDENTIAL: All information which permits the identification of the individual will be held strictly confidential, will be used solely by persons engaged in, and only for the purposes of the survey and will not be disclosed or released to other persons or for any other purpose.

## SURVEY OF OPHTHALMOLOGISTS

1. Is your name correct, and is the address above your PRIMARY PLACE OF PRACTICE?

1  Yes      2  No

↓  
If no, please enter the correct information below:

Name: \_\_\_\_\_  
                    *First*                                      *Middle*                                      *Last*

Primary place of practice: \_\_\_\_\_  
  *Number*                                      *Street*

*City*                                      *State*                                      *Zip Code*

2. Where were you born? \_\_\_\_\_  
  *(State or foreign country)*

3. In which States do you currently hold an ACTIVE LICENSE to practice medicine?

\_\_\_\_\_

\_\_\_\_\_

4. Are you CURRENTLY ACTIVE in medicine? *(Include patient care, teaching, research, and administration.)*

1  Yes, Full-time

3  No, Not active in medicine

2  Yes, Part-time

4  No, Retired

PROCEED TO  
QUESTION 5.

**STOP!**  
REMAINDER OF QUESTIONNAIRE DOES NOT  
APPLY. PLEASE RETURN QUESTIONNAIRE IN  
THE ENVELOPE PROVIDED.

5. Which of the following categories best describes your **PRINCIPAL** form of practice or employment? (Check one)

- 01  Solo practice
- 02  Partnership practice
- 03  Group practice
- 04  Arrangement with other physician(s): non-group
- 05  Medical school (or parent university)
- 06  Non-governmental hospital
- 07  City or county government hospital
- 08  City or county government other than hospital
- 09  State government hospital
- 10  State government other than hospital
- 11  Federal government hospital (Specify agency: \_\_\_\_\_)
- 12  Federal government other than hospital (Specify agency: \_\_\_\_\_)
- 13  Other - Not listed above (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.).

If you have checked 02, 03, or 04, what is the name of your **GROUP, PARTNERSHIP** or **NON-GROUP ARRANGEMENT**?

Name of group: \_\_\_\_\_

6. In your **PRINCIPAL** form of practice or employment indicated in Item 5, are you **PRIMARYLY**: (Check one)

- 1  Self-employed
- 2  Salaried employee (other than in training or in military service)
- 3  In the military service (other than intern or resident)
- 4  Intern - Civilian
- 5  Intern - Military
- 6  Resident or fellow - Civilian
- 7  Resident or fellow - Military

7. How many **WEEKS** per year do you usually practice medicine? (Include patient care, teaching, research, and administration. Do not count vacations as weeks worked).

\_\_\_\_\_ (Weeks per year)

8. How many **HOURS** per week do you usually practice medicine? (Include patient care, teaching, research, and administration.)

\_\_\_\_\_ (Hours per week)

9. **APPROXIMATELY** what **PERCENT** of the total number of hours per week, indicated in Item 8, do you usually spend in each of the following activities?

- a. \_\_\_\_\_ % Clinical ophthalmology
  - b. \_\_\_\_\_ % Clinical otorhinolaryngology
  - c. \_\_\_\_\_ % Other clinical medical activity
  - d. \_\_\_\_\_ % Teaching (Include hours spent in preparation)
  - e. \_\_\_\_\_ % Medical research
  - f. \_\_\_\_\_ % Administration, e.g., professional associations, hospital medical staffs, etc. (Administrative duties related to the medical care of your OWN patients should be excluded in f and included in a, b, or c.)
  - g. \_\_\_\_\_ % Other (Specify: \_\_\_\_\_)
- 100 % TOTAL

If 0% of your time is spent in **CLINICAL OPHTHALMOLOGY** (Item 9a above), **STOP**, and return questionnaire in the envelope provided; otherwise continue.

---

10. A. In your **CLINICAL OPHTHALMOLOGY** practice, **APPROXIMATELY** how many **EYE** patient **VISITS** do you have during a typical week? (Include office and hospital outpatient visits)

\_\_\_\_\_ )  
(Approximate number of visits)

B. **APPROXIMATELY** how many **EYE PATIENTS** does this represent? (Patients with multiple visits should be counted only once.)

\_\_\_\_\_ )  
(Approximate number of patients)

11. In your **CLINICAL OPHTHALMOLOGY** practice, which of the services below are rendered to your patients by you or under your direction?

(Check all that apply)

- 01  Diagnostic examination (includes refractive procedures and tonometry)
- 02  Medical treatment
- 03  Eye surgery
- 04  Visual field examination and medical interpretation
- 05  Fitting contact lenses
- 06  Orthoptic training (any procedure to improve acuity or binocularity)
- 07  Prescribing low vision aids (includes optical aids greater than +4.00 addition)
- 08  Aniseikonic testing
- 09  Tonography
- 10  Other (Specify: \_\_\_\_\_ )

12. In your **CLINICAL OPHTHALMOLOGY** practice, which of the following categories best describes how you spend the **GREATEST** amount of your time?

(Check one)

- 1  General ophthalmology, medical and surgical
- 2  Corneal surgery
- 3  Retinal surgery
- 4  Pediatric ophthalmology
- 5  Ophthalmic pathology
- 6  Neuro-ophthalmology
- 7  Other (Specify: \_\_\_\_\_ )

13. What is the total number of office locations at which you currently practice **CLINICAL OPHTHALMOLOGY**?

\_\_\_\_\_ )  
(Number of locations)



14. In your **PRINCIPAL FORM OF PRACTICE OR EMPLOYMENT**, indicated in Item 5 above, do you have supplementary personnel to assist you?

1  Yes      2  No

Please indicate the NUMBER in each category below for ALL offices combined which are related to your principal form of practice or employment. Include hospital personnel ONLY if your principal form of practice or employment is hospital-based.

(Persons who spend less than 75% of their time in any one category below should be counted in category d, ophthalmic medical assistant-general.)

	NUMBER WHO WORK FULL-TIME (35 hours or more per week)		NUMBER WHO WORK PART-TIME (Less than 35 hours per week)	
	FOR YOU ALONE	FOR YOU AND ASSOCIATES	FOR YOU ALONE	FOR YOU AND ASSOCIATES
a. Secretaries, receptionists, and other administrative personnel . . . . .	_____	_____	_____	_____
b. Registered nurses. . . . .	_____	_____	_____	_____
c. Licensed practical nurses (or L.V.N.'s)	_____	_____	_____	_____
d. Ophthalmic medical assistants-general.	_____	_____	_____	_____
e. Ophthalmic medical assistants-refractive	_____	_____	_____	_____
f. Optical fitters (including opticians) . . .	_____	_____	_____	_____
g. Contact lens technicians. . . . .	_____	_____	_____	_____
h. Optical technicians (laboratory - ophthalmic or contact lenses) . . . . .	_____	_____	_____	_____
i. Orthoptists. . . . .	_____	_____	_____	_____
j. Other clinical assistants. . . . .	_____	_____	_____	_____
k. Optometrists (performing refractions and prescribing lenses on <u>OWN</u> authority) . . .	_____	_____	_____	_____

15A. If you have made entries under **FOR YOU AND ASSOCIATES** in the full-time or part-time columns in Item 14 above, how many associates, **COUNTING YOURSELF**, share these personnel?

\_\_\_\_\_  
(Number of associates)

B. Of these associates, how many are **PHYSICIANS, COUNTING YOURSELF?**

\_\_\_\_\_  
(Number of physicians)

C. Of these physicians, how many are **OPHTHALMOLOGISTS, COUNTING YOURSELF?**

\_\_\_\_\_  
(Number of ophthalmologists)

COMMENTS - General comments are invited as well as comments on specific items:

PLEASE RETURN QUESTIONNAIRE IN THE STAMPED ENVELOPE PROVIDED.

# DOCTOR OF OSTEOPATHY QUESTIONNAIRE

PHS-T407-2  
REV. 8-68

U.S. DEPARTMENT OF COMMERCE  
BUREAU OF THE CENSUS  
ACTING AS COLLECTING AGENT FOR THE  
U.S. PUBLIC HEALTH SERVICE

CONFIDENTIAL: All information which permits the identification of the individual will be held strictly confidential, will be used solely by persons engaged in, and only for the purposes of the survey and will not be disclosed or released to other persons or for any other purpose.

## SURVEY OF OPHTHALMOLOGISTS

Form Approved  
Budget Bureau No. 68-S68028

1. Is your name correct, and is the address above your **PRIMARY PLACE OF PRACTICE?**

1  Yes      2  No

If no, please enter the correct information below:

Name: \_\_\_\_\_  
*First Middle Last*

Primary place of practice: \_\_\_\_\_  
*Number Street*

\_\_\_\_\_ *City State Zip Code*

2. Where were you born? \_\_\_\_\_  
*(State or foreign country)*

3. Are you a citizen of the United States? *(Please check appropriate box)*

1  Yes, Native Born      2  Yes, Naturalized      3  No

4. What degrees have you earned **OTHER THAN** Doctor of Osteopathy or Doctor of Medicine? *(Check all that apply)*

- 1  Doctorate *(Specify Major Field: \_\_\_\_\_)*  
2  Master's *(Specify Major Field: \_\_\_\_\_)*  
3  Bachelor's *(Specify Major Field: \_\_\_\_\_)*  
4  Other *(Specify: \_\_\_\_\_)*  
5  None

5. In which States do you currently hold an **ACTIVE LICENSE** to practice osteopathic medicine?

6. Are you **CURRENTLY ACTIVE** in osteopathic medicine? *(Include patient care, teaching, research and administration).*

1  Yes, Full-time  
2  Yes, Part-time

3  No, Not active in osteopathic medicine  
4  No, Retired

**PROCEED To**  
Question 7.

**STOP!**  
Remainder of questionnaire does not apply. Please  
return questionnaire in the envelope provided.

7. Which of the following categories best describes your PRINCIPAL form of practice or employment?

(Check one)

- 01  Solo practice
- 02  Partnership practice
- 03  Group practice
- 04  Arrangement with other physician(s): non-group
- 05  Osteopathic medical school (or parent university)
- 06  Non-governmental hospital
- 07  City or county government hospital
- 08  City or county government other than hospital
- 09  State government hospital
- 10  State government other than hospital
- 11  Federal government hospital (Specify agency: \_\_\_\_\_)
- 12  Federal government other than hospital (Specify agency: \_\_\_\_\_)
- 13  Other—Not listed above (all types of insurance carriers, pharmaceutical companies, corporations, voluntary organizations, medical societies, associations, etc.).

If you have checked 02, 03, or 04, what is the name of your GROUP, PARTNERSHIP or NON-GROUP ARRANGEMENT?

Name of group: \_\_\_\_\_

8. In your PRINCIPAL form of practice or employment indicated in Item 7, are you PRIMARILY:

(Check one)

- 1  Self-employed
- 2  Salaried employee (Other than in training or in military service)
- 3  In the military service (Other than intern or resident)
- 4  Intern - Civilian
- 5  Intern - Military
- 6  Resident or fellow - Civilian
- 7  Resident or fellow - Military

9. How many WEEKS per year do you usually practice osteopathic medicine? (Include patient care, teaching, research, or administration. Do not count vacations as weeks worked.)

\_\_\_\_\_ (Weeks per year)

10. How many HOURS per week do you usually practice osteopathic medicine? (Include patient care, teaching, research, or administration.)

\_\_\_\_\_ (Hours per week)

11. APPROXIMATELY what PERCENT of the total number of hours per week, indicated in Item 10, do you usually spend in each of the following activities?

- a. \_\_\_\_\_ % Clinical ophthalmology
  - b. \_\_\_\_\_ % Clinical otorhinolaryngology
  - c. \_\_\_\_\_ % Other clinical osteopathic medical activity
  - d. \_\_\_\_\_ % Teaching (Include hours spent in preparation.)
  - e. \_\_\_\_\_ % Osteopathic medical research
  - f. \_\_\_\_\_ % Administration, e.g., professional associations, hospital medical staffs, etc. (Administrative duties related to the medical care of your OWN patients should be excluded in f and included in a, b, or c.)
  - g. \_\_\_\_\_ % Other (Specify \_\_\_\_\_)
- 100 % TOTAL

If 0% of your time is spent in CLINICAL OPHTHALMOLOGY (Item 11a. above) STOP, and return questionnaire in the envelope provided; otherwise continue.

12. A. In your **CLINICAL OPHTHALMOLOGY** practice, **APPROXIMATELY** how many **EYE** patient **VISITS** do you have during a typical week? (Include office and hospital outpatient visits.)

\_\_\_\_\_

(Approximate number of visits)

B. **APPROXIMATELY** how many **EYE PATIENTS** does this represent? (Patients with multiple visits should be counted only once.)

\_\_\_\_\_

(Approximate number of patients)

13. In your **CLINICAL OPHTHALMOLOGY** practice, which of the services below are rendered to your patients by you or under your direction?

(Check all that apply)

- 01  Diagnostic examination (Includes refractive procedures and tonometry).
- 02  Medical treatment
- 03  Eye surgery
- 04  Visual field examination and medical interpretation
- 05  Fitting contact lenses
- 06  Orthoptic training (Any procedure to improve acuity or binocularity)
- 07  Prescribing low vision aids (Includes optical aids greater than +4.00 addition)
- 08  Aniseikonic testing
- 09  Tonography
- 10  Other (Specify: \_\_\_\_\_)

14. In your **CLINICAL OPHTHALMOLOGY** practice, which of the following categories best describes how you spend the **GREATEST** amount of your time?

(Check one)

- 1  General ophthalmology, medical and surgical
- 2  Corneal surgery
- 3  Retinal surgery
- 4  Pediatric ophthalmology
- 5  Ophthalmic pathology
- 6  Neuro-ophthalmology
- 7  Other (Specify: \_\_\_\_\_)

15. What is the total number of office locations at which you currently practice **CLINICAL OPHTHALMOLOGY**?

\_\_\_\_\_

(Number of locations)

16. In your **PRINCIPAL FORM OF PRACTICE OR EMPLOYMENT**, indicated in Item 7 above, do you have supplementary personnel to assist you?

1  Yes      2  No

Please indicate the NUMBER in each category below for ALL offices combined which are related to your principal form of practice or employment. Include hospital personnel ONLY if your principal form of practice or employment is hospital-based.

(Persons who spend less than 75% of their time in any one category below should be counted in category d, ophthalmic medical assistant-general.)

	<u>NUMBER WHO WORK FULL-TIME</u> <i>(35 hours or more per week)</i>		<u>NUMBER WHO WORK PART-TIME</u> <i>(Less than 35 hours per week)</i>	
	<u>FOR YOU</u>	<u>FOR YOU AND</u>	<u>FOR YOU</u>	<u>FOR YOU AND</u>
	<u>ALONE</u>	<u>ASSOCIATES</u>	<u>ALONE</u>	<u>ASSOCIATES</u>
a. Secretaries, receptionists, and other administrative personnel . . . . .	_____	_____	_____	_____
b. Registered nurses. . . . .	_____	_____	_____	_____
c. Licensed practical nurses (or L.V.N.'s) . . . . .	_____	_____	_____	_____
d. Ophthalmic medical assistants-general. . . . .	_____	_____	_____	_____
e. Ophthalmic medical assistants-refractive . . . . .	_____	_____	_____	_____
f. Optical fitters (including opticians) . . . . .	_____	_____	_____	_____
g. Contact lens technicians. . . . .	_____	_____	_____	_____
h. Optical technicians (laboratory - ophthalmic or contact lenses) . . . . .	_____	_____	_____	_____
i. Orthoptists. . . . .	_____	_____	_____	_____
j. Other clinical assistants. . . . .	_____	_____	_____	_____
k. Optometrists (performing refractions and prescribing lenses on <u>OWN</u> authority) . . . . .	_____	_____	_____	_____

17A. If you have made entries under **FOR YOU AND ASSOCIATES** in the full-time or part-time columns in Item 16 above, how many associates, COUNTING YOURSELF, share these personnel?

\_\_\_\_\_  
*(Number of associates)*

B. Of these associates, how many are PHYSICIANS, COUNTING YOURSELF?

\_\_\_\_\_  
*(Number of physicians)*

C. Of these physicians, how many are OPHTHALMOLOGISTS, COUNTING YOURSELF?

\_\_\_\_\_  
*(Number of ophthalmologists)*

COMMENTS - General comments are invited as well as comments on specific items:

PLEASE RETURN QUESTIONNAIRE IN THE STAMPED ENVELOPE PROVIDED.

## VITAL AND HEALTH STATISTICS PUBLICATION SERIES

### Originally Public Health Service Publication No. 1000

- Series 1. Programs and collection procedures.*—Reports which describe the general programs of the National Center for Health Statistics and its offices and divisions, data collection methods used, definitions, and other material necessary for understanding the data.
- Series 2. Data evaluation and methods research.*—Studies of new statistical methodology including: experimental tests of new survey methods, studies of vital statistics collection methods, new analytical techniques, objective evaluations of reliability of collected data, contributions to statistical theory.
- Series 3. Analytical studies.*—Reports presenting analytical or interpretive studies based on vital and health statistics, carrying the analysis further than the expository types of reports in the other series.
- Series 4. Documents and committee reports.*—Final reports of major committees concerned with vital and health statistics, and documents such as recommended model vital registration laws and revised birth and death certificates.
- Series 10. Data from the Health Interview Survey.*—Statistics on illness, accidental injuries, disability, use of hospital, medical, dental, and other services, and other health-related topics, based on data collected in a continuing national household interview survey.
- Series 11. Data from the Health Examination Survey.*—Data from direct examination, testing, and measurement of national samples of the civilian, noninstitutional population provide the basis for two types of reports: (1) estimates of the medically defined prevalence of specific diseases in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics; and (2) analysis of relationships among the various measurements without reference to an explicit finite universe of persons.
- Series 12. Data from the Institutional Population Surveys.*—Statistics relating to the health characteristics of persons in institutions, and their medical, nursing, and personal care received, based on national samples of establishments providing these services and samples of the residents or patients.
- Series 13. Data from the Hospital Discharge Survey.*—Statistics relating to discharged patients in short-stay hospitals, based on a sample of patient records in a national sample of hospitals.
- Series 14. Data on health resources: manpower and facilities.*—Statistics on the numbers, geographic distribution, and characteristics of health resources including physicians, dentists, nurses, other health occupations, hospitals, nursing homes, and outpatient facilities.
- Series 20. Data on mortality.*—Various statistics on mortality other than as included in regular annual or monthly reports—special analyses by cause of death, age, and other demographic variables, also geographic and time series analyses.
- Series 21. Data on natality, marriage, and divorce.*—Various statistics on natality, marriage, and divorce other than as included in regular annual or monthly reports—special analyses by demographic variables, also geographic and time series analyses, studies of fertility.
- Series 22. Data from the National Natality and Mortality Surveys.*—Statistics on characteristics of births and deaths not available from the vital records, based on sample surveys stemming from these records, including such topics as mortality by socioeconomic class, hospital experience in the last year of life, medical care during pregnancy, health insurance coverage, etc.

For a list of titles of reports published in these series, write to:

Office of Information  
National Center for Health Statistics  
Public Health Service, HSMHA  
Rockville, Md. 20852