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ABSTRACT

Included in this booklet are facts about optometry which would be helpful for those considering entering the profession. The need for optometry, its history, accredited schools, distribution of manpower, and what the optometrist does are outlined. Over one-third of the booklet is a "Profile of a Profession" which discusses specialized optometric services (care of children with learning disabilities, care of the aged, rehabilitation of the partially sighted, contact lenses, environmental vision), optometric research, types of practice and delivery systems, optometry in the armed forces, and the professional organization, the American Optometric Association. A final section indicates the current and projected need for optometrists and colleges of optometry as well as changes and trends in the field. (SC)

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Optometry Today: the vision care profession

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FOREWORD

A clamor for improved, expanded and readily accessible health care services has emerged as a salient feature for national priority in the 70s. But how do we begin? Where?

From heartland farms to coastal cities, a generalized desire for better health care in America can be found – while every corner of the diverse health field seems permeated by complex problems, both quantitative and qualitative in nature. In short, the challenge facing health care in this decade is a general one.

A person who is handicapped, ill or injured, however, is not a generality. He is of course a unique human being with a specific health problem.

Perhaps he has a vision problem, as millions of men, women and children in this country have.

Legislators, public administrators and other opinion leaders seeking answers and solutions to the health services delivery problems of today will need to take a close look at some of these specific health problems. Optometry, America's third largest independent health care profession, can help by furnishing a penetrating glimpse into its present delivery mechanisms and by evaluating its ability to meet the ever-increasing demand for vision care services.

Years of professional leadership in providing vision care services have brought optometry to the colossal challenge of health care today. Moreover, those same years have moved America's 18,000 optometrists to a position of responsibility for finding ways to meet that challenge.

Optometry has an important role to play wherever eyesight and vision care are concerned because the profession was built to serve these specific needs. Today optometry serves to build better health care in general, and we would like to share our story with you . . .

who needs it? a nationwide look at the need for vision care

"Sight is one of man's greatest gifts. The preservation of that gift is one of his greatest challenges." So said the President of the United States, 1969.

But what exactly is the challenge?

The challenge is . . . an estimated 94 percent of those American citizens 65 years of age and over have subnormal binocular visual acuity in need of correction as compared with 46 percent of the general adult population, according to the National Health Survey in a 1960-62 study.

The challenge is . . . "more than ten million children need eye care . . . their future will only be as bright as we, the leaders of this generation, are able to make it by minimizing physical impairments or other handicaps to their health." Again, according to the President of the United States.

The challenge is . . . the rates for prevalence and degree of visual impairment among persons with a family income of less than \$3,000 are considerably higher than corresponding rates for any other income group regardless of age, according to the National Health Survey in a 1963-65 study.

The challenge is . . . at least in families where the major breadwinner is visually impaired (and uncorrected), the impairment itself is probably a factor contributing to the low income of the family, according to the National Health Survey of 1963-64.





The challenge is . . . one out of every four students nationwide has significant reading deficiencies, as reported by the U.S. Office of Education (a major factor since 80 percent of learning depends on our vision).

The challenge is . . . up to 80 percent of delinquents and semi-delinquents studied by the White House Conference on Juvenile Delinquency had learning difficulties, specifically in reading, and poor vision was found to be a contributing factor in 50 percent of these cases.

The challenge is . . . inner-city ghetto children appear to have a higher incidence of learning disabilities, perceptual difficulties and developmental visual problems than do the more "advantaged" children in other parts of the city. Already the incidence of myopia seems to be reaching epidemic proportions, as reported in an optometric study.

The challenge to preserve the vision of all Americans falls upon every citizen, young or old; but it falls particularly heavy upon those who have chosen to provide vision care services as a career.

The welfare of our country has always depended on people . . . their talents, their foresight, their determination, their well-being. Actions to preserve, protect and improve vision are also dependent — on public awareness of the role effective vision can play in the enrichment of each individual's life, and on the availability as well as effective delivery of professional vision care services.

in the beginning

Early man believed that most ills which befell him were due to unfriendly supernatural beings. One of the earliest treatments for defects of vision was to beseech the heavens to make the defects go away.

Greek philosophers, including Aristotle, discussed the mechanics of vision but it was not until the 13th century that spectacles were developed. English philosopher Roger Bacon and Spain's Benito de Valdes were among the early students of visual mechanism who developed practical methods to enhance human vision.

From 1700 to approximately 1900, spectacles were supplied in England and America through optical shops, spectacle peddlers and general merchandise stores.

A pioneer in what was to become known as "optometry" was John McAllister, a Scottish craftsman in precious metals who immigrated to Philadelphia in the late 18th century. McAllister's son, John Jr., a University of Pennsylvania graduate and manager of the Wills Eye Hospital in Philadelphia, detected and also corrected ocular astigmatism as early as 1822. The McAllisters performed ocular refractions and supplied ophthalmic corrections for such famous early Americans as George Washington, Thomas Jefferson, Henry Clay and Andrew Jackson.

By the mid-1800s, some spectacle makers and opticians began testing vision and fitting spectacles according to new knowledge in physiological optics and in the science of refraction. They began to consider each eye individually, realizing that prefabricated spectacles could not satisfy the vision needs of the people.

During the latter part of the 19th century, no legislation existed anywhere in America to regulate vision care. Many refracting opticians recognized a need for reform, this in response to public dissatisfaction with some types of vision care being provided.

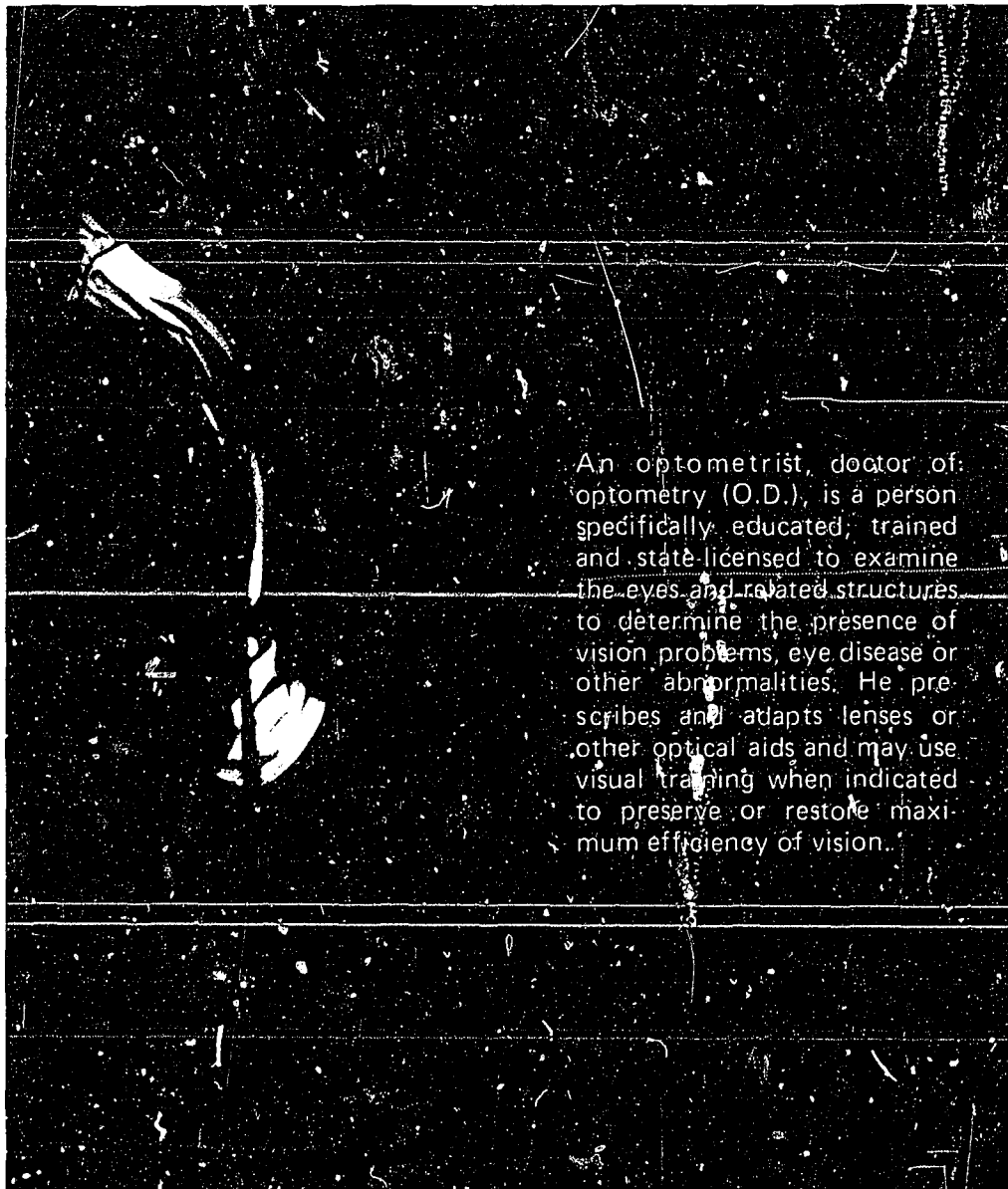
Along with several American opticians, Charles F. Prentice, an author, inventor, teacher and lecturer, organized the first meeting of the American Optometric Association in 1898 — called at that time the American Association of Opticians. Charles Lembke served as the first president.

Also among those early leaders of the profession was Andrew J. Cross, who took the lead in establishing training courses for the predecessors of optometrists. He helped establish the New York Institute of Optometry and served as the second president of the American Association of Opticians.

Efforts of optometric groups to safeguard public welfare through legislation brought visible support in 1901 when the first state optometry statute was enacted in Minnesota. By 1924 every state and the District of Columbia had laws regulating the practice of optometry as a profession.

today's optometrist

who he is



An optometrist, doctor of optometry (O.D.), is a person specifically educated, trained and state-licensed to examine the eyes and related structures to determine the presence of vision problems, eye disease or other abnormalities. He prescribes and adapts lenses or other optical aids and may use visual training when indicated to preserve or restore maximum efficiency of vision.

Today's optometrist is one of the two professionals who provide visual health care for Americans. The other eye care specialist is the ophthalmologist (formerly called "oculist") who is a physician (M.D. or D.O.) specializing in the diagnosis and treatment of defects and diseases of the eye, performing surgery when necessary or prescribing other types of treatment, including corrective lenses.

(The optician plays an ancillary role in the eye care field. He is the person who grinds lenses, fits them into frames and adjusts frames to the wearer.)

*Approved definition adopted at the 66th Annual Congress of the American Optometric Association, 1963. Definitive profiles on the profession of optometry may also be found in: U.S. Labor Department publications including, *Dictionary of Occupational Titles*, *Occupational Outlook Handbook*, *Health Careers Guidebook*, and in *Health Resources Statistics* published by the U.S. Department of Health, Education and Welfare.

TODAY'S OPTOMETRIST IS SPECIFICALLY EDUCATED

... in the sciences of optics, pharmacology, disease processes, disease detection, microbiology, zoology, neurology, physics, physiology, anatomy, psychology, social science and public health.

The professional degree program in optometry requires four years which must be preceded by at least two years at an accredited junior college, college or university. Many students, however, exceed the minimum requirement of two-year pre-professional study. In the 1968-69 academic year 38.9 percent of all first year optometry students held bachelor degrees, master degrees or higher.

Students are educated in one of twelve U. S. schools and colleges of optometry; these are accredited by appropriate regional accrediting bodies and by the American Optometric Association's Council on Optometric Education, which is recognized by the National Commission of Accrediting and the U. S. Office of Education:

ILLINOIS COLLEGE OF OPTOMETRY;
INDIANA UNIVERSITY,
Division of Optometry;
SOUTHERN CALIFORNIA COLLEGE OF OPTOMETRY;
MASSACHUSETTS COLLEGE OF OPTOMETRY;
PACIFIC UNIVERSITY,
College of Optometry;
PENNSYLVANIA COLLEGE OF OPTOMETRY;
SOUTHERN COLLEGE OF OPTOMETRY;
STATE COLLEGE OF OPTOMETRY,
State University of New York;
THE OHIO STATE UNIVERSITY,
College of Optometry;
UNIVERSITY OF ALABAMA IN BIRMINGHAM,
School of Optometry/The Medical Center;
UNIVERSITY OF CALIFORNIA,
School of Optometry;
UNIVERSITY OF HOUSTON,
College of Optometry.

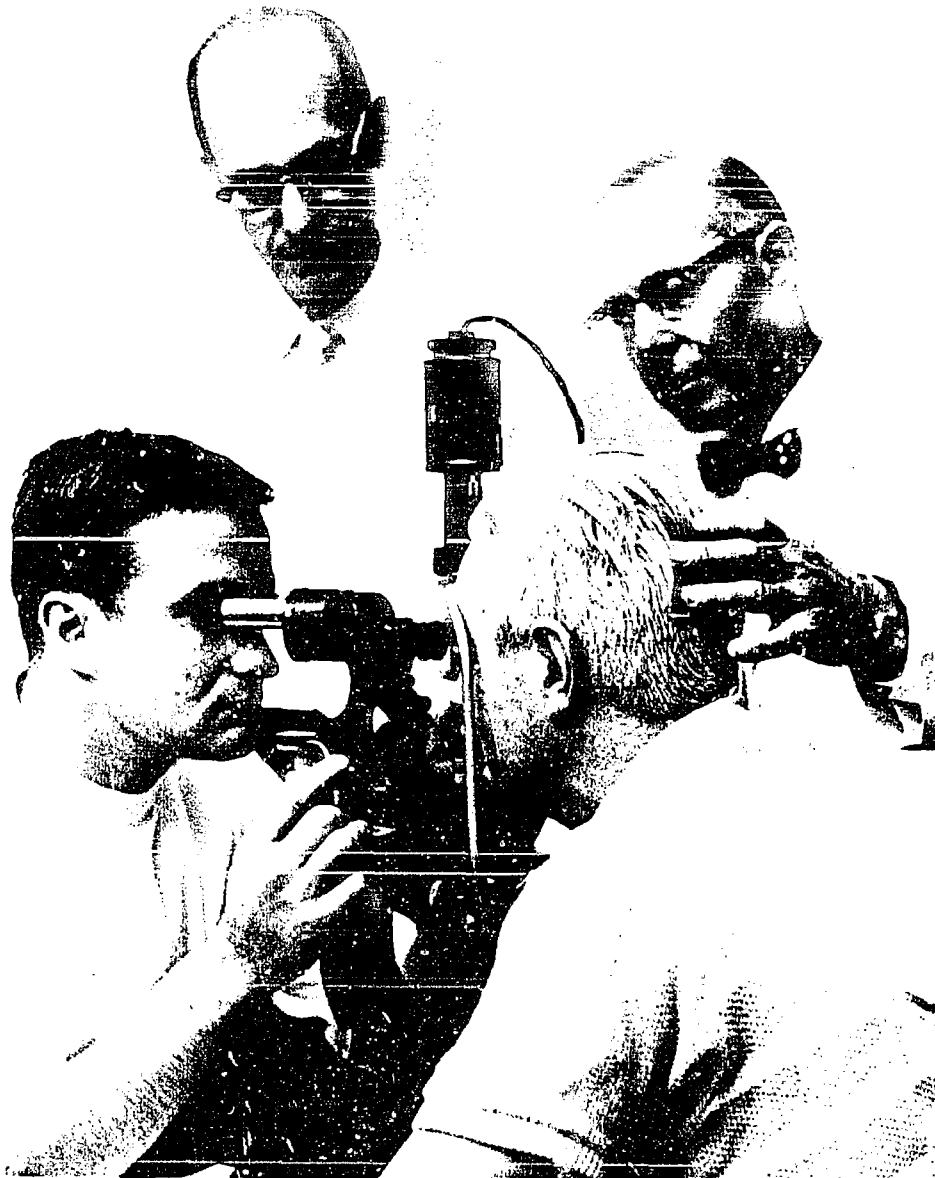
Seven of these institutions are university-affiliated. Of the five free-standing colleges chartered as non-profit institutions, one receives direct state financial aid and the others depend primarily upon income from tuition, endowments, gifts and contributions from the profession. All optometric institutions receive support through federal appropriation.

TODAY'S OPTOMETRIST IS STATE-LICENSED

...to ensure that he is educated and trained to effectively care for America's vision needs.

Virtually every state optometry law requires a graduate of an accredited school or college of optometry to successfully complete a three-part examination before a license may be granted:

1. a written examination
2. an oral examination
3. a practical examination to demonstrate his skills with modern optometric instrumentation



Enforcement power of licensure is vested, in all states, in a regulatory and licensing entity, usually in the form of a board of examiners consisting of three to five optometrists licensed to practice in that state.

To assure that optometrists who have been in practice for a number of years are kept abreast of new developments and techniques resulting from ongoing optometric and optical research, 20 states now require the applicant for renewal of license to attend a certain number of hours of continuing education each year. Efforts have recently been made to obtain similar legislation in other states, an action officially encouraged by optometry's national, professional organization, the American Optometric Association.

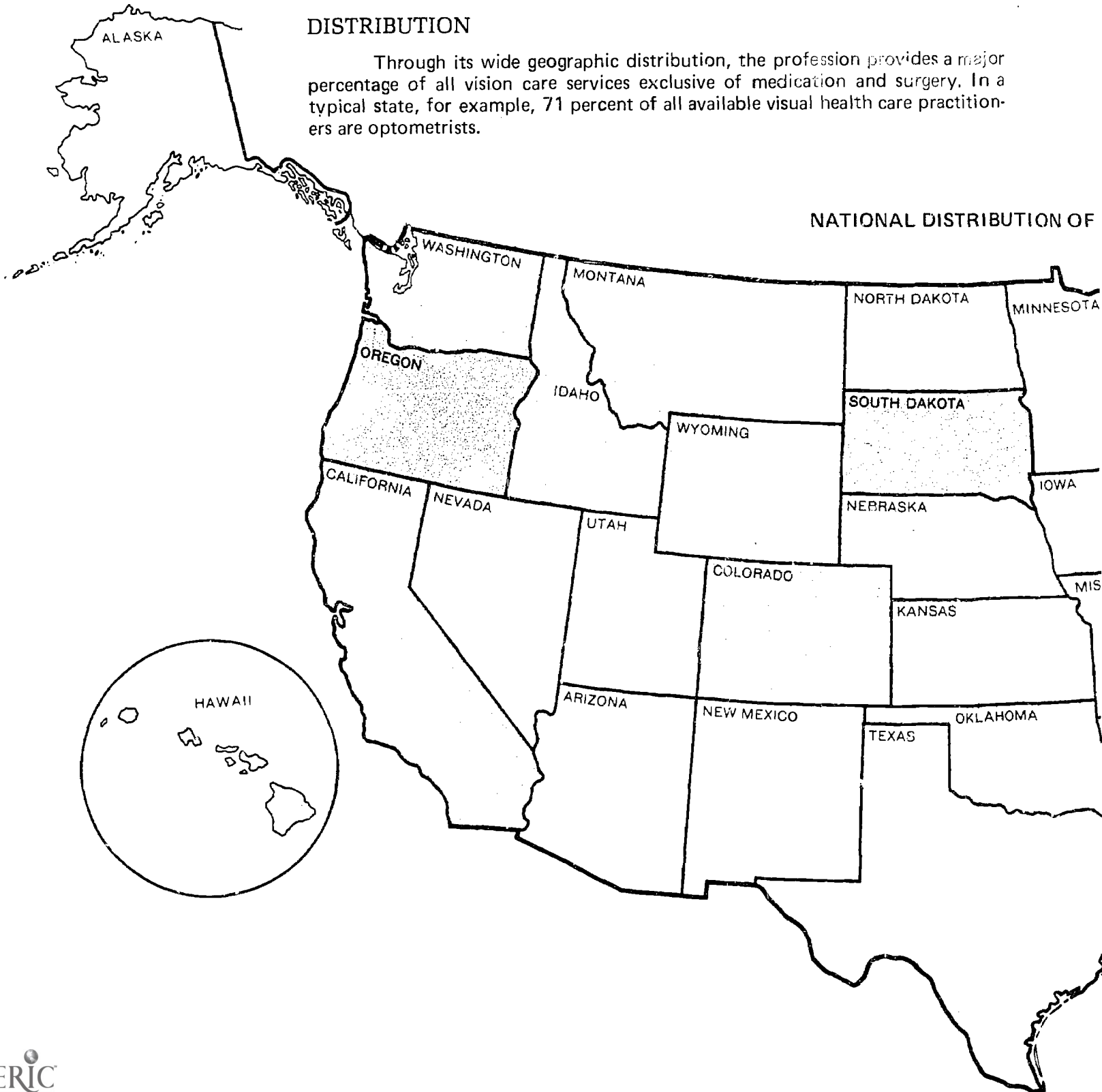
where he serves

MANPOWER

Optometry is the largest vision care profession and the third largest independent health care profession in the nation. The 18,000 optometrists in practice in the United States today provide vision care services to Americans in 6,237 different municipalities.

DISTRIBUTION

Through its wide geographic distribution, the profession provides a major percentage of all vision care services exclusive of medication and surgery. In a typical state, for example, 71 percent of all available visual health care practitioners are optometrists.



Optometric demography provides an ideal situation for delivery of conveniently accessible vision care services to beneficiaries of federal and state programs who require this type of health care.

In addition to offering convenience for the patient, there is an established system for delivery as well as for peer review of the services provided by optometrists. Established channels of communication and supervision of ethical practice are also readily available through state optometric societies which are affiliated with the American Optometric Association.

These two factors — patient convenience and established organization — can be of primary importance in such programs as Medicare, Medicaid, Maternal and Child Health Benefits, Vocational Rehabilitation, Neighborhood Health Centers, Civilian Health and Medical Program of the Uniformed Services (CHAMPUS), and Federal Employees' Health Benefits administered by the Civil Service Commission.

OPTOMETRIC MANPOWER*



KEY:



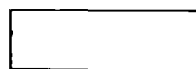
OPTIMUM RATIO
(13-14 O.D.s per 100,000 population)**



ABOVE AVERAGE RATIO
(10-12 O.D.s per 100,000 population)



AVERAGE RATIO
(9 O.D.s per 100,000 population)***



BELOW AVERAGE RATIO
(4-8 O.D.s per 100,000 population)****

* Figures based on "Table 113. LOCATION OF ACTIVE OPTOMETRISTS IN RELATION TO POPULATION: 1968" from U.S., Department of Health, Education, and Welfare, *Health Resources Statistics; Health Manpower and Health Facilities, 1969*, Public Health Service Publication No. 1509, 1969 Edition, p. 167.

** A reasonable or optimum ratio of 14 O.D.s per 100,000 population (or 1 O.D. per 7,000 population) was established by Herbert G. Mote, B.S., M.S.O.D., in preparing "A Statistical Survey of Optometric Manpower Needs," *Journal of the American Optometric Association*, Vol. 40, No. 12 (Dec., 1969) 1201-03. Because of the complex variances between this study and that presented in *Health Resources Statistics* (see footnote above), the "optimum ratio" has been expanded to include states with ratios of 13 O.D.s per 100,000 population in order to provide a more realistic view of optometric manpower distributions — particularly in states which have achieved or nearly achieved reasonable ratios in one or both studies. No state has a ratio greater than 14 O.D.s per 100,000 population.

*** *Health Resources Statistics* (see first footnotes) indicates that during 1968 the national average ratio was 9 O.D.s per 100,000 population. This United States average was based on a civilian population of 197,571,000 and a total of 18,000 active optometrists (including 611 optometrists in military service not allocated by state).

**** Since no state showed a ratio less than 4 O.D.s per 100,000 population, the ratios from 0-3 O.D.s per 100,000 population have been disregarded.

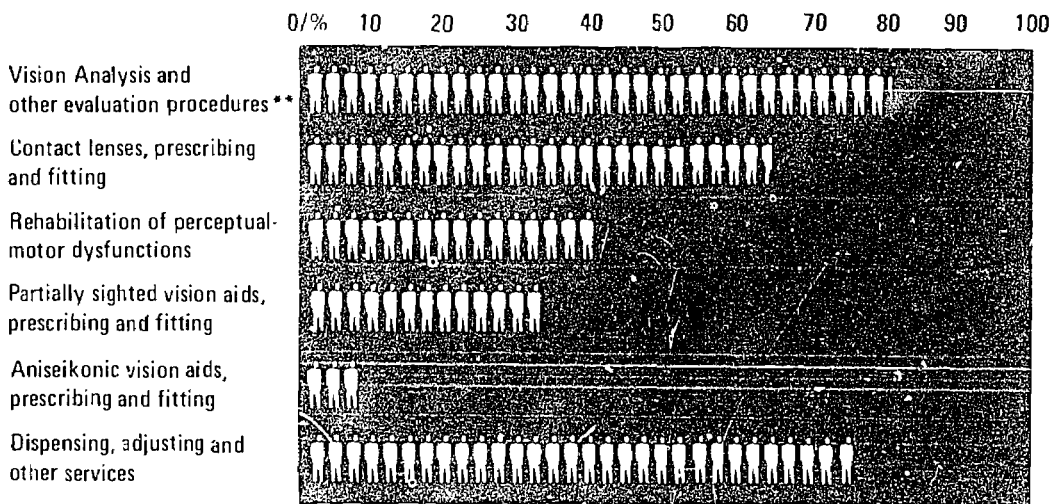
what he does

Primary vision care needs of the general public have in effect shaped the scope of optometric practice. While many special tests and examinations may be initiated by an optometrist for specific purposes or needs of the patient, the general areas of his services can be characterized by the following:

- A. EXAMINATION FOR PATHOLOGY: a comprehensive internal and external examination of the eyes to detect eye diseases or evidence of systemic diseases as revealed through the eye.
- B. VISION ANALYSIS: objective and subjective tests to determine . . .the ability of the patient's eyes to focus clearly both far and near . . . the coordination of both eyes . . . the field of vision . . . depth and color perception.
- C. EVALUATION: interpreting special tests to determine the role of vision in perception and learning ability; programming vision care, including use of prescriptions for corrective lenses or visual training techniques to correct or improve the perceptual-motor dysfunction.
- D. WRITING, VERIFYING AND ADJUSTING THE PRESCRIPTION: providing the prescription that will best satisfy the visual problem involved, an important optometric service; special optical devices such as multi-focal lenses, contact lenses and other vision aids are used; necessary adjustments assure proper positioning of the lens to allow improved visual efficiency (with contact lenses, of course, lens adjustments are particularly significant).



PERCENTAGE OF U.S. OPTOMETRISTS (LICENSED) PROVIDING SPECIFIC VISION CARE SERVICES*



*Figures based on the 1968 Survey of Optometrists (licensed) conducted by the U.S. Department of Commerce, Bureau of Census, as the collecting agent for the U.S. Public Health Service; and as reported in: "A Survey of Optometrists," *Journal of the American Optometric Association*, Vol. 40, No. 12 (Dec., 1969) 1193-96.

**Percentages indicated are low if the services of *practicing-as-well-as-licensed* optometrists are to be considered, for approximately 83% of all licensed U.S. optometrists were shown to be in full or part-time practice.

how he feels

INTERPROFESSIONAL TEAMWORK

Today's optometrist believes that responsible considerations for a patient's total health should guide even a specialized profession.

As members of a firmly-established, specialized, health care profession, optometrists have regularly detected stages of eye disease as well as other conditions which require treatment by other health professionals. Routine referrals are made by optometrists to general medical practitioners, ophthalmologists, dentists, psychiatrists, dermatologists, psychologists, educators and other professionals skilled in problems involving the perceptual system.

Naturally, interprofessional referrals are a two-way street, one that will become busier each day as the health care field changes to meet growing demands for services and manpower.

FREEDOM OF CHOICE

The right to choose freely the practitioner or type of practitioner an individual desires for treatment or correction of human ailments and anomalies is largely guaranteed to the Americans who can afford to pay for their health care.

Some, but not all, state and federal health care programs guarantee a freedom of choice to citizens who must rely upon such programs for professional vision care services.

Therefore, the American Optometric Association, its state associations and its individual members are actively encouraging legislative and administrative actions which will assure this freedom of choice for every beneficiary of every state and federal health care program, to the end that each individual has prompt access to care when he needs it, provided by the practitioner of his choice.

profile of a profession

specialized optometric services

CARE OF CHILDREN WITH LEARNING PROBLEMS

Vision plays a vital role in the intellectual and social growth and development of America's children and youth. Concerned for America's future leaders, members of several professions recognize vision problems as possible causes of slow learning or a nearly total inability to learn.

The child or youth hampered with a vision problem to the extent that he is unable to read or learn becomes, quite naturally, frustrated. Often he vents his frustration on society, becoming restless, rebellious and, in many cases, a juvenile delinquent. His behavior is a shout for help.

That help is available from today's optometrist, a vision specialist keenly aware of the need for prompt and proper care of the visual abilities of America's young.

Orthoptics and visual training, for example, have long been basic optometric techniques for either correcting or ameliorating the effects of poorly balanced eyes, unsatisfactory muscular coordination, amblyopia, strabismus or perceptual problems — all vision problems which can hinder learning ability.

Fortunately, dissemination of information developed in optometric research on learning disabilities has contributed to greater public awareness of the problems facing children with vision disorders. Handicaps which retard reading and comprehension of written or illustrated materials are still in our schools, however, and much work remains ahead.

Two optometrists are members of the National Advisory Committee on Dyslexia and Related Reading Disorders, a group appointed to serve the National Institutes of Health. In that capacity they bring optometry's special knowledge to bear on a national problem, one which is a major consideration in the lives and learning abilities of over 8 million American children.



CARE OF THE AGING

For most senior citizens, living full, active, independent lives is of primary importance; but without good vision these goals can be impossible. Lonely, empty lives are too often the only alternative. And, in some cases, the elderly become disheartened to the point where they are burdens to their children and to society — as well as to themselves.

Since some 94 percent of all individuals age 65 and over require some type of optical correction to assure them maximum visual comfort and efficiency, much optometric study and research has been directed toward their special problems. In fact, vision care needs of the aging patient have virtually produced a subspecialty within the optometric profession: vision care of the aging.

Through optometric literature, seminars and continuing-education courses, information developed through research and clinical findings in this area is continually being transmitted to practitioners throughout the country.



REHABILITATION OF THE PARTIALLY SIGHTED

Partially-sighted and legally-blind persons must first be located; they must be given the sophisticated optical aids which can improve their vision and they must be advised of facilities and services available to them.

A large percentage of cases involving legal blindness are detected by optometrists during routine eye examinations in the private practice setting. Within federal and state programs for the legally blind, optometrists are utilized for examination and certification of legal blindness.

When it is determined that a patient is legally blind, the optometrist advises him of state and federal programs which could be of financial or other assistance. This program information is especially helpful to the patient when the necessary visual rehabilitation process involves budget-straining expenses for appropriate optical goods and professional services.

One such program, which the profession of optometry has encouraged and cooperated with in establishing, is the Model Reporting Area for Blindness, a registry for the blind and legally blind which is maintained by the National Institutes of Health. This organization correlates information for purposes of granting federal aid to the states and for providing direct services (such as the Library of Congress "Talking Books" program.)

In some cases optometrists provide the visual rehabilitation of legally blind persons without calling on federal or state agencies. Several thousands of legally blind individuals have been visually rehabilitated by optometrists, either directly or indirectly (through the use of optometric procedures and optical aids developed by optometrists).

Special optical aids such as microscopic, telescopic and contact lenses have been developed by optometrists to restore functional vision for patients who have some degree of residual vision. Optometric research leading to further refinements of these special optical aids is a continuing project to which many individual practitioners and optometric teaching institutions have addressed their efforts. Dramatic progress has been made in the past 20 years and even greater breakthroughs are anticipated for the future.





CONTACT LENSES

Contact lenses, which have contributed greatly to the visual rehabilitation of the partially sighted or legally blind, represent a field in which optometry has made one of its most significant contributions to the visual welfare of Americans.

The profession has been directly responsible, through research and development, for technological breakthroughs which have brought about the widespread application of contact lenses for corrective purposes. In addition, these small optical aids have become highly successful prosthetic devices for use following surgery for removal of cataracts, an operation in which the natural lens of the eye is removed.

Even in the first years of this century, optometrists were using the large "scleral" type contact lens to correct severe visual problems which seemed virtually impossible to correct by any other means. Optometric research and development, coupled with rapid advances in optical manufacturing techniques during the past four decades, led to the smaller, lighter, more comfortable and convenient corneal contact lenses used almost exclusively today.

While contact lenses offer cosmetic value for patients who want to improve or change the appearance of their eyes, their greatest advantage is the improvement of vision, particularly for persons with vision problems uncorrectable by any other means.

ENVIRONMENTAL VISION

Optometric concern in the area of environmental vision has been, and continues to be, concentrated in two broad areas: the environment in which people work; the environment in which people live and move.

THE ENVIRONMENT IN WHICH PEOPLE WORK. As the United States expanded into an industrialized society, the number of Americans exposed to potential injury and death in industrial accidents steadily grew, increasing 40 million within the last 36 years. In 1969 alone, 2,200,000 workers were injured on the job while another 14,200 were killed.



While others worked to redesign machinery for safety, optometrists pointed out that on-the-job accidents and injuries could be appreciably reduced if every worker had maximum visual efficiency for the task at hand, in addition to non-prescription safety glasses designed to protect his eyes from injury.

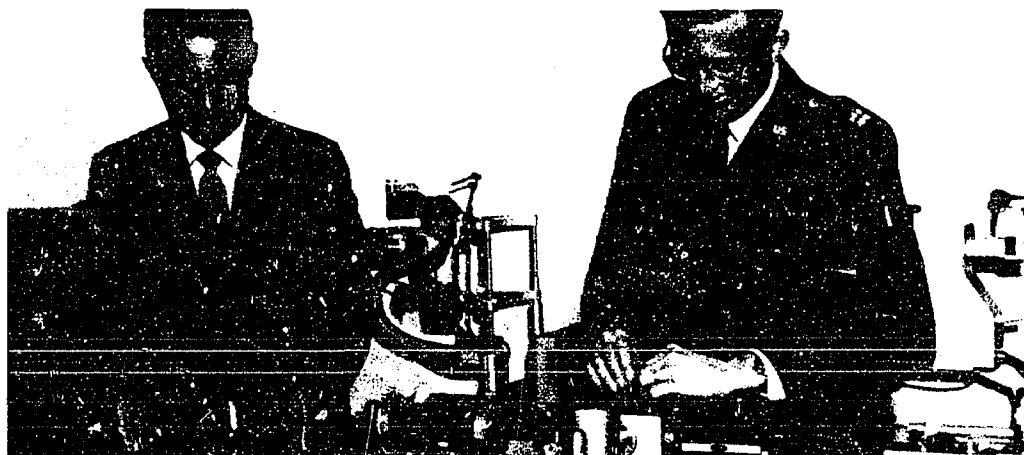
Today's optometrist recognizes that 35 percent of the nation's present total employed work force is comprised of individuals 45-64 years old, an age group in which 86 percent require optical corrections.

To meet on-the-job requirements of all workers, a highly specialized type of optometric practice has developed within the profession — particularly in heavily industrialized regions — where meeting the needs of industrial workers is of prime clinical concern.

The optometrist in this practice usually visits the employee at his job — to determine exactly what his on-the-job visual needs are, to completely analyze the worker's typical working position, and to record relevant data such as the distance from his eyes to his task. Then, after a visual examination of the worker is completed, the optometrist prescribes and fits special lenses intended for use only in that given vocational situation.

The improvement of workers' visual efficiency can result in greater industrial productivity, reduced spoilage of goods in manufacture, conservation of raw materials and inestimable savings in employment compensation costs and avoidance of human misery caused by industrial accidents.

THE ENVIRONMENT IN WHICH PEOPLE LIVE AND MOVE. The various ways Americans use their vision to live and move in the environment are as diverse as the people. Everything from accident prevention in the home and at



leisure to the effects on vision of early reading, space flight or watching television—all have a role in this aspect of environmental vision. An important example would be motorists' vision.

An area of concern to every citizen in this country is the needless slaughter of Americans on our nation's streets and highways. Annually, the toll has increased, with the 1969 record high reaching an estimated 56,000 persons killed. The safety of Americans as they travel by automobile is of utmost importance to consumers, legislators, manufacturers and everyone concerned with the prevention of accidental death or injury.

Recognizing the fact that, of the five human senses, vision is the one that is absolutely essential for driving, optometrists have actively engaged in the field of motorists' vision and highway safety since the early days of the automobile. As early as 1914, the American Optometric Association adopted a resolution concerning the relationship of proper vision and driving safety.

Throughout the years the profession's national association has actively sought inclusion of effective vision testing in state driver-licensing laws and has fully cooperated in implementation of the federal Highway Safety Act.

The unique talents of optometrists and the results of optometric research in the area of motorists' vision and highway safety have routinely been made available to local, state and national safety or law enforcement groups and agencies.

On the national level, optometrists have worked with such federal agencies as the Department of Transportation, the Bureau of Public Roads, the Interstate Commerce Commission, and with Congressional committees toward establishment of sensible and effective vision requirements for licensing.

On the state and community level, optometrists have willingly cooperated in teaching well-established optometric screening techniques to responsible driver-licensing officials and their staff.

Optometrists also have consulted with federal and state officials regarding visual factors in the design of highways and in the design, size, color and placement of highway signs. In many states optometrists serve on Medical Advisory Boards created pursuant to the U. S. Department of Transportation guidelines issued in 1967.

Helping Americans to live within their environment on their streets and highways and working to improve that environment will continue to be primary responsibilities of the optometrist.

optometric research



Today's optometrist is involved in research to develop more effective methods of detection and correction of vision problems.

Many formal research projects, (financed by federal government grants, optometric institutions or foundations) have been undertaken by individual optometric researchers and optometric institutions over the years. They have produced a wealth of information on virtually every aspect of vision, the eye and methods of ameliorating vision deficiencies.

The American Optometric Association, the American Academy of Optometry (formed in 1922) and the American Optometric Foundation (established in 1947) have played vital roles in the conduct of optometric research.

A partial listing of subjects illustrates some of the valuable research performed by optometric researchers:

- Effects of glare on vision in night driving
- Aerospace vision
- Light and dark adaptation in night vision
- Visual aids for the partially sighted
- Binocular vision
- Computer refraction
- Contact lenses
- Reading and achievement
- Photometry
- Spectrometry
- Tonometry
- Receptor optics

modes of optometric practice

SOLO PRACTICE

Most of America's vision care needs are met today by the solo optometric practitioner. According to the most recent Economic Survey of Optometrists conducted by the American Optometric Association, 77.5 percent of the 18,000 optometrists in practice today are in solo practice. In many instances, these private practitioners are the sole providers of vision care within a community, with the ratio of optometrists to general population being one optometrist for every 11,375 persons.

GROUP PRACTICE

In recent years, optometrists have begun to recognize that the group practice of optometry would provide increased service to the patient and benefits to the practitioner. There has therefore been a growing trend toward establishment of optometric practices by two or more optometrists in an "associate" relationship, as partners, or as "true groups" (as defined in Title XI of the National Housing Act which qualifies such practitioners for FHA-insured loans to erect and equip group practice facilities).

Such practices allow the optometrists to pool equipment, avoiding unnecessary duplication, and to consolidate and efficiently operate their book-keeping system. In some group practices the optometrists specialize in particular areas of vision care. For instance, under one roof and in one office, the patient may find a children's vision specialist, a contact lens specialist and a low vision specialist. Other group practices provide general vision care.

INTERDISCIPLINARY GROUP PRACTICE

The increasing awareness of optometrists and other health care professionals of the need for truly comprehensive health care in readily accessible locations is resulting today in more and more optometrists becoming members of group practices which include health specialists such as physicians, dentists, podiatrists, psychologists and other health-related professionals.

Federal, regional and state governmental units have officially encouraged and provided impetus for this movement, which promises to be the wave of the future both in private practice and in publicly-financed health care facilities.

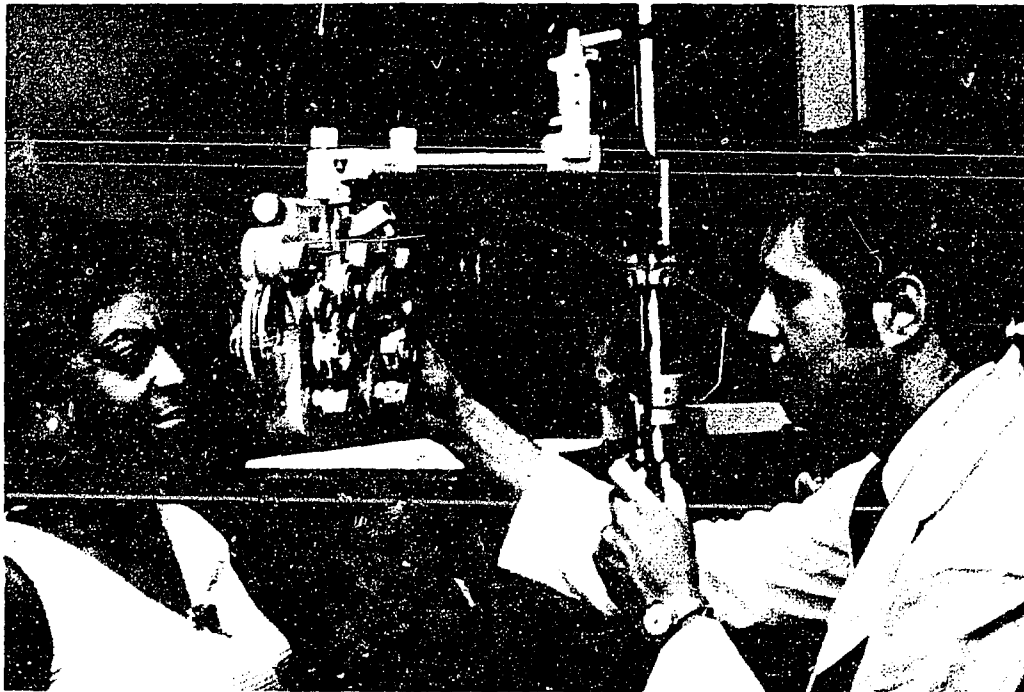
optometric services in health care delivery systems

Because the United States is composed of a great mixture of people living under a variety of conditions and residing in large cities, in small towns, on farms, in mountainous regions and on desert land, health care cannot be delivered to all of them through one channel alone.

While the quality of health care—and, in particular, vision care—must be maintained at the same high level for all Americans, the method of delivering this care must be adjusted to meet the individual needs of the people being served.

VISION CARE IN URBAN AREAS

Today, the community health center is becoming an important health unit serving the vision care needs of urban and inner-city residents. Although private health care practices are still common within urban areas, more and more optometrists are providing professional vision care services within neighborhood health care centers—in cooperation with several federal health care programs including the Community Health Services and Facilities Act, the Comprehensive Health Planning Amendments, the Model Cities and Development Act and the Partnership for Health Amendments.



REACHING ALL DISADVANTAGED PERSONS

America's poor are not confined to dwelling in large cities alone. Many of these citizens reside in small towns, rural areas and in the suburbs. It is not possible to provide health care to these scattered persons through community health centers. Therefore, the federal Medicaid program was designed and enacted to enable these Americans to obtain whatever high-quality health care they require, from a practitioner of their own choosing and within their own communities or neighborhoods.

Because every American, regardless of his financial position, has the right to receive effective vision care, the American Optometric Association participates with Title XIX of the Social Security Act (Medicaid) to guarantee the delivery of professional vision care services to all disadvantaged Americans. Thirty-six states include vision care in their Medicaid programs and most of these programs include the profession of optometry. Vision care and optometric services should be included in every state Medicaid program as a primary health care service.

VISION CARE OF THE RETIRED

Perhaps no other group of citizens deserves to reap the full benefits of our country's prosperity more than do retired Americans—men and women who have given many productive years to their country and its people.

The Medicare program is a striking achievement among recent legislation passed to guarantee Americans over 65 the privileges of senior citizens by providing low-cost yet high-quality health care.

To deliver effective vision care to our country's retired citizens, the American Optometric Association and its members participate on both the national and state levels with Title XVIII, Social Security Act (amendments of 1962); the Self-employed Individuals Tax Retirement Act and the White House Conference on Aging.

At present, optometrists are limited in providing the full scope of their services under Title XVIII and cannot provide complete optometric services to American senior citizens under the Medicare program.

VISION CARE OF CHILDREN

Every child has the right to an education to enable him to pursue a life's work of value to himself and to his fellowman. For a child to develop fully his mental and physical capacities, he must have good health to allow complete concentration upon his studies.

Since 80 percent of learning depends on our vision, the American Optometric Association and its members support and participate in programs of the Elementary and Secondary Education Act to ensure that every child has effective vision.

Optometric services are also provided for children who qualify for benefits under Title V of the Social Security Act (Maternal and Child Health Benefits).

CARE OF THE VISUALLY-HANDICAPPED

Although some children and adults are limited mentally and/or physically, these persons have the right to develop their capacities to the fullest extent their handicaps will allow. This includes the visually-handicapped.

The special techniques and sophisticated optical aids developed by optometrists are more generally available to the low-vision patient today than ever before. Availability was enhanced by passage of the Vocational Rehabilitation Amendments of 1968 and pursuant regulations, which specified for the first time since original enactment of the law, that optometrists and the specialized optical devices they prescribe should be made available as part of a state vocational rehabilitation program, insofar as possible.

The American Optometric Association and its members also support and participate in programs of the Handicapped Children's Early Education Assistance Act; Books for the Blind and other Handicapped Persons; and the National Eye Institute.

EDUCATION OF HEALTH CARE PERSONNEL

A prerequisite for the delivery of high-quality health care—and, in particular, the delivery of effective vision care—is the proper training and education of both skilled and professional health care personnel—and, in particular, vision care specialists.

The American Optometric Association, while continually encouraging the upgrading and improvement of optometric schools and colleges, also supports and participates in the Health Professions Educational Assistance Act; the Medical Library Assistance Act; the Allied Health Professions Personnel Training Act; and the Health Manpower Act of 1968.



federal/professional cooperation

In working through federal programs to deliver effective vision care to every American, the profession of optometry as well as individual optometrists and students of optometry are involved in programs with, and fully cooperate with:

- The President of the United States
- The Executive Office of the President of the United States
- The U. S. Department of Health, Education and Welfare
- The U. S. Department of Housing and Urban Development
- The U. S. Department of the Interior
- The U. S. Department of Labor
- Civil Service Commission
- The U. S. Department of Transportation
- Federal Aviation Administration
- Interstate Commerce Commission
- The U. S. Department of State
- The General Services Administration
- The U. S. Department of Defense
- The Selective Service System
- The Veterans Administration
- The Office of Economic Opportunity

optometry in uniform

Men and women serving today with the United States Armed Forces, those who have retired from active duty and the dependents of both groups are entitled to health care, including vision care, through military facilities. This guarantees to these American citizens their right to health care in whatever part of the country or the world they may be stationed.

In the United States Army, Navy and Air Force, 578 optometry officers provide an estimated 70 percent of professional vision care services to these qualified military personnel and their dependents.

Because the federal government recognizes the importance of vision care for all Americans, many more members of the profession of optometry have entered the armed forces during the past decade to devote their lives to the vision needs of those men and women serving our country. In 1960, there were 142 optometry officers in the U. S. Army. Today, there are 315. There are 83 optometry officers in the U. S. Navy, compared with only 49 in 1960; and the U. S. Air Force optometry section has grown from 149 officers in 1960 to 180 in 1970. However, the President's Commission on an All-Volunteer Armed Forces recently reported that more than 10 million persons are eligible for vision care at military facilities. The ratio of optometrists to beneficiaries is one optometrist to almost 17,300 persons. Because the reasonable ratio is one to every 7,000 persons and today's national ratio is one to every 11,375 persons, it is evident that many more military optometrists are needed.

VISION CARE FOR VETERANS

The delivery of professional vision care services to the men and women who have retired from active duty after devoting their lives to their country is provided by military optometry officers through the Health Services in the Veterans Administration; through the Military Retirees and Dependents Health Benefits (CHAMPUS); and the Veterans Hospitalization and Medical Services Modernization Amendments.

VISION CARE IN VIETNAM

The Vietnam combat situation presented new problems and challenges in the delivery of effective health care to the American soldier and his allies in the field.



To provide professional vision care services to our men and women in Vietnam, optometry officers are stationed throughout the country in combat divisions. In most cases, the vision care team in a combat zone consists of an optometry officer and two enlisted opticians, and this team is capable of examining, prescribing, fabricating and dispensing single-vision lenses, mounted in frames, on the spot.

ARMED FORCES RECRUITMENT OF OPTOMETRISTS

Optometrists enter the armed services to provide needed vision care on a volunteer basis and also through the "Doctors' Draft."

Cooperating with the Military Selective Service Act, optometrists—like physicians, dentists and veterinarians—are subject to the Selective Service System "Doctors' Draft" until the age of 35. Such draft calls have been required to procure optometrists to meet the needs of the military establishment.

By Executive Order of the President of the United States, optometry students maintaining acceptable grades are granted the II-S (student) classification and deferment of their draft obligation until they have completed their professional schooling. After receiving the Doctor of Optometry degree, many young optometrists volunteer for service in one of the three branches of the armed forces.

In 1966, the Department of Defense authorized the granting of first lieutenant, Army and Air Force, and lieutenant (junior grade), Navy, entry rank for optometry officers. Subsequently, the three services authorized two years Constructive Service Credit for the doctor of optometry degree.

Because of personnel policy differences, this credit gives Army optometrists the rank of captain or entry, but the Navy and Air Force entering optometrists come on board one grade lower: lieutenant (junior grade); first lieutenant, respectively. Optometry officers in the Navy and Air Force are eligible for the next rank, equivalent to the Army entering rank, after one year of service.

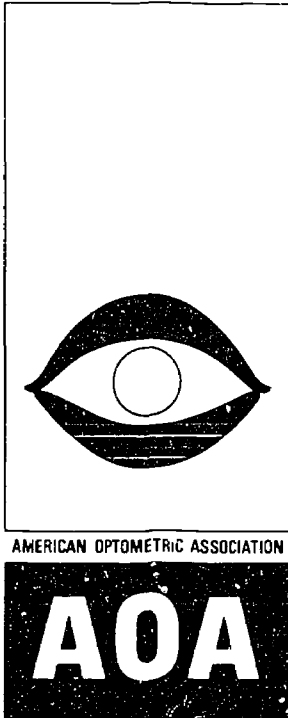
The Air Force, in an attempt to encourage optometrists to enter military service without resorting to procurement through the "Doctors' Draft," has instituted a "senior commissioning program." Through this, a selected number of seniors in the schools and colleges of optometry are commissioned as second lieutenants and receive all pay and allowances during their senior year. Upon graduation they must serve three years on active duty instead of the normal two years of obligated service time.

All three branches of the armed services are now implementing an "early commissioning" program whereby the student of optometry is commissioned in the Reserves as a second lieutenant but receives no compensation while in school. However, upon graduation and entrance into the service, the student receives the normal constructive credit for an increase in rank and, for pay purposes, is credited with the total time commissioned, including the time he was in school.

SERVING WITH THE U.S. PUBLIC HEALTH SERVICE



Today, a number of optometrists are commissioned as members of the Commissioned Corps of the U. S. Public Health Service, providing visual care in federal clinics and to American Indians through the Public Health Service Division of Indian Health.



optometry's professional association: the american optometric association

Some 75 percent of the 18,000 optometrists practicing in the United States today are members of the American Optometric Association, which operates as a federation of associations representing each of the 50 states and the District of Columbia.

OBJECTS

The objects of the American Optometric Association as stated in its constitution are: "to improve the vision care and health of the public and to promote the art and science of the profession of optometry."

STRUCTURE

The association seeks to achieve its objectives by national leadership through its councils, divisions and committees. It also seeks to achieve its objectives by joint endeavors with other organizations, agencies, groups or communities.

In addition to its eleven-man Board of Trustees, the AOA has within its organizational structure three councils, eight divisions and twenty-nine standing committees.

The Council on Optometric Education is the official accrediting body for the schools and colleges of optometry in the United States and Canada; the Judicial Council acts upon resolutions passed by the House of Delegates; and the Council on Clinical Optometric Care accredits optometric clinics and centers.

The eight divisions are Administrative, Education and Manpower, Executive, Law, National Affairs, Professional Development, Public Health Optometry and Public Information.

The committees comprise Administrative Agencies; Aid to Partially Sighted; Assistance to Graduates and Undergraduates; Career Guidance; Children's Vision; Civil Defense and Disaster; Annual Congress; Contact Lenses; Education; Environmental Vision; Federal Legislation; Insurance; International Affairs; Inter-professional Relations; Legal Advisors to the Law Division; Membership Development; Military Affairs; New Academic Facilities; Optometric Advisors to the Law Division; Optometric Assistants, Technicians and Technologists; Orthoptics and Visual Training; Practice Management; Publications; Public Health and Optometric Care; Public Information; Public Service Optometry; Research and Standards; Urban Optometry; and Vision Care of the Aging.

ANNUAL MEETING

The association holds an annual convention, known as the "Annual

Congress of the American Optometric Association," during which the House of Delegates meets. Members of the House of Delegates are those chosen delegates representing the respective constituent affiliated associations, military and other members.

PUBLIC EDUCATION

Through its Public Information Division, the American Optometric Association continually provides educational materials on vision and its care to the American public. These include booklets, pamphlets, news releases, radio and television public service announcements and educational films, filmstrips and slide series. The association also sponsors award programs to recognize and encourage distinguished service to the visual welfare of mankind. As another public information service, the association has sponsored "Save Your Vision Week" since 1927. The event is proclaimed each year by the President of the United States in accordance with a Congressional joint resolution passed in 1963.

PUBLICATIONS

The *JOURNAL of the American Optometric Association*, published monthly and distributed to members and subscribers, contains post-doctorate reference material, articles on clinical procedures, international practices and all phases of vision care by outstanding practitioners, educators, psychologists and other professionals. A tabloid newspaper, the *American Optometric Association NEWS*, is also published monthly and distributed to AOA members and other subscribers.

MAJOR AFFILIATED ORGANIZATION

The Auxiliary to the American Optometric Association was founded in 1927. Its members include the spouses of practicing optometrists. The Auxiliary has been active with other national organizations in the promotion of highway safety, career guidance and other activities. Through its fund raising efforts, the AOA Auxiliary has provided funds for research, fellowships for graduate students and visual aids to needy children. The Auxiliary is organized into departments to meet its major objectives and to assist its affiliated auxiliaries at the state and local levels.

STUDENT ORGANIZATION

Students of optometry are eligible for membership in the American Optometric Student Association. Upon graduation, these young optometrists are encouraged to assume active roles in their professional associations and to contribute fresh ideas and young leadership to the profession.

PROFESSIONAL ETHICS AND RULES OF PRACTICE

Every member of the American Optometric Association must adhere to a nine-point code of professional ethics, which sets forth certain basic duties of members and reaffirms the fundamental principle of the profession of optometry: to protect, conserve and improve human vision.

Combined with the Rules of Practice adopted by the AOA House of Delegates in 1950, the Code of Ethics provides the basis for the ethical practice of optometry. Enforcement is delegated to the constituent state optometric associations.

tomorrow's optometrist

need for more doctors of optometry

One of the primary elements necessary for expansion and improvement of vision care delivery services to every American is an increase in optometric manpower to meet the growing demand for young optometrists who are highly trained in every aspect of optometric vision care.

Twenty-six major metropolitan areas are served by optometric centers—more such centers and optometrists to staff them are needed.

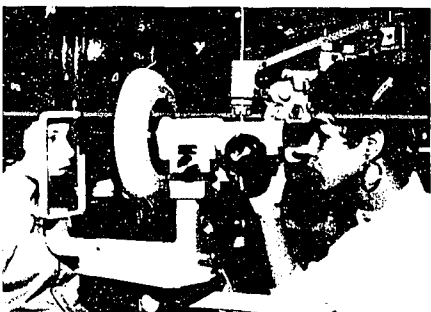
Optometrists serve in the Commissioned Corps of the U. S. Public Health Service—many more are needed to serve in this capacity.

Today 18,000 optometrists are in practice, with the ratio of optometrists to population at one optometrist for every 11,375 people—this ratio must be improved.

Many more optometrists are needed to conduct vision research; to teach in the schools and colleges of optometry; to care for vision in private and group practices; to serve on the staffs of optometric centers and neighborhood health centers; to provide optometric services in the U. S. Public Health Services and the U. S. Armed Forces.

Optometric studies indicate that a ratio of one optometrist for every 7,000 people is reasonable for the average in the United States. Today, only four states meet such criteria.

To meet a 1:7,000 ratio, U. S. Bureau of Census population projections for 1980 show that 14,202 more optometrists must be in practice by that date. With an annual attrition rate of three percent, another 6,159 optometrists will be needed to replace those who have died or retired. Thus a total of 20,361 more optometrists will be needed by 1980.





To meet this manpower need, the profession is seeking and encouraging young men and women to enter the profession of optometry. Particular emphasis is being placed on the recruitment of members of minority groups and also women.

need for more schools and colleges of optometry

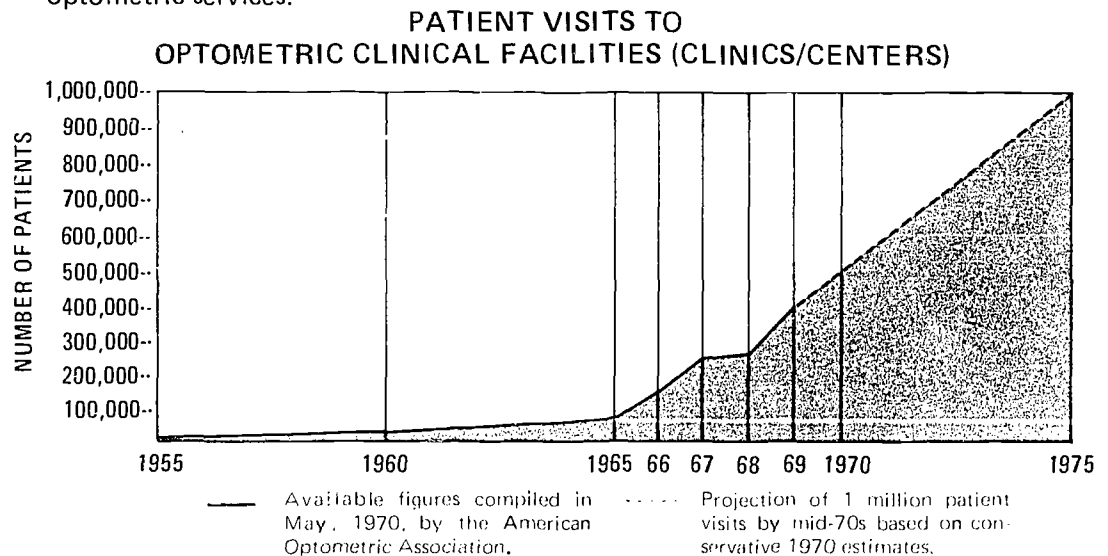
To meet the pressing demand for more optometrists, the profession of optometry has been working on national, state and local levels to establish additional university-affiliated colleges of optometry. In 1969, the University of Alabama's School of Optometry accepted its first students.

In 1970, New York Governor Nelson Rockefeller signed a bill creating the State College of Optometry to help train the 1,848 new optometrists who need to be practicing in the state by 1980, bringing the total to twelve schools and colleges of optometry throughout the United States.

optometric trends

VISION CARE DELIVERY IN COOPERATION WITH SOCIAL AND WELFARE AGENCIES

The optometric center concept, pioneered in New York City in 1956, is one proven method of delivering professional vision care services to persons living in urban and inner-city areas. Presently, the residents of twenty-six major metropolitan areas are served by optometric centers which provide the full range of optometric services.



The optometric center concept combines many of the best features of a public health clinic with most of the better features of the optometric solo practice.

Supported by a profession rather than a single individual, it is financially able to purchase, maintain and use complete and up-to-date optometric equipment and instrumentation meeting high standards established by qualified staff and administrative personnel. The economies effected by centralized record-keeping bring savings to both the center and its patients.

The dignity of the patient is of primary importance at an optometric center. Physical construction of the center reflects a concern for the health, safety, social dignity and privacy of the patient as well as for the staff.

The optometric center is a way of reaching out into the community. It is a community institution and the people have a voice in it, with a member or members of the community serving on the Professional Advisory Board of the center.

The optometric center also provides a facility for the continuing education of practicing optometrists and creates an environment where standards and excellence in optometric vision care can be achieved.

Extensive vision research is continually being conducted at various optometric centers. For example, the Optometric Center of New York is conducting research in basic visual science, clinical evaluation and therapy, health manpower and social research in optometry. Many of these programs are funded by the U. S. Public Health Service. Because the profession of optometry recognizes that progress tomorrow depends upon the gains made in research today, it is hoped that, with additional funds, such vision research can be expanded in more areas of the country.

VISION CARE DELIVERY THROUGH NEIGHBORHOOD HEALTH CENTERS

A method of delivering professional vision care services to urban and rural area residents which holds great potential is the participation of optometrists in Neighborhood Health Centers, which utilize the interdisciplinary group practice method.

Recognizing this trend in health care for the future, optometric leaders throughout the nation, since the profession of optometry's inclusion in the program as a result of the Partnership for Health amendments, have been working with local, state and regional health planners toward providing adequate vision care facilities in future health care centers. A number of such facilities are already operating and an almost equal number are in the final planning stages.

In the Neighborhood Health Center programs, optometrists work within the centers as consultants, as part-time employees or as full-time staff members—consistent with the financial ability of the jurisdiction in which the health center is, or is to be, located.

changing delivery systems

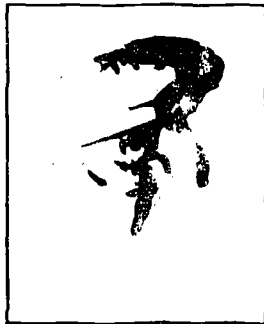
To keep pace with the ever-increasing demand for professional vision care services, optometry is developing and implementing new methods of delivering care to those who need it. Heightened awareness of the pressing need to improve health care delivery systems has provided the background and motivational factors required as a basis for change.

Conferences at the state and national levels, sponsored by the American Optometric Association and its federated state optometric organizations, have accomplished a great deal in pinpointing the problems of delivery of optometric services, with special emphasis on the inner-city and rural areas.

In addition to the critical need for more optometrists, a key factor in delivery of optometric services is the training and effective utilization of ancillary personnel, so that each optometrist may work to his highest level. This requires a delicate balance to assure optometric responsibility for those skills which require professional judgment and which cannot ethically be delegated. But this balance can indeed be effectively achieved and its success is spreading.

Also under way at various points throughout the nation are experimental programs in mass vision screening projects utilizing such methods as "eye-mobiles."

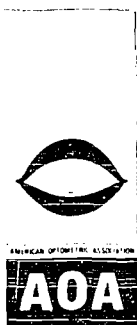
From any one or all of these professional efforts may come vastly improved ways of bringing better vision care to more people at an earlier date than might be possible under existing delivery systems. It's all part of the health care challenge — a challenge that today's 18,000 doctors of optometry are helping to meet.



This material has been prepared as a public service by the American Optometric Association.

A complete listing of documentation and references utilized in *Optometry Today: the vision care profession* is available on request.

For additional information on vision and eye care, as well as on the profession of optometry and the American Optometric Association, please write or call:



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