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Few optometrists work exclusively in activities other than patient care, and relatively few optometrists work part-time. If full-time is defined as working 30 or more hours a week, more than nine out of ten active optometrists worked on a full-time basis. Among the active optometrists, only a small proportion (3.5 percent) were engaged exclusively in non-patient care activities, generally consisting of teaching, research or administration.

Optometrists are usually self-employed. In 1973, the number and percent who were self-employed (Table A-VI-3), mostly in solo practice, was nearly 14,900 or 77 percent of all active optometrists. As with podiatrists and other health professionals, however, there is movement in optometry away from solo practice and toward partnerships or groups. (Table A-VI-4) In 1973, employed optometrists accounted for 3,600 or nearly 20 percent of active optometrists. Because of the costs of setting up a solo practice and the rapidly expanding nature of optometric practice, optometry graduates appear to be increasingly favoring associateship or partnership arrangements from among the available career alternatives.

Newly graduated optometrists also exhibit a far greater tendency than other optometrists to be employed rather than self-employed (Table VI-2). Although nearly 20 percent of all active optometrists were employed, this proportion varied from 50 percent of those under 30 years of age, to only 13 percent of those 50-59 years of age. Also, while less than 3 of 5 self-employed optometrists under 30 years of age were in solo practice, more than 4 of 5 self-employed optometrists over 40 were in this form of practice. A comparison of 1968 and 1973 data for principal form of employment shows a decline in the proportion who were self-employed and a corresponding increase in the proportion employed. While military service accounts for a large percent of those employed, a large number were employed by optometrists and other employers. This trend toward multiple practitioner arrangements and salaried employment may have implications for the characteristics of optometric clinical practice such as productivity, number and types of services offered by the practitioner, and even the geographic distribution of optometrists.

Developments in Licensure of Optometrists

The regulation of the practice of optometry has undergone a number of significant changes since 1973. The most pervasive has been the increase in continuing education requirements. Optometry appears to have one of the most major and significant continuing education programs of all the health professions. Beginning with Iowa in 1938, forty-two States have adopted some form of continuing education as a requirement to license renewal, although the nature of the requirements imposed by States vary considerably. Most States specify that credit may be given for optometric or other scientific education, lectures, symposiums, courses approved by the board for post-graduate study at a school of optometry, and courses given by the American

Optometric Association. Such programs are offered by over 100 organizations, making it easier for optometrists to update their credentials.

Geographic Distribution of Optometrists

On the basis of most measures of determining geographic unevenness of distribution of health manpower, it is generally recognized that optometrists are more evenly distributed than most other health professions. However, there continues to be disparity in the provision of optometric services to various areas of the country. This reflects the fact that the distribution of optometrists on a geographic basis needs to be linked directly to consideration of the distribution of ophthalmologists, many of whom provide some similar services. Although the distribution of optometrists is somewhat uneven, the distribution of ophthalmologists does little to alleviate the situation. A substantial proportion of the population in the United States has little or no access to the services of ophthalmologists.

Among the four geographic regions, the ratio of active optometrists to resident population varied from 6.9 per 100,000 in the South to 10.9 per 100,000 in the West, a difference of nearly 50 percent, (Table A-VI-5). Among the States, Illinois had the highest ratio, 14 per 100,000, while the lowest State, Alabama, had a ratio (5 per 100,000) only about one-third that of Illinois.

Although the same two States, California and New York, have the largest numbers of both ophthalmologists and optometrists in the Nation, there is no apparent correlation between the relative numbers of ophthalmologists and optometrists at least as related to population. On a regional basis, for both ophthalmologists and optometrists the Pacific States have the highest ratios of practitioners to population, while the lowest ratios for both disciplines occur in the East South Central States.

Nationally, there are 2 optometrists to 1 ophthalmologist and this ratio is approximated or exceeded in most States. However, notable exceptions exist. Only in Maryland and the District of Columbia, which also rank very high in relative numbers of all physicians, does the number of active ophthalmologists exceed the number of active optometrists. Although seven States--Maine, Rhode Island, Indiana, Illinois, North Dakota, South Dakota, and Nebraska--had more than three times as many optometrists as ophthalmologists, a number of other States had less than three optometrists for each two ophthalmologists. Thus, while some states are able to provide added vision services through ophthalmologists, others cannot. In addition, the services of ophthalmologists are rendered primarily in large metropolitan areas, while the ratio of optometrists to population is about the same (9 per 100,000) in metropolitan as in non-metropolitan counties. Nevertheless, optometrists provide a greater proportion of total vision care in non-metropolitan and rural areas.

Although the ratio of optometrists to population is somewhat greater in counties in SMSA's over 1 million population than in counties in SMSA's of smaller size, their distribution still remains better than that of most health professionals. It is only in non-metropolitan counties that substantially lower than average ratios of optometrists to population exist. The percent of optometrists practicing in metropolitan areas is somewhat higher than the percent of the resident population, whereas the percent of ophthalmologists practicing in these areas substantially exceeds the percent of the resident population. In non-metropolitan areas this pattern is reversed, with the percent of persons residing in those areas being more than 2 1/2 times the percent of ophthalmologists, and somewhat larger than the percent of optometrists.

An examination of persons-per-optometrist ratios for counties, often used to show geographic distribution, indicates large variation exists between the ratios. As a matter of fact, there are 840 counties (more than one fourth of all counties) that have no optometrists at all, and 552 counties (18 percent) that have a ratio of 15,000 or more residents per optometrist, far above the ratio recommended by the American Optometric Association of approximately 7,000 residents per optometrist, or 14.5 optometrists per 100,000 population.

Optometric Education

In the recent past, enrollments and subsequent graduates in schools of optometry peaked in the early 1950's, reaching their highest level until the early 1970's. (Table VI-1) In academic year 1951-2, the 10 schools of optometry enrolled 2,435 students and graduated 961 students. At that time, only 3 years of optometric school curriculum were required. During the decade of the 1950's, enrollments declined sharply, reaching the level of 1,101 students and 316 graduates in academic year 1960-61. Coincidental with the enactment and implementation of the Health Professional Educational Assistance Act of 1963, enrollment and graduates began to rise sharply. Total enrollment increased from 1,547 students in academic year 1964-65 to 3,909 students in academic year 1975-76, an increase of more than 150 percent. First-year enrollments during the same period rose more than 80 percent, from 593 to 1,078, (the larger increase in total enrollment was due to the increase in the number of years of professional education). The number of graduates rose by 140 percent, from 377 to 905 during the same period. Part of the increase in the number of graduates reflects the increase from 10 to 13 in the number of schools of optometry during this time.

In academic year 1975-77, the Nation's optometrists were being trained in 13 accredited schools and colleges of optometry. Regionally, the schools of optometry are relatively evenly distributed, although the Northeast, South, and West had three schools each, while the North Central States had four.

All of the 13 optometry schools have a 6-year curriculum which includes a minimum of 2 years of pre-optometry education at an accredited college plus 4 years of professional training at a school of optometry leading to a Doctor of Optometry degree (O.D.). In 1976, the 12 schools with 4 years of classes enrolled 1,078 first-year students and graduated 905 students. Nearly one-half of these students graduated from three schools: the Illinois, Pennsylvania and Southern Colleges of Optometry. The Pennsylvania College of Optometry produced the most graduates, 144; of the established schools, the Ohio State University College of Optometry graduated the fewest students, 52.

First-year enrollment in the 13 schools of Optometry totalled 1,078 students in academic year 1975-76 (Table VI-2). The Southern and Illinois Colleges of Optometry had the largest first-year enrollments, 152 and 151 students respectively.

In 1976, 72 or nearly 9 percent of the graduates were women. This number is expected to rise substantially in the upcoming years as more than 14 percent of the entering class in 1975-76 were female.

The location of the school of optometry is a prime factor in determining where the optometrist actually practices after graduation. More than four out of five optometrists under age 45 practice in States with schools of optometry, and are graduates from the school within the State. The proportion of all active optometrists who graduated from schools within their State of practice is more than 92 percent in Illinois, 86 percent in Pennsylvania, 81 percent in California and 77 percent in Massachusetts (Tables A-VI-5 and A-VI-7).

Data from the 1973 inventory of optometrists show that schools of optometry make a varied contribution of optometrists to non-metropolitan areas. More than 2 of 5 graduates of two schools, the Southern College of Optometry and the Pacific University College of Optometry, practice in non-metropolitan areas. Three other schools have contributed nearly one-third of their graduates to these areas--Illinois, Houston, and Indiana. Together, these schools account for three out of four optometrists practicing in non-metropolitan areas. One school, the Illinois College of Optometry and its predecessors in Illinois, graduated approximately one-third of all active optometrists in the United States (Table A-VI-8).

Trends in Optometry Education

Optometry is one of several health professions that serves the public as a means of entry into the health care system. As such, the forces for change in the optometric curriculum are similar to those confronting the other health disciplines. Most notable among these forces is the rapid expansion of knowledge of the eyes, the expanding

scope of optometric practice, increased social awareness of the importance of proper eye care, student demands for improved curricular relevance, and the priorities of external funding sources. Since many disease entities have observable manifestations in the eye, the optometry curriculum is being broadened to improve the continuity of vision care for the patient, serving as a bridge between the medical and optometric professions. This is resulting in a trend toward primary vision health care in optometric practice.

The changes that are occurring in optometric education fall into two basic categories: content of curricula and location of training. Curricula content is being changed in many ways, including revisions to accommodate the addition of new knowledge and new areas of emphasis. Courses in human nutrition and in the behavioral and sociological aspects of health and disease are new areas of content and areas of increased emphasis, and added emphasis is being placed on the areas of low vision training, rehabilitative procedures, pediatric and geriatric optometry, as well as on training in community, environmental and public health. The most common areas of change are in training of students to detect pathological departure from the health of the eye, as well as the use of diagnostic drugs. The latter has necessitated increased curricular emphasis on general and ocular pharmacology. Congress recognized the need for change by a provision in PL 94-484 for grants and contracts for curriculum development in schools of optometry.

Other curricular trends are: earlier student contact with patients to improve the student's perception of the relevance of the basic sciences to clinical practice; elimination or modification of the "lock-step" curriculum to permit the student to progress more at his own pace; the greater use of modern educational technology such as the use of television and computer-assisted instruction; and the increased offering of electives to permit the student to pursue knowledge in areas of special interest. Remedial programs are also being offered with the objective of retaining students in academic difficulty in schools and reducing attrition rate in schools. As indicated earlier, continuing education has become a major activity of many schools, since a large majority of the States now require a demonstration of competency in order to obtain re-licensure for optometric practice.

Major changes have been made recently in the specific setting or location of training. Numerous instances exist where the student is receiving part of his instruction in external clinical settings such as preceptor offices, health maintenance organizations, community clinics and special optometric clinics established in underserved areas. These off-campus training sites have greatly facilitated the teaching of the utilization of optometric auxiliaries, demonstrated new services, provided health services, exposed students to rural and inner city practice possibilities and developed interdisciplinary learning opportunities.

Optometrists and Delivery of Care

The role of the optometrist as a provider of primary care has increased steadily in importance in recent years. The optometrist also has assumed a larger role in military settings, as well as in institutional care as typified by the presence of optometrists in Health Maintenance Organizations. In this setting, the optometrist may evaluate all patients who report any visual problems. In a number of States, optometry State laws have been redefined to reflect the recognition of optometrists as primary vision care providers. In these states, optometrists may ascertain the presence of disease or pathological conditions and refer the patient to the appropriate medical practitioner for further diagnosis and treatment.

In terms of the need for vision care services, both met and unmet, about half of the population who require some form of vision care services actually receive them. About nine out of ten of the patients who need vision care services require services which are within the present scope of optometry. Only about 10 percent of the population with vision care problems require medical treatment or surgery which must be provided by ophthalmologists, as shown by the 1968 NCHS Survey of Ophthalmologists.

In terms of actual services currently being provided, about two-thirds of the population, or 33 million people receiving vision or eye care receive such care from optometrists. About one-third or 17 million of the population seek and receive vision or eye care from ophthalmologists. As reports show, a substantial area of overlap of services exists in the provision of refractive services, and at least some proportion of the population that receives ophthalmological care could go to optometrists for this care.

The number of optometrists is increasing, and so is the number of patients each can see, (i.e. productivity). A major factor in this increased productivity on the part of optometrists is their rising use of auxiliaries. While only about one-third of active optometrists in 1973 utilized full-time auxiliaries, there appears to be a far greater tendency on the part of younger, newly graduated optometrists to utilize auxiliaries than optometrists in practice for a number of years. In part, this may reflect the training in optometry schools that emphasize utilization of auxiliary services in optometric practice. While data on specific services provided by chairside optometric auxiliaries does not exist, data from a 1973 survey suggest considerably greater productivity on the part of optometrists utilizing auxiliaries than optometrists without such services.

On the average, optometrists working in patient care activities on a full-time basis perform approximately 1,350 vision analyses (basic measure of productivity) a year, or about one vision analysis per hour for an optometrist working approximately 30 hours per week. Those optometrists utilizing full-time auxiliaries perform approximately

1,600 vision analyses annually, or nearly 20 percent more than the average of all active optometrists.

Optometrists in smaller metropolitan areas also appear to have far greater productivity (in terms of number of vision analyses) than do optometrists in larger metropolitan areas. This may be related to the availability of ophthalmological services in the larger metropolitan areas, in that some patients may utilize the services of an ophthalmologist instead of an optometrist. In non-metropolitan areas, on the other hand, the reverse pattern in productivity seems to be true. Optometrists in larger counties perform more vision analyses, on the average, than do their counterparts in smaller counties.

The Future Supply of Optometrists

The supply of optometrists is expected to rise sharply in the coming years. Several projections of the supply of active optometrists to 1990 are presented here under different assumptions as to graduate input over the projection period. 1/ The projection findings under each set of these different assumptions are described below and are summarized in Tables VI-3 and VI-4.

The basic determinant of the future supply of optometrists is very clearly the current and anticipated enrollment in optometry schools. As indicated earlier, optometry enrollments have grown rapidly since the early 1960's, with new Federal legislation providing much of the impetus for the recent increases. In terms of the projected supply of optometrists, the most realistic assumption is that schools will meet the capitation requirements set down by P.L. 94-434, that of increasing full-time first-year enrollments in the 1978-79 academic year in each school by 5 percent or 5 students over the 1976-77 enrollment, depending on the size of the 1976-77 first year class. No additional growth or enrollment per existing school or college is anticipated, although the basic projection series also assumes that one new school of optometry will open during the projection period--most likely a Southern regional school. The basic projection of the graduating classes of 1973-74 through 1989-90 then results in a total gross graduate input of 16,757 for that period. On this basis, the supply of active optometrists is expected to increase from 19,900 in 1975 to 22,000 in 1980 and to 26,700 in 1990. Thus, the number of active optometrists is expected to increase by about one-third between 1975 and 1990, or about 2 percent a year, slightly faster than the growth between 1970 and 1975. The ratio of active optometrists to population is projected to increase somewhat by 1990, reaching 10.9 per 100,000 population, as compared with 9.3 per 100,000 population in 1975. For the purposes of this report, the basic assumption is believed to provide the most realistic supply estimates.

1/ See Appendix (A-VI-8) for description of Methodology.

By way of contrast, if full-time first year enrollments should rise substantially beyond those mandated by the legislation and assumed in the basic projection series, the increases in active optometrists would be even larger. For this "high" projection series, an annual increase of 1 percent per year in enrollment per existing school above and beyond increases described in the basic series was used, and again it was assumed that only one new school would open in academic year 1981-82. In this estimate, the number of optometrists would be slightly higher than the basic estimate, or 27,100 by 1990, a ratio of 11.1 optometrists per 100,000 population.

On the other hand, if schools meet the requirements of P.L. 94-484 by providing for the specified proportion of full-time students to be comprised of residents of States in which there are no accredited schools of optometry and if no new schools of optometry open, then first-year enrollments would then be maintained at about the 1976-77 levels. Under this "low" estimate, the supply of optometrists would reach 26,100 by 1990, for a population ratio of 10.6 optometrists per 100,000 population.

Although the distribution of future graduates can not be projected with any degree of precision, current estimates are based upon the assumption that there will be little improvement in the geographic distribution of optometrists. The proportion of recent graduates from schools of optometry practicing in non-metropolitan areas is about the same or slightly lower for nine out of ten established optometry schools as compared to the proportion of total graduates practicing in these areas.

Requirements for Optometrists

Although it is difficult to determine the exact level of requirements for optometrists, it is likely that the projected supply of optometrists will be roughly in balance with the number of optometrists required.

There are several ways to measure requirements. One measure is the optimum ratio of 14.3 optometrists per 100,000 population utilized by the American Optometric Association. Such a ratio if applied to projected 1990 population would indicate a requirement for about 35,000 optometrists in that year, well above the anticipated supply. Another measure of requirements for optometrists might be to apply the best State ratio in 1975 as a standard to be met by all States. Such a standard would show a requirement for about 34,000 optometrists in 1990, again well above the anticipated supply of 26,700 active optometrists.

Thus, if these "need" related standards are applied, there would appear to be a shortage of 7,000-8,000 optometrists projected for 1990.

On the other hand, the Supply Output and Requirements Model (SOAR) generates an increase in requirements for optometrists of nearly one-third in 1990 over current levels. These requirements for optometrists take into account recent trends in per capita utilization of optometric services, and are based on increased utilization of optometric services by the population during 1975 to 1990. Such levels of projected requirements for optometrists are about equal to the projected supply of optometrists in 1990. All things considered, the best judgement is that supply and requirements will be in balance by 1990.

Data and Analytical Needs

As indicated previously, 1973 data from the Optometric Manpower Resources Project supported by the Bureau of Health Manpower are the latest available data on optometrists.

However, more current data on optometrists are currently being collected in States participating in the Cooperative Health Statistics System, and also by means of the Bureau of Health Manpower Inventory. But data and standards are needed in the designation of health manpower shortage areas, and for health manpower analysis of data from small geographic areas. It would also be desirable to have another data point for trend analysis of optometric data. The only reliable data on optometrists are from the NCHS 1968 and 1973 surveys.

Optometrist Projection Methodology

Estimates of the number of active optometrists for 1975-90 were calculated utilizing the data from the 1973 Bureau of Health Manpower/American Optometric Association survey of optometrists as a base. It was assumed that the base reflected a point in time of December 31, 1973. Data on graduates of optometry for 1974 through 1976 were obtained from school reports on FY 76 Capitation Grant applications; the American Optometric Association provided estimates of first-year enrollments through 1975-76. Graduate projections to 1990 were computed from the number of first-year students reported 4 years earlier utilizing an attrition rate of 12 percent in both the basic methodology and the alternative supply projections in line with the most recent experience. Thus, 88 percent of entering optometry students are projected to graduate 4 years later. If a different attrition rate were used, of course, the graduate component would change somewhat, but the overall impact on the total supply estimates would be minor. Under the basic methodology, for example, if a 10

percent attrition rate were used, only about 300 additional graduates would be expected over the projection period. If a 15 percent attrition rate were used, about 500 fewer graduates of optometry schools would be expected over the projection period.

Separation rates used in the basic methodology and in the alternative approaches were derived from age specific death and retirement rates for white males developed by the National Center for Health Statistics, 1/ and the Bureau of Labor Statistics. 2/

There was no evidence to suggest that optometrists, on the average, tend to live longer than males in the general working population. For this reason age specific mortality rates developed by the Department of Labor were applied to the optometrist population.

In contrast to the mortality experience, however, information does exist that suggests variation in retirement patterns between optometrists and all working males. For example, in comparing total male labor force participation rates with age-specific proportions of optometrists that are active (1973 Survey data), it was found that, in general, a higher proportion of optometrists were "active" for each age group. Based on these findings, published age-specific retirement rates for all male workers were adjusted to better reflect the apparent experience indicated for optometrists. Over the projection period, use of the adjusted series reduced estimated requirements of optometrists 25 percent below that obtained by not undertaking such a modification.

1/ Death rates from abridged life tables--U.S., 1969-71, white male and white female rates (unpublished 5-year age groups).

2/ Retirement rates are for the general male and female labor force, 1970, as published in Bureau of Labor Statistics. Length of Working Life for Men and Women--1970, Monthly Labor Review, pp. 31-35, February 1976.

Table VI-1. Schools of optometry and number of students and graduates: selected years, 1964-65 through 1975-76

Academic year	Schools	Students 1/		Graduates
		Total	First-year	
1975-76.....	12	3,909	1,078	905
1974-75.....	12	3,704	1,024	806
1973-74.....	12	3,529	988	684
1972-73.....	12	3,328	984	691
1971-72.....	12	3,094	906	683
1970-71.....	11	2,831	884	528
1969-70.....	11	2,488	786	445
1968-69.....	10	2,203	771	441
1967-68.....	10	1,962	649	477
1966-67.....	10	1,892	669	481
1965-66.....	10	1,745	643	413
1964-65.....	10	1,547	593	377

1/ Fall enrollment of undergraduate students.

Source: American Optometric Association.

Table VI-2. Enrollment and graduates in schools and colleges of optometry: 1975-76

School	Total enrollment	1st	2nd	3rd	4th	Graduates (1976)
Total.....	2,297	1,070	1,002	221	206	205
University of Alabama.....	107	41	23	20	23	22
Southern California College of Optometry.....	351	70	105	85	61	61
University of California.....	246	64	61	60	59	57
Illinois College of Optometry.....	570	151	145	136	130	118
Indiana University Division of Optometry.....	274	70	69	68	72	72
Massachusetts College of Optometry.....	270	71	80	57	60	60
Western State University, Michigan.....	21	21	-	-	-	-
State University of New York College of Optometry.....	106	41	23	22	20	20
Ohio State University College of Optometry....	219	57	57	51	52	52
Pacific University College of Optometry.....	301	85	81	67	60	60
Pennsylvania College of Optometry.....	555	130	139	131	145	144
Southern College of Optometry... ..	590	152	144	165	129	130
University of Houston College of Optometry....	266	69	71	57	69	69

Source: Council on Optometric Education, Annual Survey of Optometric Educational Institutions. Bureau of Health Manpower, Health Professions Schools, Selected Enrollment Data 1970-71/1977-70, October, 1976.

Table VI-3. First year enrollments and graduates in optometry schools under basic and alternative assumptions: actual 1971-72 through 1975-76, projected 1976-77 through 1989-90

Academic year	First-year enrollment			Graduates		
	Basic methodology	Alternative assumptions		Basic methodology	Alternative assumptions	
		Low	High		Low	High
1972-73.....	1,004	1,004	1,004	--	--	--
1973-74.....	989	989	989	794	704	754
1974-75.....	1,024	1,024	1,024	806	806	806
1975-76.....	1,078	1,078	1,078	884	884	884
1976-77.....	1,134	1,134	1,134	870	870	870
1977-78.....	1,153	1,134	1,153	901	901	901
1978-79.....	1,189	1,134	1,189	949	949	949
1979-80.....	1,189	1,134	1,201	998	998	998
1980-81.....	1,189	1,134	1,213	1,015	998	1,015
1981-82.....	1,213	1,134	1,249	1,046	998	1,046
1981-83.....	1,213	1,134	1,261	1,046	998	1,057
1983-84.....	1,213	1,134	1,274	1,046	998	1,067
1984-85.....	1,213	1,134	1,267	1,057	998	1,099
1985-86.....	1,213	1,134	1,300	1,057	998	1,110
1986-87.....	1,213	1,134	1,313	1,067	998	1,121
1987-88.....	--	--	--	1,067	998	1,133
1988-89.....	--	--	--	1,057	998	1,141
1989-90.....	--	--	--	1,067	998	1,155

Table VI-4. Supply of active optometrists and optometrist/population ratios, using basic methodology and alternative assumptions: actual 1970 and 1975, projected 1980-90

Projection series	1970	1975	1980	1985	1990
Number of active optometrists					
Basic methodology...	18,400	19,900	22,000	24,400	26,700
Alternatives:					
Low.....	18,400	19,900	22,000	24,200	26,100
High.....	18,400	19,900	22,000	24,500	27,100
Rate per 100,000 population					
Basic methodology...	9.0	9.3	9.9	10.4	10.9
Alternatives:					
Low.....	9.0	9.3	9.9	10.3	10.6
High.....	9.0	9.3	9.9	10.5	11.1

Source: 1970 active optometrists derived from data collected in the 1968 NCMS Vision and Eye Care Manpower Survey. 1975 active optometrists derived from data collected in the 1972-73 BHM Inventory of Optometrists conducted by the American Optometric Association.

Population: U.S. Bureau of the Census, Current Population Reports, Series P-25, No. 601 (Series II). Total population as of July 1, includes armed forces overseas.

Table A-VI-1. Number and percent of total optometrists by age and activity status: 1973

Age group	All optometrists	Activity status				
		Active	Total	Retired	Inactively Unemployed non graduate	Other unemployed
Number of optometrists						
All ages.....	21,627	12,265	2,422	1,217	60	114
Less than 30.....	1,700	1,690	90	0	50	22
30-39.....	3,159	3,002	77	5	0	12
40-49.....	5,674	5,279	395	27	0	29
50-59.....	6,005	6,236	649	144	0	34
60-69.....	2,655	2,177	470	341	2	14
70 and over.....	1,503	793	710	667	0	3
Unknown.....	33	0	33	33	0	0
Percent						
All ages.....	100.0	56.3	11.2	5.6	0.3	0.5
Less than 30.....	100.0	95.0	5.0	-	2.0	1.2
30-39.....	100.0	97.6	2.4	0.2	0.3	0.4
40-49.....	100.0	93.0	7.0	0.5	-	0.5
50-59.....	100.0	90.6	9.4	2.1	-	0.5
60-69.....	100.0	82.0	10.0	12.0	0.1	0.5
70 and over.....	100.0	52.0	47.2	44.4	-	0.2

Note: Percents may not add to totals and subtotals due to independent rounding.

Table A-VI-2. Number and percent of active optometrists by racial/ethnic category: 1973

Racial/ethnic category	Number of optometrists	Percent
All categories.....	12,269	100.0
White/Caucasian.....	10,652	96.8
Total minorities.....	400	2.5
Black/Negro.....	105	0.5
Japanese/Chinese.....	200	1.5
Other, Asian.....	9	1/
Indian/Eskimo/Alut.....	12	0.1
Mexican American.....	37	0.2
Puerto Rican.....	1	1/
Other Latin American.....	10	0.1
All other.....	10	0.1
Not reported.....	133	0.7

1/ Less than 0.05 percent.

Table A-VV-3. Percent of self-employed optometrists, by form of self-employment and age: 1973

Form of self-employment	All ages	Less than 30	30-39	40-49	50-59	60-69	70 and over
Total..	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Solo practice.	79.9	50.0	70.7	82.5	83.4	83.2	84.7
Partnership...	16.9	34.9	25.0	14.6	13.6	14.4	12.0
Group.....	3.3	6.2	4.3	2.9	3.0	2.5	2.5
Total..	100.0	5.5	15.6	20.2	34.5	11.6	1.0
Solo practice:	100.0	4.0	13.0	29.9	36.1	12.1	4.1
Partnership..	100.0	11.3	23.1	25.0	27.0	9.9	2.9
Group.....	100.0	10.5	20.7	25.7	31.4	0.0	2.9

Note: Percents may not add to 100.0 due to rounding.

Table A-VI-4. Number and percent of active optometrists by principal form of employment: 1973

Principal form of employment	Number of optometrists	Percent
Total.....	12,265	100.0
Self employed:		
Total.....	11,026	77.2
Solo practice.....	11,095	61.7
Partnership.....	2,514	13.1
Group.....	407	2.5
Employed:		
Total.....	1,565	10.5
Federal government--military.....	405	2.1
Federal government--nonmilitary.....	32	0.2
State or local government.....	40	0.2
Professional corporation 1/.....	790	4.1
Optometrist.....	1,064	5.5
Ophthalmologist.....	157	0.0
Physician other than ophthalmologist.....	16	0.1
Multidisciplinary group practice.....	174	0.9
Nonprofit organization.....	369	1.9
Profitmaking firm or manufacturer.....	430	2.2
All other.....	00	0.4
Not reported.....	004	4.2

1/ Established after 1969.

Notes: Percents may not add to totals and subtotals due to independent rounding.

Table 1-VI-5. Number of active optometrists and optometrist/
population ratios, by geographic division and State
December 31, 1973

Division and State	Number of active optometrists	Resident population July 1, 1974 (in 1,000's)	Rate per 100,000 population
United States....	12,265	202,054	2.2
New England.....	3,201	12,145	11.9
Connecticut.....	226	3,030	0.6
Maine.....	124	1,039	11.9
Massachusetts.....	749	5,799	12.9
New Hampshire.....	72	794	9.1
Rhode Island.....	126	967	13.0
Vermont.....	44	466	9.4
Middle Atlantic.....	3,322	37,401	2.1
New Jersey.....	675	7,325	9.2
New York.....	1,590	10,714	0.7
Pennsylvania.....	1,120	11,662	9.5
South Atlantic.....	2,204	32,602	6.0
Delaware.....	30	573	6.6
District of Columbia..	60	734	9.3
Florida.....	621	7,745	0.0
Georgia.....	291	4,010	6.0
Maryland.....	210	4,074	5.2
North Carolina.....	336	5,302	6.3
South Carolina.....	179	2,724	6.6
Virginia.....	326	4,054	6.7
West Virginia.....	135	1,700	7.6
East South Central.....	921	12,206	6.7
Alabama.....	101	3,546	5.1
Kentucky.....	225	3,329	6.0
Mississippi.....	124	2,317	5.4
Tennessee.....	363	4,025	0.9
West South Central.....	1,402	20,170	7.1
Arkansas.....	163	2,035	6.0
Louisiana.....	225	3,746	6.0
Oklahoma.....	273	2,659	10.2
Texas.....	820	11,030	7.0

Table A-VI-5. Number of active optometrists and optometrist/
population ratios, by geographic division and State:
December 31, 1973 (cont)

Division and State	Number of active optometrists	Resident population July 1, 1974 (in 1,000's)	Rate per 100,000 population
East North Central.....	9,262	50,022	10.5
Illinois.....	1,569	11,175	10.0
Indiana.....	530	5,304	10.1
Michigan.....	745	9,051	0.2
Ohio.....	974	10,743	9.1
Wisconsin.....	436	4,539	9.6
West North Central.....	1,658	16,925	9.2
Iowa.....	319	2,863	11.0
Kansas.....	247	2,264	10.9
Minnesota.....	361	3,090	9.3
Missouri.....	422	4,160	0.9
Nebraska.....	149	1,533	9.7
North Dakota.....	74	615	11.7
South Dakota.....	87	602	12.0
Mountain.....	706	7,200	0.5
Arizona.....	149	2,073	7.2
Colorado.....	200	2,460	0.4
Idaho.....	85	776	11.0
Montana.....	101	730	13.0
Nevada.....	40	551	0.7
New Mexico.....	80	1,099	7.3
Utah.....	75	1,150	6.5
Wyoming.....	40	353	11.3
Pacific.....	3,401	27,473	11.7
Alaska.....	10	330	5.5
California.....	2,421	20,652	11.7
Hawaii.....	74	841	0.0
Oregon.....	305	2,219	13.7
Washington.....	305	3,431	11.2

SOURCE: DHEW, HRS, DHEW. OPTOMETRIC MANPOWER DATA, 1973. DHEW Pub. No. 76-101.

Table A-VI-6. Percent distribution of active optometrists by age
in each geographic region: 1973

Age group	All regions	Northeast	North Central	South	West
All ages.	100.0	100.0	100.0	100.0	100.0
Less than 30....	8.0	0.5	7.5	10.1	9.6
30-39.....	16.0	12.2	13.9	17.7	20.9
40-49.....	27.4	27.7	26.7	27.9	27.5
50-59.....	32.4	32.2	34.0	31.0	29.7
60-69.....	11.3	13.7	12.6	9.3	9.0
70 and over.....	4.1	5.0	4.5	3.4	3.3
All ages.	100.0	24.6	30.7	23.0	22.7
Less than 30....	100.0	24.0	26.2	27.2	22.6
30-39.....	100.0	20.0	26.7	26.3	27.1
40-49.....	100.0	25.0	30.0	24.2	20.0
50-59.....	100.0	24.7	33.0	23.4	19.0
60-69.....	100.0	30.1	34.2	19.2	16.4
70 and over.....	100.0	30.1	33.5	19.7	16.6

Note: Percents may not add to 100.0 due to rounding.

Table A-VI-7. Number and percent of active optometrists by school or college of graduation: 1973

School or college	Years of operation	Number of optometrists	Percent
Total.....	--	12,265	100.0
Northern Illinois.....	1926-55	4,077	21.2
Southern.....	1932 to present	2,670	13.9
Pennsylvania.....	1919 to present	2,470	12.9
Los Angeles 1/.....	1904 to present	1,525	7.9
Massachusetts.....	1894 to present	1,210	6.3
Illinois.....	1955 to present	1,106	6.2
Ohio State University.....	1914 to present	1,012	5.3
Pacific University.....	1921 to present	999	5.2
Chicago (Monroe).....	1937-55	909	4.7
University of California...	1923 to present	874	4.5
Columbia.....	1910-55	817	4.2
University of Houston.....	1952 to present	433	2.3
Indiana University.....	1951 to present	391	2.0
Bochoutec.....	1902-36	103	0.5
Huedler.....	1907-26	67	0.4
All other 2/.....	--	316	1.7
Not reported.....	--	162	0.8

1/ Name was changed in 1975 to Southern California College of Optometry.

2/ Includes 2 Canadian schools.

SOURCE: Gregg, James D. The Story of Optometry. New York, The Ronald Kraus Co., 1965. Librarian, American Optometric Association Archives, St. Louis, Missouri.

Table 1-VI-8. Number and percent of optometrists active in the same State and in the same geographic region as the school from which graduated: 1973

School or college	Active optometrists	In same State		In same geographic region	
		Number	Percent	Number	Percent
Los Angeles 1/.....	1,525	1,215	79.7	1,410	92.5
Univ of California....	374	751	65.9	601	91.6
Illinois 2/.....	6,219	1,452	23.4	3,216	63.0
Indiana University....	391	207	52.9	292	72.1
Massachusetts.....	1,210	503	47.9	1,094	92.0
Ohio State Univ.....	1,012	612	60.5	710	70.2
Pacific Univ.....	999	253	25.3	797	79.0
Pennsylvania.....	2,470	977	39.2	1,086	76.1
Southern	2,670	309	11.5	2,030	75.0
Univ of Houston.....	433	196	45.3	319	73.7

1/ Name was changed in 1975 to Southern California College of Optometry.

2/ Includes also Northern Illinois, Chicago (Monroe), and Weadon.

CONCLUSIONS OF THE HRA STUDY

The following set of conclusions responds directly to the Congressional charge concerning whether it is appropriate overall to alter Part B reimbursement under Medicare for services provided by optometrists related to aphakic and cataract conditions. These conclusions have been derived by the Health Resources Administration from factual information, analytic findings, and professional judgments assembled during the Study.

1. Qualifications of optometrists. Optometry is a profession qualified to provide a broad range of services beyond refraction and the provision of eyeglasses. Furthermore, the services provided appear to be effective in patient management, including the management of aphakic and cataract patients. They are reasonable, non-experimental, safe, and generally acceptable to the vision/eye care community and the public.
2. Services related to aphakic and cataract conditions. Many of these services are the same as the specific diagnostic, therapeutic, and consultative services currently covered under Part B of Medicare when provided to pre- and post-surgery cataract patients by ophthalmologists or other doctors of medicine and osteopathy. (See Table 1, Part I Section I-B).
3. Detection and diagnosis of disease. Evidence presented during this study supports the conclusion that optometrists, in general, are qualified to provide services for the detection and preliminary diagnosis of ocular disease and ocular manifestation of systemic disease. Referral, where indicated, is made to ophthalmologists and other health care practitioners for definitive diagnosis and medical or surgical treatment.

4. Standards of Procedure. Clinical standards committees of professional associations have identified effective instrumentation and procedures that are available to and utilized by optometrists which are effective in the diagnosis/detection of disease, notwithstanding limitation by certain State jurisdictions regarding the use of topical drugs.
5. Quality Assurance. Quality assurance is attainable in the provision by optometrists of reasonable, safe, nonexperimental, and acceptable services to all patients including the Medicare eligible population. The development of criteria of care for diagnostic, therapeutic, and consultative services provided by optometrists, and similar to those existing for certain other health professional groups, does appear feasible in both organized and independent health care settings. Such criteria currently exist in a number of individual situations or are in various stages of development.
6. Access to services. Vision/eye care services for aphakic and cataract patients, as well as for patients more generally, can be made more accessible to the Medicare eligible population by providing reimbursement for services when provided by optometrists. In general, optometrists are more widely distributed geographically and practice in many smaller communities where other vision/eye care practitioners are not available.
7. Equity. Financial equity can be extended to those Medicare beneficiaries who currently obtain necessary and reasonable health services from optometrists but who do not currently receive the reimbursement to which they should be entitled.
8. Delivery patterns. It is reasonable to infer that inclusion of services under Medicare for aphakic patients when provided by optometrists would not significantly alter existing provider delivery patterns within the vision/eye care community. However, the impact upon such delivery patterns of the inclusion of services by optometrists for cataract patients, while likely to be small, is less clear.

9. Costs. It is reasonable to infer that the inclusion of services related to aphakic and cataract conditions when provided by optometrists would result in some added costs to the Medicare program. These added costs would be partly associated with Medicare enrollees currently served by optometrists without reimbursement, as well as those patients not now receiving care, who would do so as a result of the inclusion of such services under Medicare. Estimates suggest, however, that such added costs would not be significant in the context of overall Medicare costs for vision/eye care services and service benefits. (See the Study Summary, Part I, p. 28). This is viewed particularly so in the instance of extended reimbursement for services provided by optometrists to aphakic patients.

RECOMMENDATIONS AND ADDITIONAL CONSIDERATIONS OFFERED BY STUDY
CONSULTANTS

In reviewing study materials, expert consultants to the study concluded that steps should be taken immediately to extend reimbursement under Part B for services provided by optometrists to both aphakic and cataract patients. It was their collective judgement that referral delivery patterns, costs, and administrative features of the program, would not be significantly affected if reimbursement of optometrists were extended to cataract, as well as aphakic, patients. Thus, study consultants recommended the following:

1. Based primarily on considerations of patient needs, qualifications of optometry to provide services effective in patient management, and increased access of Medicare beneficiaries to vision/eye care services, it is recommended that covered services related to aphakia when provided by optometrists be reimbursable under Part B of Title XVIII. This recommendation is presented in direct response to the requirements of Section 109 of the Social Security Amendments of 1975 (P.L. 94-182).
2. Based on the same considerations as indicated above, it is recommended that covered services related to cataract conditions, when provided by optometrists, be reimbursable under Part B of Title XVIII.

As is evident from the discussion above, the Department endorses the first recommendation. For reasons cited, however, Department endorsement of the second recommendation is viewed as inappropriate and premature at this time.

During the course of the study effort, a number of additional issues and concerns were identified by the expert consultants which, although important considerations, represent matters not directly responsive to the specific legislative charge as interpreted by the Department. These recommendations and comments, made unanimously by the consultants, are presented here to provide an opportunity to bring these matters to the attention of Department Agencies and the Congress. Because the following items go beyond the requirement of this report, the Department has not fully examined them and makes no recommendation at this time.

1. Refractive services for aphakic patients

Aphakic patients, specifically, should be considered as having special needs given their disabled condition. Refractive services for such patients represent non-routine and necessary services in the provision of prosthetic devices, i.e., lenses.

Study advisors recommend that consideration be given to extending coverage under Part B of Medicare to include refractive services for aphakic patients when provided by either ophthalmologists or optometrists.

2. Low vision services and aids

For those patients who have inoperable cataracts or have less than optimal results from cataract surgery, that is, those who have reduced visual acuity, low vision services and aids represent essential components of reasonable and necessary health care services for these patients.

Study advisors recommend that coverage under Part B of Medicare be extended to include the provision of appropriate low vision services and optical aids for the above-referenced patients, when provided by either ophthalmologists or optometrists.

3. Prevention, health maintenance, and health education

In the interests of health care cost advantages, effects on productivity, and the overall improvement of benefits that can be afforded our population, the expert consultants recommend that a more effective effort be made to improve preventive, health maintenance, and health education measures. While this is needed in all areas of health services, the vision/eye care field offers a particularly promising area for such approaches.

4. Other service provided by optometrists

Vision/eye care services currently covered by Part B of Medicare, when provided by ophthalmologists or other physicians, include eye conditions other than cataract and aphakia. Optometrists can provide appropriate services for some of these conditions. It is recommended that extension of reimbursement to include the services of optometrists for such appropriate conditions is a desirable subject for further consideration.

5. Administrative considerations

Also during the course of the study effort, expert advisors raised several concerns pertinent to the administration of the Medicare program. These issues, also applicable to other Medicare services, include the following: (a) inconsistent application of coverage and reimbursement policies by individual carriers, (b) the problem of payment duplication for services and reimbursement for similar diagnostic procedures when performed for specific individuals by more than one provider, and (c) need of improvement in coding and billing procedures for vision/eye care services.

6. Cooperative working relationships between vision/eye care professionals

It became clear during the course of this study that more effective working relationships between optometry and ophthalmology and other providers in the vision/eye care field would enhance patient care and result in improved services to individual patients. While improved interdisciplinary coordination applies to all the health disciplines and specialties, it is a problem of particular concern in the vision/eye care field. Such working relationships could be significantly strengthened by

- a. Development of joint educational programs at the undergraduate and graduate levels, including rounds, clinics, conference, and meetings and publications.
- b. Establishment of interdisciplinary clinics with optometrists and ophthalmologists working together.
- c. Facilitation of referral of patients between the optometrist and the ophthalmologist when in the best interest of the patient.
- d. Joint development of quality standards for service and materials by peer review mechanisms. By materials, particular reference should be assigned to varying quality of lenses and frames and the need for furnishing laboratory invoices of material costs for reimbursement.

- e. Joint development of appropriate revision to State licensure laws to permit use of diagnostic drugs (mydriatics and local anesthetics) by optometrists.

While such joint endeavors are evident in various areas of the country, they need to be broadened and routinized.

ATTACHMENT

LISTING OF EXPERT CONSULTANTS, STUDY STAFF, FORMAL AGENCY LIAISON

I. Expert Consultants

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V. Library and Reference Services

Elizabeth Martinsen
Manpower Analysis Staff
Office of the Director
Bureau of Health Manpower, HRA

stration

Adopted by the American Optometric Association House of Delegates

A primary care optometrist is defined as the eyecare professional of first contact for the patient, makes the initial assessment and attempts to solve as many of the patient's problems as possible, coordinates the remainder of the health care team, including ancillary personnel as well as consultants, that are necessary in dealing with the patient's problems; provides continued contact with the patient and often his/her family regarding eyecare needs; and is responsible for his/her eyecare.



Juneau

MEDICAL SOCIETY

P. O. BOX 3-3000 • JUNEAU, ALASKA
99802

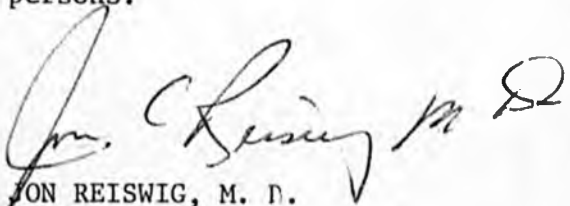
• TELEPHONE (907) 586-2611

March 9, 1979

The Honorable Glenn Hackney
Chairman
Health, Education & Social
Services Committee
The State Senate
Pouch V
Juneau, AK 99811

SB 75 - AN ACT RELATING TO OPTOMETRY

The Juneau Medical Society at its regular meeting on Tuesday, March 6, 1979
unanimously went on record as being opposed to the above captioned
legislation as it would allow the practice of medicine by unqualified
persons.


JON REISWIG, M. D.
PRESIDENT

JUNEAU MEDICAL CENTER
R.R. 3, BOX 3051
JUNEAU, ALASKA 99801
PRACTICE LIMITED TO THE EYE

file SB 75

January 31, 1980

ROBERT N. PAGE, JR., M.D.

Senator Glenn Hackney
Pouch V
Juneau, Alaska 99811

Dear Senator Hackney:

You will be considering HB 79 and Senate Bill 75. If passed, these bills would permit Optometry, a non-medical measuring science, the use of potentially dangerous prescription drugs. These drugs would be used for the diagnosis of disease, for the determination of the absence of disease and, in certain cases, in the treatment of disease.

Most of your constituents and Americans in general are unaware of the fact that Optometry is in no way a medical science. Optometry's national advertising ("Your Family Doctor of Optometry"), as well as their lobbying before this and other state legislatures, has been deceptive.

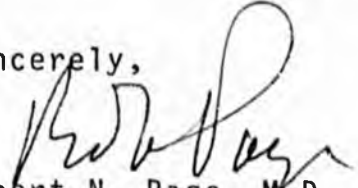
If this legislature grants the privilege of practicing medicine to this non-medical group by legislative fiat rather than by educational achievement, it will further compound this public deception.

There is amassed ample irrefutable evidence that this policy has caused great harm, unnecessary suffering, loss of vision and economic loss in the form of recovered damages. I enclose examples of such evidence.

I know you are burdened by many more important issues; few, however, have the potential of impacting as heavily and adversely on Alaskans' public safety from a health point of view.

Please consider these points and call on me at any time if I can help.

Sincerely,


Robert N. Page, M.D.

Enclosures

HOW DOES OPHTHALMOLOGY (M.D.) TRAINING COMPARE WITH OPTOMETRY (O.D.) TRAINING?

OPTOMETRIC EDUCATION DEFICIENCY DOCUMENTED

As prepared by John W. Gamel, M.D., University of Louisville School of Medicine

EDUCATIONAL BACKGROUND REQUIRED FOR DELIVERY OF EYE CARE:

Comparison between Optometry and Ophthalmology*

REQUIREMENT	OPTOMETRY	OPHTHALMOLOGY
Admission	2 years of college	4 years of college plus 4 years of medical school
Total Training after High School	6 years	12 years
Class and Laboratory time	1,650 hours	3,249 hours
Supervised Practice of General Medicine (Internal Medicine, General Surgery, Obstetrics-Gynecology, Psychiatry, Primary Care)	0 hours	3,240 hours
Supervised Practice of Medicine and Surgery of the Eye	0 hours	5,250 hours
TOTAL TRAINING HOURS	1,650 hours	11,739 hours
Number of years during which training occurred	4 years	7 years
Hours per year	412½ hours	1,677 hours

* Information abstracted from:

1. Course Handbook of Indiana University, Division of Optometry, 1975-76.
2. American Association of Medical Colleges Curriculum Directory, p. 86 87 (re: University of Louisville School of Medicine).
3. Residency Training Schedule, Department of Ophthalmology, University of Louisville.

(over)

Conclusion: An Ophthalmologist (M.D.) receives more hours of training each year of his rigorous program, than an optometrist (O.D.) receives in his entire four-year curriculum.

OPHTHALMOLOGY
11,739 HOURS

OPTOMETRY
1,650 HOURS

THE OPHTHALMOLOGIST (M.D.) HAS OVER 700% MORE HOURS!

John W. Gamel, M.D., Assistant Professor and Director, Pathology Laboratory and Medical Retinal Service, University of Louisville (Kentucky) School of Medicine has provided new, conclusive evidence that optometric education is "woefully inadequate" for these technicians to attempt to provide any medical eye services. The Gamel study reveals that the graduate ophthalmologist (M.D.) has received more hours in each year of his rigorous program than an optometrist receives in his entire four-year curriculum. Excluding any differences in content, the data shows the ophthalmologist (M.D.) has over twice as many hours of class and laboratory study as the optometrist. Furthermore, the ophthalmologist (M.D.) has infinitely more medical and surgical supervised experience in patient care than the optometrist. In total, the ophthalmologist (M.D.) has over 700% more hours of training than the graduate optometrist.

**RESIDENCY TRAINING SCHEDULE,
DEPARTMENT OF OPHTHALMOLOGY
UNIVERSITY OF LOUISVILLE SCHOOL
OF MEDICINE**

Summary of Hours of Didactic Learning Offered During Residency:

Ongoing Lectures:

Monday, a.m.	1 hour
Tuesday, a.m.	1 hour
Thursday, a.m.	2 hours
Friday, a.m.	1 hour
TOTAL	5 hours per week

Basic Science Courses:

40 hrs per wk lectures/labs
Duration: 10 weeks

Home Study Course:

20 hrs per month
Duration: 24 months

**BREAKDOWN OF HOURS
SPENT IN EDUCATION
OF OPHTHALMOLOGIST:**

1. Class & Laboratory:		
Medical School		
1st year	871	
2nd year	748	
		1,619
2. Residency:		
Lectures:		
5 hrs per wk x 150 weeks	750	
Basic Science		
40 hrs per wk x 10 weeks	400	
Home Study		
20 hrs per mo x 24 mos	480	
		1,630
TOTAL DIDACTIC TRAINING (HRS.) (1 + 2)		3,249
3. Supervised Practice of General Medicine		
54 wks x 60 hrs per wk (includes night calls & weekends)		3,240
4. Supervised Practice of Medicine and Surgery of the Eye		
35 hrs per wk x 150 weeks		5,250
TOTAL TIME SPENT IN SUPERVISED PRACTICE (HRS.) (3 + 4)		8,490
TOTAL TIME SPENT IN FORMAL EDUCATION OF OPHTHALMOLOGIST AT THE UNIVERSITY OF LOUISVILLE (HRS.) (1 + 2 + 3 + 4)		11,739

"M.D. IS THE MAJOR DIFFERENCE"

THE PEN...



PRO
BONO
PUBLICO

Published in the Public Interest by Ophthalmology

VOL. 3 NO. 15 OCTOBER 1, 1979

U.S. Naval Medical Officers Expose Policy Which Threatens Quality Eye Care Throughout Military



Naval Regional Medical Center at Camp LeJeune, North Carolina

The military ophthalmologists at Camp LeJeune, N.C., have pinpointed "fear of retaliation" as the reason medical officers have not exposed the extent of unnecessary damage which has occurred in the armed forces as the result of allowing medical functions to non-medical optometrists.

Reporting that "primary eye care" performed by optometrists has caused irreversible eye damage and untold suffering for military personnel and their dependents around the world, Lieutenant Commander (LCDR) U.S. Naval Reserve (USNR) Gregory W. Cobb, M.D., Chief of Ophthalmology, Naval Regional Medical Center at Camp LeJeune, and Frederic D. Young, M.D., LCDR, USNR, an ophthalmologist at the same facility, have risked the wrath of the establishment and expressed their concerns directly to Representative Melvin Price, Chairman of the House Armed Services Committee, to Representative Butler Derrick of South Carolina, and to Vice Admiral W. P. Arentzen, Surgeon General of the Navy.

Upon hearing that Representative Price's committee had not received any complaints from active duty ophthalmologists on the matter of "extending

Continued on page 2



WHY "THE PEN?"

The files of state and national medical associations, all learned societies concerned with the public health, overflow with a preponderance of evidence that the quality of health care is threatened by the precedent of Government encouraging the lowering of professional standards by allowing medical functions to practitioners with no medical education. Medicine accepts the responsibility to respond to epidemics. Death and trauma are resulting, and Doctors of Medicine can do no less than warn potential victims through the continuous presentation of this evidence. The public press of America, given the facts, is supporting this cause, and concerned physicians throughout the nation are pooling their knowledge and resources to package and present the truth through the PHYSICIANS EDUCATION NETWORK.

Kentucky O.D. Overlooks Eye Cancer; M.D. Diagnosis Is Malignant Melanoma

Dr. Millett's History of the Case of Elvis R. Johnson — Summarized for Readers

● April 16, 1979

Mr. Elvis R. Johnson, formerly a Lexington, Kentucky house painter, was taken to the emergency room of the VA Medical Center, complaining of a dark spot on his left eye and decreased vision in the eye. Medical doctors immediately suspected a malignant melanoma which had spread beyond the eye itself — highly dangerous and potentially fatal.

● April 23, 1979

A complete metastatic work-up confirmed the suspicion of the malignancy and that it had spread beyond the eye but not throughout the body. The decision was made to perform an "orbital exenteration" — complete removal of the eye and all structures surrounding it. This operation leaves a deep, permanent disfiguring scar.

● May 4, 1979

The surgery was performed on May 4, 1979. Mr. Johnson is recovering nicely, and the malignancy has been removed. He is permanently disfigured. Microscopic examination of the specimen confirmed the pre-operative diagnosis and the need for drastic surgery.

Transcript of Tape-Recorded Interview

This is Adrienne J. Millett, M.D., staff ophthalmologist at the Veteran's Administration Medical Center in Lexington, Kentucky, and here with me

Misplaced Confidence — Tragic Hindsight

As the adjacent interview of patient Elvis R. Johnson and his son, Elvis L. Johnson, reveals, an impressive array of office equipment convinced the Johnsons, of Lexington, Kentucky, to place medical confidence in an optometrist.


A black spot in the eye (which was ultimately diagnosed by an M.D. as potentially fatal Malignant Melanoma) was dismissed as "nothing to worry about" over a year ago. The optometrist attempted to correct the situation with glasses and recommended frame adjustments — while the malignant tumor grew and spread.

Elvis R. Johnson is blind and disfigured — but happy to be alive. His son, who helped him to choose the well-equipped limited practitioner, is sadder but wiser — and knows the "major difference." The surgeon, Adrienne J. Millett, M.D., Assistant Professor, Department of Ophthalmology at the University of Kentucky's Albert B. Chandler Medical Center, performed the surgery, and conducted the interview for PEN. The Johnsons are anxious to share their story to protect others.

today are Mr. Elvis R. Johnson, a patient of mine at the VA Hospital, and his son, Mr. Elvis L.

Continued on page 3

DR. ALLEN'S
DIAGNOSES



James H. Allen, M.D.: founding president, New Orleans Academy of Ophthalmology; professor of ophthalmology, Univ. of Iowa and Tulane Univ. for 30 years; Senior Surgeon, Tulane Univ.; awarded the prized Gold Medal of the Ophthalmology Section of AMA, 1976.

On Selecting Adjectives for the Eye Care Crisis

Scandalous. Absurd. Courageous. Determined. Tragic.

These are powerful adjectives. The truth of the public danger from the invasion of medicine by non-medical practitioners, and reports of medical resistance to this threat, cannot be written without resorting to these strong words. The message we bring you in these pages each month contains strong words, for what is occurring throughout our nation, in both civilian and military eye health care, has been labeled a crisis by independent journalist V. H. Krulak — and to confront a crisis, weak words are impotent.

Consider the plight of Kentuckians Elvis R. Johnson and Elvis L. Johnson as detailed on page 1 of this issue, and decide if tragic is too strong a word. The father is blinded, the son is guilt-ridden, having been misled into believing that fancy equipment used by an optometrist could substitute for a medically trained mind. Kentucky legislators were similarly misled last year when optometrists were given the right to legally use dangerous drugs and eye drops.

Consider the reaction of Kentucky medical leaders in launching an uphill optometric drug law repeal campaign and decide if determined and even courageous are overstatements. It may take years, but the quality of eye health care in Kentucky is at stake, and courage is involved because the leaders of this effort will be vilified and boycotted from optometric referrals. The hole in Mr. Johnson's head, which could have been averted by appropriate referral, concerns them more than the financial benefits of optometric goodwill.

Speaking of courage, consider the action of

Lieutenant Commanders Cobb and Young (see page 1) in lifting the lid on a scandalous military eye health care dilemma which threatens the precious gift of eyesight for military families everywhere. Following the lead of Colonel Appleton, they have put their military careers on the line by speaking out to preserve "the magic sense" for their patients. Is courageous an exaggeration in peacetime?

Ponder the absurdity of the petition of optometrist Maynard to the Arizona legislature (see page 3). In presenting a bill which would allow the practice of surgery to optometrists — the use of any device to treat the "abnormal conditions of the human eye or its adnexa" (adjacent parts) — he has proposed the exact equivalent of legalizing brain surgery by barbers. Is absurd too flamboyant? Determined also applies in this case — opportunist Maynard has mobilized Medicine under the leadership of the Arizona Ophthalmological Society legislative chairman, Thomas F. Moore, M.D., who is determinedly alerting all to the danger in the Grand Canyon state.

Eyesight to many is as precious as life itself. Thus, it is not possible to comment on action which recklessly risks blindness without resorting to superlatives.

If you feel that scandalous, absurd, courageous, determined, and tragic do not apply to the concerns raised in this issue, then try shocking, ridiculous, brave, dedicated, and oh, so sad — and tell a friend that entrusting eye health care to a limited practitioner is a very risky business.

JHA



COL. BUDD APPLETON, M.D.

Navy Eye Care Exposé Saluted By Former U.S. Army Eye Care Chief

Colonel Budd Appleton, M.D., the first senior military officer to speak out publicly against drug use by civilian opportunists, and a staunch advocate of medical supervision of optometrists in the military, resigned from the service in 1978 under heavy political pressure. The career military officer, who served as ophthalmology consultant to the Surgeon General, was given the choice of stepping down as consultant or remaining silent in public.

The Colonel, who had served the Army with distinction for 24 years, and who held the highest leadership position in ophthalmology in the army, had testified as a civilian at state legislative hearings in opposition to proposed optometric drug bills. Col. Appleton's testimony was widely sought to provide factual rebuttals to optometry's claims about the safety of military policy which permitted optometrists the use of drugs.

When asked to comment on the actions taken by Lieutenant Commanders Cobb and Young, Col. Appleton told PEN, "I admire the courage of these fine officers, and fervently hope that their efforts will serve to bring this matter into the public spotlight. I believe young military ophthalmologists should not be reluctant to cite instances of malpractice when they occur. It is my observation that most senior military medical officers, including hospital commanders, understand the issues, and the necessity for placing optometric care under medical supervision. In my opinion the only time the proper relationship is interrupted is when optometry interrupts it — through political pressure. It was my opposition to this kind of intervention that brought about my retirement."

Lt. Cdrs. Cobb and Young, in alleging that fear of retaliation was the reason military M.D.s had not exposed existing problems within the military, pointed to the experience of Col. Appleton. In their letter to Congressman Melvin Price, they stated, "In our opinion you have received no complaints from active duty ophthalmologists because the chain of command tends to suppress problems, keeping them at the local level, and there is real fear of retaliation for making waves such as that experienced by Col. Budd Appleton."

THE PEN is a public newspaper, international in scope. Its readers include people from every walk of life. THE PEN is freestanding and independent of any national or state association, with the exception of its sponsor, Physicians Education Network, Inc. PEN, Inc. is a Florida non-profit corporation. Submissions to this newspaper are welcome and are published at the discretion of the editors. THE PEN does not accept paid advertising or paid subscriptions.

MILITARY EYE CARE THREAT

Continued from page 1

the privileges of optometrists", the naval officers registered their protests loud and clear in letters dated August 17 and 24, 1979.

The letters, signed by both officers, pointed out that they served at Camp LeJeune as the "referral center" for five military optometrists (four Navy, one Air Force).

They told the Congressmen, "Hardly a week passes without our becoming aware of another example of the optometric mismanagement of ocular disease. We are continually astounded by the lack of understanding of basic ocular disease, its diagnosis and treatment revealed in the chart entries and consultation summaries from these young, supposedly well-trained optometrists."

Cases Provided

To illustrate their point, physicians Cobb and Young cited two sample cases of optometric mismanagement.

In the first instance, they reported that a dependent child was seen by an optometrist at the Naval Hospital at Cherry Point, N.C., in 1976 and 1977 at ages six and seven. On both occasions, it

was noted that the child suffered from a high degree of farsightedness in both eyes, a turning inward (esotropia) of the left eye, and amblyopia (lazy eye) of the left eye.

At the later visit in 1977, the vision in the child's left eye was 20/80, poor compared to a normal vision of 20/20. Without determining the cause of the poor vision, the optometrist prescribed "circle exercises" with the right eye covered. The M.D.s noted that this was totally inadequate therapy for amblyopia. The parents had stated to the M.D.s that "no follow-up care" was provided and they were not advised of the urgency of aggressive treatment of amblyopia before the age of nine or ten, when visual maturity is reached and the condition becomes irreversible.

At age nine the same patient was seen by an optometrist at Cherry Point complaining of pain in the left eye. At this time vision had dropped to 20/100 and the esotropia was still present. This optometrist told the parents no facilities for treatment of the child's condition were available in the Navy; this, despite the fact that two ophthalmologists, to whom referrals were routinely made, were stationed at Camp LeJeune just 40 miles away.

Continued on page 4

THE PEN...

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ST. PETERSBURG, FLORIDA

Arizona Citizens Threatened By Bill That Gives Optometrists Surgery/M.D. Functions

Offering what he termed a definition of optometry that will be recognized nationwide in a few years, Robert Maynard, O.D., past President of the Arizona Optometric Association, has presented to the Joint Health Committee of the Arizona legislature a proposed bill that would expand the practice of optometry medically and surgically to be the equivalent to the practice of ophthalmology.

Senator Robert B. Usdane, Chairman of the Allied Health Committee, who opposed the optometric proposal, told PEN in a telephone interview that the non-restrictive proposal, in his opinion, would expand optometric services beyond the use of drugs or the prescribing of medications.

When questioned as to whether the optometrists had explained how the permissive bill would benefit Arizona's citizens, Senator Usdane answered no, but noted that discussion of the issue had been limited.

The proposal submitted by optometrist Maynard would amend the Arizona Revised Statute, Section 32-1701, to read, "Practice of optometry" means any one or a combination of the following practices:

(a) The examination of the human eye by any method to diagnose or to treat any abnormal condition of the human eye or its adnexa (adjacent parts);

(b) The employment of instruments, devices, pharmaceutical agents and procedures intended for the purposes of investigation, examining, treating, diagnosing, or correcting visual defects or abnormal conditions of the human eye or its adnexa; or

(c) The prescribing and application of lenses, devices containing lenses, prisms, contact lenses, orthoptics, vision training, pharmaceutical agents, and prosthetic devices to correct, relieve, or treat defects or abnormal conditions of the human eye or its adnexa.

Although the broadly permissive bill was rejected by the Allied Health Committee, optometrist Maynard, who then presented a bill limited to diagnostic drug use by optometrists, left no doubt that his constituents considered a drug use bill only an interim measure.

The Joint Allied Health Committee, acting to

ARIZONA STATE SEN. ROBERT B. USDANE

voted against dangerous proposal



protect the public health, voted not to recommend either proposal. This action means that the Committee will not introduce or sponsor the optometric drug bill. Senator Usdane pointed out, however, that this action would not preclude the possibility of a bill being introduced by one or more legislators during the legislative session.

According to James W. McMahon, attorney for the Arizona Ophthalmological Society (AOS), there is little doubt that an optometric bill will be introduced in some form.

Truman D. Plainer, M.D., of Tempe, Vice-Chairman of the Physicians Education Network, Inc. (PEN), has reported that medical leaders view the current effort as evidence that optometry's desire to obtain diagnostic drugs was, and is, the first step in the eventual assumption of all ocular care by optometrists, even though they are not trained or qualified for this function.

Dr. Plainer further commented that ophthalmologists feel that the optometric initiative documents what most have known all along, that the purpose of optometrists in Arizona in introducing optometric drug bills is not to "do a better job" as they have claimed, but to become licensed as ophthalmologists via legislative fiat to the detriment of the public interest.

Suit Prepared To Stop Use Of Eye Drugs At University Of Alabama Optometry School

The Alabama State Licensing Board for the Healing Arts is preparing to file suit against the University of Alabama at Birmingham (UAB) School of Optometry to stop optometrists at the school from administering prescription drugs, according to the Mobile Press.

The newspaper reports that although no suit has been filed yet, George Hardesty, Jr., executive officer for the Licensing Board, has confirmed it was being prepared.

Hardesty told the Mobile Press the suit would be an effort "to get a judicial determination" on whether Alabama law allows optometrists to use prescription drugs in the eyes of patients or to write prescriptions for those drugs.

In a letter to Charles N. Robbins, M.D., president of the Alabama Academy of Ophthalmology, dated March 19, 1979, Dr. Charles A. McCallum, vice-president for Health Affairs at UAB, said that state law permits optometrists "to use drugs for diagnostic purposes, but not for therapeutic purposes, and this is the policy followed by our School

Dad came over about an hour and a half or two hours later and said that he was ready to go home. I asked Dad what the optometrist had said about the place in his eye and Dad told me he said, "It's nothing to worry about, I think I caught it in time." From there he just proceeded to make him a pair of glasses and that was it.

Dr. Millet: Is that what you recollect, Mr. Johnson?

Continued on page 4



Happier days... Elvis R. Johnson, Kentucky victim of tragic optometric oversight

MALIGNANT MELANOMA

Continued from page 1

Johnson, both from Lexington. Mr. Johnson has been employed most recently as a painter. Dr. Millet: Mr. Johnson, can you tell us when you were last employed?

Patient Johnson: Well, I went to work and lasted until what was the Friday before the 16th. I don't remember the month. But I was laid off because I couldn't see well enough to do the job. Then I came into the VA Hospital the 16th and...

Dr. Millet: That was the 16th of April. Patient: ...yes, and on a later day the 23rd, I was admitted.

Dr. Millet: To the VA Hospital? Patient: Yes, and my eye was removed. I don't remember the exact date. My son brought me.

Dr. Millet: How long had you been having trouble with your eye?

Patient: Well, the real bad trouble about a year.

Dr. Millet: And Mr. Elvis L. Johnson, can you tell us the history of your father's eye complaints as you know them to be?

E. L. Johnson (son): Well, about a year and a half ago a small black place had come up in his eye.

Dr. Millet: Which eye? Son: His left eye. At first we thought it might be a bruise or something like that, but it didn't go away. I had been going to an optometrist to get contact lenses fitted for myself, and he had all this fancy equipment. The way he carried on his procedures, I thought he was really good and knew his business. So I decided to take my dad in to see him.

Dr. Millet: For what reason? Son: Because of this black place in his eye. On my last visit to him before I took my father in, I had asked him about this spot in my dad's eye and he said, well, without seeing him he couldn't tell me what it was, but if I brought him in, he'd be glad to examine him.

So I made an appointment for him the next day. I worked right across the street from there at the time, so I dropped my dad off and went on to work.

MILITARY EYE CARE THREAT *from page 2*

The child was subsequently seen by a civilian ophthalmologist. He diagnosed her condition properly, and informed the child's parents that the help she needed was available in the Navy at nearby Camp LeJeune.

The patient, now nine years of age and nearing maturity, will require a much longer course of therapy for her amblyopia. More importantly, the delay in treatment may well have produced irreversible damage.

"Gross Malpractice"

Termining the optometric mismanagement of this case "gross malpractice", the naval officers report that litigation against the government is likely to be instituted, since they have already been contacted by attorneys.

In further support of their allegations, the two officers made reference to a serious case reported in September 1978.

According to the M.D.s, an enlisted man aboard ship in the Mediterranean explained to the general medical officer (M.D.) in early August of 1978 that he was suffering from double vision (diplopia) and headaches. The physician was concerned about swelling of the patient's optic nerve head — a serious sign — and promptly referred the patient to the "eye doctor", specifically stating ophthalmology, at the Naval Hospital in Rota, Spain.

Since there was no ophthalmologist at this hospital, the patient was seen by an optometrist. According to the patient, the optometrist noted he had crossed eyes, which he said was no problem, but that surgery to reposition the eye muscle would be necessary in the future. The ship's physician, apparently content that his patient had been seen by an eye specialist, failed to pursue the matter further.

About a month after the optometric examination Drs. Cobb and Young saw the patient. Their examination revealed decreased vision in both eyes, obvious swelling of both optic nerve heads, paralysis of both sixth cranial nerves, which paralyze the muscles which rotate the eyes, consistent with increased pressure inside the skull, affecting the brain. The patient was transferred immediately to the National Naval Medical Center in Bethesda, Md., where sophisticated skull X-rays revealed a chronic subdural hematoma (blood clot in the

brain). In less than 36 hours after seeing the ophthalmologist, the patient underwent brain surgery to remove the clot.

This patient suffered needlessly, and could have lost all vision or his life as a result of optometric misdiagnosis. More significant is the fact, they note, that the optometrist failed to recognize that sudden, unexplained double vision in a young adult is an ominous sign requiring immediate, thorough medical evaluation.

Another ophthalmologist, John D. Walker, M.D., Lieutenant Colonel in the United States Army, residing in Berea, Kentucky, presented his personal views on military optometry. He said, "I am opposed to their prescription of eye medications, because of the possibility that this may delude either the optometrist and/or the patient into thinking that appropriate treatment has been given, and therefore delay referral to appropriate medical care facilities."

He states that while the ophthalmologist is the local medical eye authority, he still is within the military chain of command. He notes that the ophthalmologist is responsible to the Chief, Department of Surgery; Chief, Professional Services; and the Medical Treatment Facility Commander, in that order. He reports that these individuals, by regulation, may treat ophthalmologists, optometrists, and physician's assistants as equals in rank, ignoring the difference in their educational qualifications and medical knowledge. ●

MALIGNANT MELANOMA *Continued from page 3*

Patient: Yes, I remember him saying, "You came to me in time," and that he could help me.

Dr. Millett: And how was it that he offered to help you?

Patient: He ran tests on his machine, fitted me with glasses, and told me it would be a few days, then I would get my glasses. Then I went to Indiana and this eye started giving me trouble so I came back to Lexington in March of '79. I couldn't see when I went to work so I came to the VA Hospital and that's when I had to have my eye removed.

Dr. Millett: At the time you went to see the optometrist, were you having trouble with your vision?

Patient: Yes, I thought it was both eyes, but I guess it was just the left one because it kept getting worse all the time. When I came to the VA Hospital I found out what really happened. I had a tumor that had to be removed.

Dr. Millett: Did the optometrist offer you a return appointment or offer you a referral to a physician?

Patient: No, he did not.

Son: The only thing he wanted was for Dad to come back in for refitting of his frames because they didn't fit him properly. And as Dad was in the VA Hospital at the time, I told him that wouldn't be possible. The one thing is that from the time he got his glasses on, we wore around him all the time.

We really couldn't tell that much of a change in the black spot so we continued thinking it was a bruise. In January he left for Indianapolis and after not having seen him for a couple of months, we noticed the big change . . . it was staring you right in the face.

Dr. Millett: How many times would you estimate the black spot had enlarged, if you had to just guess?

Son: From the first time I saw it, at least ten times, if not more.

Dr. Millett: Was it obvious at that time, or were you looking for it?

Son: It was very obvious. You couldn't miss it.

Dr. Millett: Did it continue to enlarge from January until April, when your father came to the VA Hospital?

Son: He came back in March and yes, it did continue to enlarge, but I couldn't tell that much of a change from the time he got back to the time he was admitted to the hospital. I feel that if the optometrist had done his job properly, and actually examined my dad like he should have, he should have at least noticed something wrong and recommended us to a specialist.

Dr. Millett: Mr. Johnson, can you describe for us the series of events that happened to you

when you came to the VA Hospital in April of 1979?

Patient: I was taken to the Eye Clinic where a doctor examined me. He had four or five others look at my eye, and they decided it was a tumor. Then he took me in and talked to me and told me what it was.

Dr. Millett: And what did he tell you?

Patient: He said it was a malignant tumor, and it would have to be taken care of. They arranged to bring me in on April 23, and I lost the eye some days later.

Dr. Millett: What did the doctors do with you while you were in the hospital?

Patient: They ran scans of my brain, liver, and bone for some days before they operated.

Dr. Millett: Did the doctors find any evidence of spread of this tumor?

Patient: Yes ma'am, I think they had.

Dr. Millett: Where was that spread?

Patient: It was in my left eye and the left corner of my eye.

Dr. Millett: Was it spread anywhere else throughout your body that the doctors were able to detect?

Patient: As far as they could tell with the scans they ran it was stable in that one place.

Dr. Millett: You went to the operating table on May 4, 1979. What sort of procedure did you have?

Patient: A fellow told me what they would be doing, and what they would give me. Before I went into surgery a doctor took some pictures of me; then I went into surgery. When I woke up my eye was gone and the operation was complete.

Dr. Millett: Mr. Johnson, do you have any comments that might summarize your feelings about what happened to you?

Patient: My story might be of use to other people; if they came up with a problem like mine, they should go to people who can help them. I made a mistake in going to an optometrist in the first place. I guess the man wasn't equipped to find anything, or else he didn't want to find anything. I don't know, but I'd advise them to go where they could get themselves taken care of properly before it gets too late, like it was for me.

Dr. Millett: Do you have any last comments that you would like to make to the people who will read this publication?

Son: His modern equipment made me feel that the optometrist was properly trained to detect what was there, but he failed to do his job. If a man can't do that then you know he really doesn't have any business in the job to begin with. Optometrists, I believe, should be left to making glasses and contact lenses, but not diagnosing illness. If anything like this comes up again, you can be sure I'm not going to take my dad to an optometrist again. ●

UNITED STATES PHYSICIANS EDUCATION NETWORK Statement of Purpose

PEN exists solely to utilize its resources and combined influence to present, promote, and promulgate, through communication outward, and communication inward, these simple truths:

- The American people must be protected by placing and keeping health care in the hands of experts, whose abilities are established by having reached a standard level of medical education.
- The logical minimum level of education necessary for leadership to protect the public in shaping the optimum health care delivery quality standards in the United States is the degree of Doctor of Medicine or Osteopathy, earned at a school of medicine or osteopathy — at an accredited institution of higher learning.
- Government at every level should cooperate with medicine in establishing these health safety standards.

Membership in PEN is available to any law-abiding citizen who subscribes to these truths, and desires to be informed, as well as to participate in informing the public at large.

Mail to: James H. Allen, M.D., 9104 Quince St.
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Alton Ochsner, M.D.

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I intend to be an active member of PEN and I endorse and support the STATEMENT OF PURPOSE.

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VOL. 3, NO. 13 AUGUST 1, 1979

ORGANIZED OPTOMETRY CO-DEFENDANT

Glaucoma Victim Blames Optometric Ads, 3 O.D.s in Indiana Lawsuit

John Collins, a glaucoma victim, has filed suit against three Indiana optometrists and the 20,600-member American Optometric Association (AOA) for alleged negligence that has caused his condition of glaucoma to progress from a non-impairing, controllable problem to that of disabling, irreversible near-blindness.

The former Indiana resident, now residing in Charleston, West Virginia, has filed suit in the U.S. District Court of Southern Indiana, and the amount in controversy exceeds \$10,000 exclusive of interest and costs.

According to the complaint filed by Howard S. Young, Jr., attorney for the plaintiff, sometime prior to 1977, Collins began to develop glaucoma in his eyes of which he was unaware and in the first part of 1977 noticed impairment in his vision.

The complaint states that on or about May 21, 1977, John Collins went to the defendant, Dr. Kenneth Van Arsdall, an optometrist practicing in Columbus, Indiana. It is alleged that this optometrist, who prescribed glasses, negligently failed to detect, diagnose, or treat the plaintiff's condition of glaucoma.

The complaint further alleges that Collins went to two other optometrists, also practicing in

Columbus, Indiana, one in September, 1977, and the other in October, 1977, and that they too failed to detect, diagnose, or treat glaucoma in the plaintiff's eyes.

It is claimed that as a result of this negligence, John Collins' glaucoma was not diagnosed or treated until late December of 1977, at which time Collins' vision was substantially and permanently damaged so that he is nearly blind.

The complaint also states that in order to induce members of the public to seek the services of optometrists, including the named defendants, the American Optometric Association negligently advertised, informed, and represented to the public, including the plaintiff, that optometrists were educated and qualified to detect and diagnose glaucoma and to give the best vision care possible. AOA also represented that optometrists were capable of giving preventive care, when in fact some members of its association were not so qualified.

Claiming damages in excess of \$10,000, the plaintiff alleges that he has incurred large medical expenses, lost earnings, and suffered pain and agony, all of which may continue. He states that his earning capacity has been permanently impaired, and that he is also permanently impaired in his ability to perform the ordinary activities of daily life.

The allegation of AOA negligence in advertising was a concern of Virginia Governor John N. Dalton when he vetoed for the second straight year an optometric drug bill.

In his veto message Governor Dalton made specific reference to the on-going optometric advertising. In this regard the Governor said, "There is further concern over public misunderstanding that complete medical care has been effected after having an optometric examination. Recent advertising in national magazines and on television by the American Optometric Association has reaffirmed my concern in this regard."

Continued on page 3

OPTOMETRIC MISMANAGEMENT

Total Settlement to New Jersey Glaucoma Victim May Exceed Half Million Dollars

A New Jersey optometrist's failure to detect glaucoma and to refer the patient for appropriate medical treatment has resulted in near total blindness for the patient, and an out-of-court settlement that will cost the optometrist \$25,000 in a lump sum plus \$20,000 a year for the patient's lifetime plus attorney's fees. The patient has a life expectancy of 25 years.

According to Alfred Dimiero, attorney for Eleanor Steward, age 49, a resident of Newark, his client noted a loss of peripheral vision and first saw the optometrist in November, 1975. On examination, the optometrist determined that the patient was able to perceive light in her left eye, but could not see images. The optometrist, however, failed to determine why this was the case. He never examined the interior of the patient's left eye, never

Blind Victim of O.D. Oversight Sues; Settles For \$53,500



WINONA T. BROWN

"No amount of money can pay for loss of my eye"

Optometric mismanagement and failure to refer promptly to a medical doctor have cost a Seattle, Washington, woman the sight of her right eye, and provides further evidence for the growing file of PEN cases that non-medical practitioners are not qualified to diagnose or treat disorders of the eye.

The victim, Winona T. Brown, experienced continued difficulty for a 12-month period adjusting to contact lenses prescribed by her optometrist. Finally, her right eye developed an infected ulcer, causing excruciating pain. Ms. Brown was eventually referred to an ophthalmologist. Despite immediate hospitalization, with intensive medical and surgical treatment, Ms. Brown has permanently lost vision in her right eye.

Ms. Brown received damages in the amount of \$53,500 in an out-of-court settlement with the op-

Continued on page 3



WHY "THE PEN?"

The files of state and national medical associations, all learned societies concerned with the public health, overflow with a preponderance of evidence that the quality of health care is threatened by the precedent of Government encouraging the lowering of professional standards by allowing medical functions to practitioners with no medical education. Medicine accepts the responsibility to respond to epidemics. Death and trauma are resulting, and Doctors of Medicine can do no less than warn potential victims through the continuous presentation of this evidence. The public press of America, given the facts, is supporting this cause, and concerned physicians throughout the nation are pooling their knowledge and resources to package and present the truth through the PHYSICIANS EDUCATION NETWORK.

DR. ALLEN'S

DIAGNOSES



James H. Allen, M.D., founding president, New Orleans Academy of Ophthalmology; professor of ophthalmology, Univ. of Iowa and Tulane Univ. for 30 years; Senior Surgeon, Tulane Univ.; awarded the prized Gold Medal of the Ophthalmology Section of AMA, 1976.

Who Should Pay The Price of Incompetence?

Justice may be blind, and retribution may be slow, but documented evidence appearing in this issue of THE PEN attests to the fact that if blindness results from negligence on the part of those professing to accept the responsibility for sight, the cost can be astronomically high.

In a letter to the editors of the *American Optometric Association News* which appeared in the July 16, 1979 issue, optometrist Harold L. Castleman of Chambersburg, Pennsylvania, wrote:

"Dear Sir:

I grieve everytime I read the *AOA News* in which articles and advertisements proclaim the drop in malpractice insurance rates through the Aetna Life & Casualty Co. My insurance is costing me \$250.00 this year, far above the figures you quote. Aetna requires us to have \$1 million in personal liability which runs the premium up and is a whole different ballgame."

To O.D. Castleman we say, "You ain't seen nothin' yet."

Medical doctors, who are by no means without blame in some instances, have had to accept the high cost of insurance protection, as a part of the cost they must pay for the privilege of attempting to heal the sick.

If optometrists, who are not trained or qualified to perform medical functions, persist in their efforts to achieve medical status through legislative channels, the "new ballgame" that optometrist Castleman refers to hasn't even been developed yet. And there can be no doubt that in comparison to the present, it will make Russian roulette look like a game of Parcheesi.

High as the present cost may be in terms of malpractice insurance, if damages due to mismanagement continue to mount, the cost to the optometric profession will soar. More importantly, the cost in suffering and loss of vision to those who have entrusted their eyesight to them will climb.

Optometry has for many years been an honorable and necessary profession. Today, however, the validity and credibility of the profession and all who practice it are being undermined and seriously damaged by those few misguided zealots who for reasons of social status or economic gain seek to function beyond their training and their capabilities without regard for patient well-being or patient safety.

The ultimate cost is one that defies calculation. It is the cost of being blind. No amount of money, however astronomical the sum, can replace the God-given gift of sight, as Ms. Brown states in her deposition on page 1.

Acceptance of such a fate is hard enough if the victim is confident that all that could have been done was done, but to be doomed to darkness knowing that such a fate need not have been, is not acceptable.

The ultimate cost, blindness, can be drastically cut, if not eliminated, by demanding that every man, woman, and child in this nation be assured only medical care by M.D.s, not pseudo-medical care by non-medical practitioners.

Optometric contentions that would substitute quantity for quality and convenience for competency must be challenged by rational persons and must be constantly refuted.

We recognize that there are many practitioners in the field of optometry who believe as we do, that medicine is a function for only those trained and "qualified to perform in that field; medical doctors.

However, if it takes the naked truth and horror stories told in gruesome detail to awaken the American people, then that is but another cost that all of optometry must pay for the actions of a few. Yes, the cost is high, but if, indeed, as optometrist Castleman says, there is to be a "whole new ballgame", medicine is committed to making it one that makes the patient, not the non-medical practitioner, the league champion. Batter up! JHA

administered by Mutual Eye Claim Audits, Inc. of Indianapolis, Indiana. This program is particularly significant in Michigan, one of the most highly industrialized states in the union, where much of the eye care provided is handled through insured plans.

To counter the challenges of the current national advertising campaign sponsored by the American Optometric Association, Michigan decided to take the offensive and launch a full-scale hard-hitting marketing effort designed to educate and inform the public. That program, now underway, includes a series of strong, positive, paid advertisements, which have been placed in the Michigan editions of leading national magazines.

The first advertisement, which is carried on the back page of this issue of THE PEN, was placed in the Michigan editions of *Time*, *Newsweek*, and *U.S. News & World Report*. The first advertisement appeared in full color. Others will be black and white.

In addition, Moran reports, a third advertisement is being produced which will be placed in the television program guides of metropolitan area Sunday newspapers.

Weekly News Magazines Chosen

According to Moran, weekly news magazines were chosen for the primary media effort because of their excellent penetration among influential leaders in the state, and among individuals likely to become involved in providing or negotiating for pre-paid eye care programs. To make certain union leaders at all levels receive Ophthalmology's message, reprints of the ads are being mailed to all 2800 elected union officials in the state shortly after they appear in the various publications.

The third ad, which has a headline reading, "When an M.D. prescribes your glasses, you get the finest eye care possible", is being placed in television program guides to reach the mass market, and patients most likely to respond to hearing television advertising sponsored by optometry.

Although it is too early to evaluate the full impact of the advertising effort, Moran believes it has already had one good effect. In his view, the first ad brought home to Michigan optometrists the realization that such a campaign could have deadly impact, and prompted a resolution from the Michigan Optometric Association, which called for the immediate cancellation of AOA's \$6 million dollar national ad campaign.

Moran states that the Michigan initiative originated with the MOS Executive Council and Society president, Philip C. Hessburg, M.D. The MOS Secretary Jerome D. Davis, M.D., who serves as chairman of the Society's Public Information and Communication Council, was assigned to implement the council's decision.

In addition to retaining marketing professional Justin Moran to act as Director of Public Information and Communications, the MOS and MESOM commissioned a prominent Detroit marketing and research organization, Lincorp Research, Inc., to identify attitudes and opinions which had to be corrected in order to motivate the public to seek eye care from Ophthalmologists.

In addition to determining that the public did not know the difference between optometrists and Ophthalmologists, the firm turned up two other significant findings, Moran said.

The research firm discovered that the public views optometrists as being in the same relationship to Ophthalmologists as osteopathic physicians are to physicians, and believe they have the same training and perform substantially the same services.

They also found that the public generally viewed eye care in a mechanical rather than a medical context. The reasoning: to correct poor vision, one needs eyeglasses. To get these appliances one must see the "mechanic" who fits and sells them (e.g. the "eye doctor"). Findings showed little comprehension of the eye as an organ of the body, subject to disease or injury, which might require the services of a physician or surgeon.

Three Advertising Objectives

After selecting Buckhelm and Rowland, Inc., of Ann Arbor, to produce and place its advertising, MESOM studied the research data and on the basis of the findings formulated three objectives for its

advertising. They were:

1) To create awareness of the fact that there is a significant difference between an Ophthalmologist and an optometrist;

2) To create awareness of the fact that an Ophthalmologist is better qualified to care for the eye, including routine examinations for corrective lenses, because of his medical education; and

3) To create awareness that prepaid eye care programs that do not provide an opportunity to choose eye care by Ophthalmologists are inferior fringe benefits.

According to Justin Moran, the Michigan program has been so well received by the medical profession, businessmen, union leaders, and others that Dr. Hessburg has contacted the presidents of all state Ophthalmological societies offering to share with them the Michigan experience.

Moran says, "Clearly, in order to protect the public health, our ultimate objective must be to preserve the position of the Ophthalmologist as the provider of primary eye care. Time may very well prove that the best way to do this is to use marketing techniques to motivate and modify patient behavior. While the use of such an approach is new for a medical specialty, Michigan's Ophthalmologists appear to be demonstrating that it can be done successfully in an ethical, tasteful, easily understood, and extremely effective manner." ●

VICTIM BLAMES ADS

Although recent advertising efforts have been greatly expanded, optometry made the same claims long before initiating its media blitz. In a pamphlet titled "Answers to Your Questions About Glaucoma" which was disseminated long before '77, the AOA had this to say about the detection of glaucoma:

"Glaucoma is most frequently detected during a professional vision examination. Optometrists check carefully for glaucoma in the 'eye health' part of an optometric examination by inspecting the interior of the eye, giving field-of-vision tests and taking eye pressure measurements... (with) a tonometer. Used routinely by optometrists, it records quite accurately subtle and gradual changes in pressure as well as dramatic changes the patient may be aware of because of discomfort or impaired vision."

The Collins case, which is scheduled for hearing in November, 1979, will undoubtedly attract

Mail to: James H. Allen, M.D., 9104 Quince St.
New Orleans, LA 70116

PEN MEMBER APPLICATION

"PEN MUST SURVIVE AND GROW... IT IS ALREADY THE MOST VIABLE, POTENT, AND ACTIVE COMMUNICATIONS FORCE IN MEDICINE - IT'S A MUST DO - CAN DO - AND WILL DO ORGANIZATION."

Allon Ochser, M.D.

STATEMENT OF INTENT

I intend to be an active member of PEN and I endorse and support the STATEMENT OF PURPOSE.

In providing my resources I am assuring that PEN will continue to block efforts to invade medicine at the expense of the public health. I am subsidizing the ever-expanding promulgation of truth, the circulation of THE PEN and other publications to an ever-expanding audience. I am assuring the availability of resource materials, mass communications, legislative, and other expertise relating to this issue to all who support medicine in this cause.

I DESIRE TO INFORM AND BE INFORMED AND HEREBY PLEDGE DUES IN THE AMOUNT OF \$250 ANNUALLY. (Subject to reduction as PEN grows)

Date _____ 19__

Name _____

Address _____

City _____ State _____ Zip _____

Telephone: (Area) _____ Number _____

Ophthalmologist? _____ Other specialty _____

Profession, other than M.D.? _____

Check enclosed (\$250) _____ Please bill me _____

Resident Dues \$25.00

Affiliate (spouses, office staff) \$25.00

Military M.D.s \$150.00

national attention, and may well spark a rash of similar suits, since many cases of glaucoma overlooked by optometrists have been reported by medical doctors and patients across the nation. ●

\$53,500 SETTLEMENT

Continued from page 1

tometrists and his insurance carrier. But, as she sadly notes, "No amount of money can pay for the loss of my eye and the agony I went through."

Motivated by a sincere desire to protect other innocent people from a similar fate, Ms. Brown has provided the following testimony of her tragic experience:

While waiting in an optometrist's office where I had taken my mother to have her hearing aid fixed, I read information about contact lenses. I only wore glasses for close work in my office job and had always hated to wear glasses so I became interested in wearing contacts.

The optometrist informed me there would be a charge for the examination, but if I decided to purchase contacts, it would be included in the purchase price. The cost was \$400.00 for one kind and \$450.00 for another kind. He advised bifocal lenses, which he said were semi-soft, or if I cared to have the soft lens, he could make one eye for distance and one eye for close. He suggested the bifocal. These, he said, were new and somewhat difficult to fit but as he put it, very interesting. I trusted his advice.

On January 15, 1977, I signed a contract.

The contacts were changed many times over the period of nearly one year. They would be mailed to me about one week before an appointment.

I received my last pair in December 1977. One night around midnight, I woke in terrible pain. Both eyes were swollen closed and my face was puffed. I had some Tylenol No. 3 on hand so I took some for the pain. That was not strong enough.

The next morning, I was still in horrible pain. I called the optometrist's office as soon as it was open and was advised to alternate between hot and cold packs.

The next day there was no improvement. I called again and told them (both husband and wife are optometrists) it felt like I had glass in my eye and that I thought I must have an infection. The woman "doctor" informed me they knew I did not have glass in my eye and I did not have an infection. She said I could go to hospital first aid but she wanted to warn me, it had cost one of their patients eighty five dollars to do that.

Finally, a friend was worried because I had not been to work, and she called me. She had her husband take me to the optometrist's office. By that time there was a white film covering my right eye, and it looked horrible, and my pain was excruciating. The man optometrist took one look and ran for the telephone. He called an Ophthalmologist and then took me to his office. The Ophthalmologist had me admitted to the hospital where I finally had expert help.

The doctor was in to see me as many as three times a day, as well as bringing his colleagues for conferences. The Ophthalmologist was able to save my eye, but not my sight in my right eye. The antibiotics which were necessary to fight the germ affected my intestines, therefore, all through the year of 1978, I was ill, because I still had to be on medicine for the eye. For months my face was swollen and there was no shape to my eye. I had to go to work in that condition.

After I was well enough to think straight, I decided to get advice from an attorney. I felt if I could take the optometrist to court, and get it on record, I may be able to keep this from happening to some one else. I would shudder every time I saw a television advertisement where optometrists were fitting contact lenses.

As it turned out, I wasn't the first to bring suit against the optometrists' insurance company. My own attorney had brought suit against them for another party. The insurance company offered us an out-of-court settlement which we accepted in the amount of \$53,500 in my case.

I hope and pray that laws will be passed to prevent this sort of thing from happening. No amount of money can pay for the loss of my eye

Optometry Kills National Television Commercials

Facing a decline in membership attributed to a \$200 special assessment for this year's portion of a multimillion dollar national advertising campaign, the American Optometric Association (AOA) has decided to eliminate television ads and restrict expenditures to \$500,000 this year, down from \$1.3 million in 1978.

The possible effects of exaggeration in optometric advertising is reflected in the suit, in which AOA is a co-defendant, brought by John Collins (See page 1).

According to the July 1 *American Optometric Association News*, after several days of debate at the AOA annual meeting held in Anaheim, California, June 17-23, the AOA House of Delegates compromised on a resolution by the Michigan Optometric Association to terminate the 2.5-year National Consumer Communications Program (NCCP) and instead resolved to more diligently concentrate efforts on collecting the special assessments.

The AOA *News* reported that, "Indications are that the association could witness a potential 15% to 20% decline in membership a year from now if 1979 and 1980 NCCP assessments are not paid. Many state optometric associations, primarily those serving industrial states, indicated severe membership losses based upon current collections received."

The AOA *News* also stated that AOA Trustee John D. Tumblin, O.D., former chairman of the AOA Advisory Committee on the NCCP, said no monies have been allocated for the final years of the NCCP. "Nevertheless," Tumblin said, "a loss of even one member is too much for this association to accept." ●

UNITED STATES PHYSICIANS EDUCATION NETWORK Statement of Purpose

PEN exists solely to utilize its resources and combined influence to present, promote, and promulgate, through communication outward, and communication inward, these simple truths:

- The American people must be protected by placing and keeping health care in the hands of experts, whose abilities are established by having reached a standard level of medical education.
- The logical minimum level of education necessary for leadership to protect the public in shaping the optimum health care delivery quality standards in the United States is the degree of Doctor of Medicine or Osteopathy, earned at a school of medicine or osteopathy — at an accredited institution of higher learning.
- Government at every level should cooperate with medicine in establishing these health safety standards.

Membership in PEN is available to any law-abiding citizen who subscribes to these truths, and desires to be informed, as well as to participate in informing the public at large.

and the agony I went through.

On February 18, 1979, one of Seattle's best Ophthalmologists did surgery on my right eye. He first had to remove the cataract that had been caused, he then had to graft the white part of my eye which was so thin and then over all of that, he transplanted a cornea. Some of the stitches are covered up and will remain. Some have dissolved and a week ago he removed half from the cornea. In all there were nearly forty stitches in the eye. I was in surgery for two hours. My eye now looks pretty much like the other one. I still can not see and I know I will never regain the vision I had but I am so thankful for all my doctors of Ophthalmology. ●

Michigan Ophthalmologists Launch Aggressive Campaign With Positive Ads in Regional Editions of National Magazines

Michigan has taken a bold new approach to the invasion of medicine by optometrists — non-medical practitioners.

Although Michigan was the first state to defeat optometric drug legislation in 1966 and has successfully resisted since that time, the state in the past two years has been confronted with serious new challenges.

According to Justin L. Moran, Director of Public Information and Communications for the Michigan Ophthalmological Society (MOS), the first challenge came from the development of pre-paid "eye care" programs that discriminated against Ophthalmologists.

The second challenge was, according to Moran, the national advertising campaign undertaken by the American Optometric Association. As one of the top five markets in the United States, Moran said, Detroit was particularly affected by the misleading campaign.

To meet the first challenge, that of providing complete high quality eye care through pre-paid eye care programs, Michigan Ophthalmologists formed Medical Eye Services of Michigan, Inc. (MESOM). This organization provides panels of Ophthalmologists for third party payment programs such as Blue Cross/Blue Shield and offers employers a self-insured eye care program

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Only an Ophthalmologist can diagnose and treat these four common eye diseases.



Melanoma

You'll probably never have the four diseases pictured here. But how can you make sure?

You should know that all four of them can lead to permanent blindness. And one, melanoma, is a cancer.

Nobody likes to think about eye diseases. But as long as you have a choice, isn't it better to think

about them before... rather than after? That's why there's no better time than now to see an ophthalmologist.

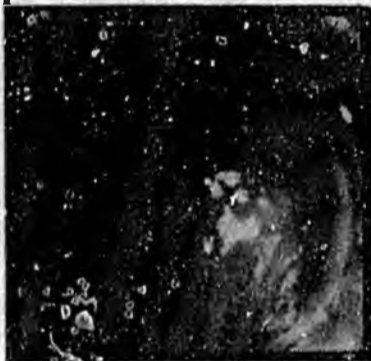
Why an ophthalmologist? Because he's a physician. Fully trained and qualified to examine the eye; not only to prescribe glasses but also to diagnose all abnormalities; and—above all—to prescribe corrective treatment, including drugs, therapy, and, when necessary, surgery.

And, being a physician, an ophthalmologist can also check your eyes for symptoms of other diseases like high blood pressure and diabetes.

Some group benefit programs only permit you to see an optometrist. Make sure yours permits you to choose an ophthalmologist. Then see him. It could mean the difference between vision... and blindness.



Cataract



Fungal Corneal Ulcer



Glaucoma

This message presented as a public service by



Medical Eye Services OF MICHIGAN, INC.

A non-profit advisor to eye care programs.

1010 Antietam Road, Detroit, MI 48207 (313) 962-2394

Reprinted with the permission of the Medical Eye Services of Michigan, this advertisement appeared in full color in the Michigan editions of Time, Newsweek, and U.S. News & World Report.

MARVIN J. GREINDAHL, M.D.
OPHTHALMOLOGY
3500 LATOUCHE
ANCHORAGE, ALASKA 99504
277-2661

ALLOW ME TO INTRODUCE MYSELF -- MY NAME IS MARVIN GRANDAHL.

I AM GRADUATED FROM THE UNIVERSITY OF MINNESOTA WITH A BACHELOR OF ARTS DEGREE.

I AM A GRADUATE OF THE UNIVERSITY OF MINNESOTA MEDICAL SCHOOL.

I HAVE COMPLETED MY PH.D. THESIS WORK IN PHYSIOLOGY AT THE UNIVERISTY OF MINNESOTA. AT THAT TIME, I WAS A TEACHING ASSOCIATE IN THE DEPARTMENT OF PHYSIOLOGY AND A CARDIOVASCULAR RESEARCH FELLOW. I WAS ALSO A NIH RESEARCH FELLOW DURING THAT TIME.

I WAS AN OPHTHALMOLOGY FELLOW AT THE MAYO CLINIC IN ROCHESTER, MINNESOTA.

I AM NOW AN OPHTHALMOLOGIST IN PRIVATE PRACTICE IN ANCHORAGE, AND WICH TO URGE YOU TO HELP DEFEAT HOUSE BILL #75 AND SENATE BILL #79.

Handwritten marks:
A large handwritten 'X' or checkmark on the left.
A large handwritten 'S' or '5' on the right.
The word 'fill' written in cursive below the 'S'.

In reviewing House Bill #75 and Senate Bill #79, Section 2, Subsection 08.72.305 - Use of Drugs for Diagnosis, included in the list of drugs proposed to be used is a class of drugs called miotics. This group of drugs is only therapeutic and has no diagnostic use. They are used for treating chronic glaucoma and acute angle closure glaucoma. What is a therapeutic drug doing in a "diagnostic" bill? Mr. George Hall's and Mr. Sternberg's (both Anchorage optometrists) responses to this question at the March 1, 1978 meeting of the Legislative Coalition of Health Care Professionals in Anchorage and at the 1978 hearings on a similar bill introduced and defeated last year respectively was: "To take care of angle closure." "To use this as a first aid measure." This is treatment.

The proposed bill lists only broad general categories of the desired eye medications, not specific drug names and concentrations. The classes of drugs include such potent substances as Cocaine, Atropine, Scopolamine, Phenylephrine and Phospholine Iodide. All these drugs when applied to the eye are readily absorbed into the bloodstream and are capable of producing a wide range of total effects.

Cocaine, a topical anesthetic and mydriatic (dilator of the pupil) is a Class II narcotic controlled substance which is subject to wide spread abuse by addicts and requires a controlled substance registration certificate to dispense. Atropine and Scopolamine are cycloplegic agents which paralyze the eye's focusing power and in sufficient doses produce irritability, hallucinations and even coma. Phenylephrin (a mydriatic) has the ability to raise the blood pressure markedly and to alter the rhythm of the heart and has been implicated in deaths in older people through strokes and in children through cardiac arrhythmias. Phospholine Iodine, a miotic which constricts the pupil is used in the treatment of glaucoma (elevated pressure in the eye) and in certain cases of crossed eyes. The active ingredients are related to the active substance in certain insecticides and nerve gas. This medication has been shown to produce retinal detachments and cataracts. Miotics are a therapeutic class of drugs and are listed incorrectly in the proposed bills as diagnostic drugs.

The above are only a few examples demonstrating what potential dangers exist in the various classes of drugs listed in the proposed bills. By allowing wide spread use of these drugs by nonmedical persons, the overall risk to the general public of potentially serious side effects or untoward reactions are markedly increased.

I. EYE HEALTH CARE PROVIDERS OF THE CONSUMING PUBLIC

The American Optometric Association defines an optometrist as:

"...a health care professional who is specifically educated, highly trained and state licensed to examine, diagnose, and treat conditions of the vision system. Optometrists are highly skilled individuals who examine the eyes and related structures to determine the presence of vision problems, eye diseases and other abnormalities. They gather information on the vision system during the optometric examinations, diagnose any conditions discovered and prescribe optometric treatment such as contact lenses or vision therapy that may be required to provide the patient with clear efficient vision."¹

A. Although this definition is broad the Alaska legislators have specifically narrowed the definition down considerably. According to the Alaska State Statutes, Title 8, Business and Professions Section 08.72.300, the Statutes define optometry as:

1. "optometry" is the employment of means or methods, other than the use of drugs, for the diagnosis of an optical deficiency or deformity, visual or muscular anomaly of the human eye, or the prescription or application of lenses, prisms or ocular exercises for the correction or relief of the human eye;
2. "practicing optometry" means the diagnosis, by means or methods other than the use of drugs, of an optical deficiency or deformity, visual or muscular anomaly of the human eye, or the prescription of lenses, prisms or ocular exercises for the correction or relief of the human eye, or the holding of oneself out as being able to do so.

Although the optometrist will or have suggested to you that they are legally bound to diagnose eye disease and that they are in a dilemma, i.e., they cannot diagnose eye diseases without the use of drugs. They are in a dilemma if the broader sense of the definition is used as set forth by the American Optometric Association. The Alaska State Legislators have ingeniously removed that dilemma for the optometrist by limiting diagnosis of visual anomalies muscular anomalies, optical deficiency or deformities and not eye diseases.

The ophthalmologist is a medical doctor who has completed a 3-5 year residency program after one year internship² preceded by 4 years of college and 4 years of medical school. He is trained in the diagnosis and treatment of ocular dysfunction and disease and in the use of all techniques or treatment including drugs, surgery, laser photocoagulation, radiation, etc. Because he has

been trained as a general physician first, his perspective of the eye is broader than the optometrist. He views the eye and its diseases within the context of the whole body physiology and pathology.³ Further, refraction to the ophthalmologist is viewed as only one necessary step in a differential diagnosis of the patient's complaint, Table 1 demonstrated the overall education and numbers of optometrists and ophthalmologists. From Table 1 it is evident that ophthalmologists have much more training in pharmacology and pathology than the optometrists. Still the optometrists continue to compare their curriculum hours to dental school curriculum hours. This is like comparing apples to oranges. They are not asking to use the drugs dentists use or to diagnose oral pathology. They are asking to do what the ophthalmologist does. Therefore, it is more accurate to compare ophthalmologists curriculum hours to optometric curriculum hours. (Please read Ref.#43, which explains this point in detail for the State of Alaska)

Table 2⁴ gives a comparison of consumer services offered by ophthalmologists and optometrists. It is quite apparent that there is considerable overlap. This is most apparent with respect to refractions. The optometrist obviously can do some of the things the ophthalmologist can do; the ophthalmologist can do all of the things the optometrist can do, has the education to better interpret the data acquired, and provide medical/surgical treatment. The ophthalmologist is trained to provide complete eye care and to evaluate ocular dysfunction in the context of total body physiology and pathology. Although the overlap of professional services is greatest for refractions, this is a source of considerable consumer spending in both professions.

II. ECONOMICS (AND PRACTICE)?

Table 3⁵ shows the substantial number of public dollars which are expended for eye care. A total of approximately \$4,135 million dollars were spent in 1975 for vision care services.⁶ The national consumer spending for ophthalmic surgery is not listed. This would make the total ophthalmologic dollar spent on eye care far greater than the optometric dollar. If optometrists are allowed to expand the scope of their practice through the use of diagnostic drugs, the price of the basic eye examination would undoubtedly rise. Proposed national health care legislation

can be expected to impact heavily upon these figures. For example, if the Kennedy-Mills proposal were to include coverage of sight correction services, total spending for these services would rise by 21% or \$866 million dollars per year. It is obvious that there will be considerable effort by vision care providers to ensure their fullest possible participating in this program. The economic stakes are very high.⁷ This makes it very clear why optometry has put on an aggressive nationally organized push to legislate themselves into a better position to compete for this consumer dollar. Even though the optometrists in the State of Alaska suggest that this is not a "money bill" -- it is. It is merely the first step toward the national optometric goal to attempt to become the primary eye care provider. We should expect that in the future the Alaska optometrists to follow the attempt of other states optometric associations to next try for the privilege to use these same diagnostic drugs as therapeutic agents. An attempt was made in West Virginia to legislate the privilege of eye surgery but this was defeated.

The optometrists have claimed at their bill hearings in the lower 48 that they see 70% of the eye consumer and therefore are the point of first entry into the eye care system. Looking first at the source of this claim and national statistics, the fallacy of this claim is demonstrated. They have erroneously assumed that the average number of eye consumers seen by each practitioner is the same. Thus the source of the fallacy: that since they compose 70% of the national work force they see 70% of the eye consumers.

Table 1, indicates the total number of practitioners in each group.⁸ The median number of patients seen per week by optometrists was 43.2; the median seen by ophthalmologist was 102.⁹ The ophthalmologist sees more than twice as many patients as the optometrist while he comprises only 30% of the work force. It is, therefore, clear that the ophthalmologists care for half the patients, while the optometrists, comprising 70% of the national work force, care for the other half. The statistics in Alaska show that there is a total of 40 optometrists¹⁰ and 25 ophthalmologists.¹⁰ Thus the

ophthalmologists make up 39% of the state work force and the optometrists 61%. Applying the same national ratio of eye consumers seen by optometrists and ophthalmologists, it is evident that the ophthalmologists see 56% of the eye care consumer, but makes up 39% of the state work force. The accuracy of the ratio of two to one was checked in the city of Anchorage by comparing the number of eye consumers seen by the most active ophthalmologist in town-40-50 eye consumers-as compared to the most active optometrist in town-20-25 eye consumers-seen in one day. These figures would seem to indicate that although ophthalmologists are a smaller group than optometrists, the public will work out their services given a free market choice.¹¹ On this point, the eye consumer in the State of Alaska has ready access to the ophthalmologic eye care providers. Some of the states in the lower 48 are mainly rural and ophthalmologists are congregated in the metropolitan areas and the optometrists are distributed over the rural areas. However, much of Alaska is "bush country", so that the ophthalmologists and optometrists are both congregated in Anchorage, Fairbanks, Kenai Peninsula and the southeast. There are only two areas (Kodiak and Bethel) that have a full time optometrist and no full time ophthalmologist, Table-Map 5,6. However, there are other medical doctors in these communities with "medical know how" and there are airports for evacuation in the case of eye emergencies. Furthermore, Kodiak and Bethel are visited on a regular basis by itinerant ophthalmologists. In fact, most areas in Alaska are served by itinerant ophthalmologists both by the Alaska Native Service and by private practicing ophthalmologists, Table-Map 6. In the 14 other states where a similar bill was passed, these states were mainly rural with a maldistribution of ophthalmologists. In these states this was the main reason for passing this legislation. Therefore, this argument for passing house bill 74 or senate bill 75 does not apply to the State of Alaska, because the distribution of ophthalmologists is essentially identical to that of the optometrists. Thus, the health services of ophthalmologists are readily available to

people in all sections of the state and in many small communities through the itinerant program.

In the states where optometric drug laws are in effect, optometrists who wish to use drugs much take short slide and lecture courses on pharmacology. This has or will create two classes of optometrists, which can only lead to additional consumer confusion about a profession already shrouded in confusion. In addition, the use of drugs by optometrists could falsely lead patients to believe diagnostic expertise is available from optometrists.

It is misleading to the consumer and legislature to imply that any drug is purely diagnostic. Each of the classes of drugs asked for by optometry have therapeutic uses. Will the optometrists resist the temptation to use these drugs to treat conditions beyond their knowledge and skill?

It has been said by the optometrists that they would like to use dilating eye drops also in their bush clinics when they see Alaska natives. A unique situation exists within the native population of Alaska. The incidence of angle closure glaucoma is 1 in 1,800, not 1 in 20,000 as in caucasians. To allow the optometrist to use these dilating eye drops would result in many more cases of acute angle closure glaucoma, for which they are not trained to treat, and which requires quick and effective treatment to prevent blindness. Sometimes angle closure glaucoma requires administration of intravenous Diamox, Manitol or urea. This would result in further expenditure of health care dollars.

III. LEGISLATIVE DUTY FOR THE EYE CARE CONSUMER:

As practitioners of an occupation which deals with the integrity of eyesight, optometrists have been recognized by the Washington Legislators as members of a "learned profession".¹² Professionals who deliver health care may be regulated by the state via its

police powers to oversee those activities which are involved with health, education and welfare.¹³ The healing arts particularly have been the subject of regulatory legislation which specifies strict requirements for the practice of such professions.¹⁴ The intent of such restrictive legislation is avowedly the protection of the public against injuries it may suffer from the conduct of such business or calling.¹⁵ The state may reasonably impose any condition precedent to the grant of its consent to practice a healing art, which has a real and rational relation to that objective.¹⁶

The usual means taken by the state in applying these conditions as quality standards has been by imposing licensing requirements and by carefully defining the particular professions involved.¹⁷ Constitutional challenges to this power of the state have been universally defeated when that power has been reasonably exercised.¹⁸

Licensing requirements usually specify minimum standards of professional competence for the profession covered and frequently the definition of the profession gives broad areas of practice which will be considered appropriate for the practitioner seeking licensure. Additional restrictions upon the practice can be found in state statutes which define unprofessional or unethical conduct.¹⁹

The above state powers are broad and greatly influence the scope and freedom of practice by the health care provider. Although the right to follow a profession is recognized as a valuable property right which is constitutionally protected,²⁰ such a right is not absolute; there is no natural or vested right to practice within the healing professions. Any such right is a conditional use.²¹

The justification for such regulations lies in a perceived right and duty of the legislature to protect the citizens of the state from incompetents and fraudulent health practitioners.²² The Washington Constitution specifically vests exclusive authority in the legislature to:

"...regulate the practice of medicine and surgery and the sale of drugs and medicines."²³ From this, courts have construed legislative authority to regulate, by means of separate statutory licensing requirements, all of the various professions and occupations engaged in health care delivery. This includes many professions which are not obviously included in "...the practice of medicine..."²⁴ Further, the state has the power to define what constitutes the practice of any profession and may then confine practitioners of various health disciplines to the particular system of practice in which they have been educated.²⁵

This is a logical stance for the legislature to take. If the legislature has an avowed interest in protecting the public,²⁶ it must make some attempt at defining the scope of appropriate practice which each class may safely employ and to license those within each class to practice upon the public only those skills for which they have demonstrated competent training. That includes courses, testing and most important of all, clinical experience under supervision. This is the legislative intent in enacting licensing statutes.²⁷ This reasoning is followed with consistency in cases involving almost every viewpoint and aspect of health care.²⁸

Great latitude is given by the courts to the legislature in defining its public health goals. However, the goal is universally stated to be the protection of public health. Health legislation is not passed to promote the personal ends of individuals or to enhance the status or prestige of any given class of practitioners.²⁹ Although the legislature may enact such regulatory legislation as it may consider necessary, there must be a rational basis upon which the legislative determination rests.³⁰ This cannot be interpreted as meaning anything less than that such legislation must appear to be rationally directed toward the achievement of the stated legislative goal and to be reasonably rational in the means which it seeks to achieve that goal.

- a) Goal - As noted above, the frequently given objective for regulation of health care providers is the protection of the public from incompetent practitioners.³¹

This goal is stated to exist even if it deprives a citizen of a right he otherwise might enjoy in the pursuit of his profession.³²

This reasoning leads to the conclusion that the legislature has the duty to ensure that its acts and statutes do not tend to increase public exposure to health risk.³³ The stated legislative goal is increased public protection, not increased public risk. Nowhere does case law state that public protection will be qualified - i.e., that the legislature may increase the risk "a little bit", but not "a lot". No such slippery subjective terms appear. The intent is protection. The language is explicit.

- b) Means - The means by which the legislature attempts to arrive at its stated goal must be reasonable and rational.³⁴ The means which have been used by all states to regulate the professions have been noted above. The states have attempted to ensure the competency of each practitioner and then limit each to the area of practice embraced within the training which that practitioner has received.³⁵ If this means anything, it must mean that before the provider is allowed to administer to an uninformed public, (45% of the public does not know the difference between an ophthalmologist and an optometrist)⁴⁸ he must provide evidence of training sufficient to ensure the public from health care which is inadequate. Such inadequacy can range from innocuously improper diagnoses which are nonetheless economically costly, to disabling or fatal mistakes in clinical judgement - either diagnostic or the end result of therapeutics.

Insofar as it can ever be sure of the quality of professional performance, the state has two related ways to oversee clinical performance.

The state may require evidence of formal professional training which has as its foundation and primary goal, a strong commitment to an understanding and clinical application of those methods, techniques and material to which the public will be exposed and which will place it at risk. Such training must satisfactorily convince the legislature that which it certifies the practitioner, the legislative duty to prevent risk of public harm has been met.

Using the data presented in the first portion of this testimony, it is apparent that optometric training as it now exists in the State of Alaska is not directed toward a broad understanding of human pathology/physiology/pharmacology with supervised clinical experience.⁴³ Training is limited to a superficial, most theoretical, presentation of data concerning ocular dysfunction with inadequate clinical supervised experience. Not only do the data show that the instruction given the optometric student is very limited, but little or no integration of visual disease/function

10

is made with 'whole body' disease/function. The eye is studied in isolation as an optical instrument. To use an analogy, an operating room nurse could teach an optometrist about eye surgery, just as a pharmacologist Ph.D. can teach an optometrist about pharmacology. However, no one would want an optometrist to perform surgery with an education based only on lectures and theoretical familiarity with the subject. The prescribing and using of drugs, just like the performance of surgery, must be founded on a broad-based curriculum involving many hours of supervised clinical experience using drugs. To allow any health care provider to practice with only limited classroom experience and testing violates the legislative duty to protect the public from risk of incompetency from lack of clinical experience.⁴³

As a second step, the legislature can require continuing education for those practitioners who have already completed broad formal training upon which additional, up-dated information may be rationally correlated. This type of post-graduate instruction always preumes in-depth background knowledge. It is used to present newly altered clinical concepts or additional practical experience (e.g., using operating microscopes, intraocular lens implants, vitrectomies, etc) for those practitioners with clinical experience sufficient to allow them to understand the usefulness or pitfalls, to see the advantages or clear disadvantages, to comprehend the clinical reliability or dangers of the material which the course is presenting. Crash courses which involve totally new material, presented to practitioners without that clinical judgement or experience necessary to actually grasp the real impact of the data presented, let alone the nuances, can be expected to create clinicians who will test their newly acquired knowlege in the public sphere. The hazards of such an approach are obvious. Again, such an approach does not satisfy the legislative duty to reduce public risk.

I must conclude that for the state to allow graduates of optometric schools, who are unarguably well-trained in the limited sphere of practice which optometry has exercised to date, to extend their

clinical practice to include the application of drugs to the eye would be an irrational approach toward the protection of public health.⁴³ If the curricula of optometric schools demonstrated sufficiently integrated instruction in human anatomy/pharmacology/physiology/pathology to provide the optometric graduate with an adequate basis for making appropriate clinical decisions of diagnosis, then such a legislative extension of clinical opportunity, and responsibility would be reasonable. Crash courses are not an adequate substitute³⁸ for many hours of supervised clinical experience.⁴³

It should be repeated that the strong interest of the state in protecting the public, has traditionally and appropriately placed rigid conditions and restrictions upon the right to affect public health.³⁹ It should also be repeated that this power to restrict health care practice is recognized as proper regardless of its effect upon the economic interests of those regulated.⁴⁰

It is doubtful that an informed public would voluntarily accept a role as an on-the-job training clinical practice model so that the optometrists can gain the clinical experience needed to use drugs. The consumer public currently has expectations which include a higher standard of knowledge by the medical service provider than ever before. These expectations directly flow from the public's increased understanding that they each, as individual complex biologic units, are biochemically affected in manifold ways via the environment, foods and drugs. Any legislative change which would franchise greater administration of drugs and which simultaneously does not require firm, convincing evidence of a profound understanding of the disease to be detected, its effect on the human body, the biochemistry of the drug to be used, ignores the public right to be protected from incompetency and the public right to make decisions concerning its health care. The public has a right to understand that any practitioner, presuming to diagnosis ocular disease that usually have total body manifestations, is making diagnostic decisions based upon training which comprehends all of the above principles.

12

IV. AGENCY ACTION FOR ASSURANCE OF THE HIGHEST QUALITY EYE CARE FOR THE CONSUMER.

The public should be able to rely upon state certification of competency. Legislation which does not demand evidence of such competency before certification fails in its duty to provide public protection in matters of health.

Currently, states have little control over the calibre of training which optometrists acquire prior to licensure. An optometrist may have trained in an optometric school unaffiliated with any medical center, he may have obtained the minimal training necessary to qualify for graduation, but once having graduated, he can apply for and obtain a license with ease.⁴¹

The State Board of Optometry certifies the competency to use drugs of those optometrists which it approves for licensing.⁴² Two problems are immediately apparent:

- 1) The members of the Board of Optometry have little personal experience in ocular pharmacology, ocular pathology, and diagnosis. They are themselves graduate of optometry schools which have offered limited training because the board members took their training when little time was devoted to course work in pharmacology, and now have little experience with drugs. It is difficult to see how such a Board can adequately evaluate such clinical ability in optometric applicants for licensure, nor is it clear how such a Board can construct any 'refresher' course that would adequately prepare the optometrist for his broadened responsibilities. What is usually used is a 'canned' course, prepared elsewhere.
- 2) The ability of the Board to carry out its mandate to protect the public from those few individuals that would use these diagnostic drugs also as therapeutic drugs would find themselves in a frustrated position. The Board can do nothing to prevent this and the fine for practicing medicine without a medical license is only \$100.00.

The regulation of the profession by the Optometric Board will be considered appropriate so long as it is reasonable and necessary in the interest of health, safety of the people.⁴⁴ Licensing of optometrists by a Board itself lacking in the necessary qualifications to evaluate clinical performance and knowledge, is manifestly unreasonable. To grant the right to optometrists to use diagnostic drugs who are poorly qualified to do so, is not a reasonable, or an appropriate, or a necessary means of 'protecting' the public health.

The regulation of the practice of optometry is not for the benefit of the licensee, but for the state and its people.⁴⁵ Certainly, if the practice of medicine and surgery is a proper subject for careful and precise legislation, so also should be legislation which concerns eye care and those who provide it to the public.⁴⁶

V. CONCLUSION

Having looked critically at the past trend toward the expansion of optometric services into medical care, and with the present trend of more and more states defeating this kind of bill, it is proper that some statement be made regarding an appropriate role for this vision care professional.

If the optometrist will be expected to diagnose eye disease, then one of two events must occur:

- 1) optometric training must be upgraded substantially enough to provide him with clinical expertise sufficient to satisfy appropriate public expectations of high competency; or
- 2) optometrists must work in an association with ophthalmologists close enough to provide for the day-to-day transmission of diagnostic information from the M.D. to the O.D., and allow the latter to obtain practical involvement in treatment rationals and administration. This would be similar to the military, Veterans Administration and Alaska Native Service, where the optometrist use these drugs under the direct supervision of the ophthalmologists.⁴⁷

Having once recognized the above solutions two problems immediately present themselves. The first solution would require the relocation of optometric schools to permit integration with medical training and include a complete restructuring of optometric training. So much change would be needed that any difference between the ophthalmologist and optometrist would evaporate. However, if any group of practitioners presumes to medically minister to the public it must accept the rigorous training which must precede such responsibility. There is no quick and easy path to competent understanding of a subject becoming increasingly complex year-by-year. The optometrists seem to want to become doctors, but do not want to go through the extensive number of years training it requires. This is particularly true when the results of error or incompetency can be blindness.

The second solution, close day-to-day association of optometrist/ophthalmologist, creates a psychological hurdle - perhaps an economic one as well. Optometrists would be required to visualize themselves in a supportive role. This is difficult for any professional to do, especially if he has historically been conditioned to see himself as a member of a separate group, practicing independently. So long as he can offer only limited eye care, he is in a supportive role to those who offer complete eye care. This cooperative association is currently working well in the Veteran's Administration System, the military and the Alaska Native Service. It could work well in private care.

Finally, if state legislatures believe that it is proper to expand the medical opportunities of this health-care group of practitioners via redefinition and short-course catch-up lectures without restructuring fundamental educational requirements and experience, there can be little rationale for not doing the same for all paramedical groups, e.g. naturopaths, acupuncturists, and faith healers.

Rationally, the legislature must either strictly require very high state-of-the-art medical training standards to protect its citizens or it should minimize that responsibility and lower its standards to permit each group to economically advance at the public expense. The latter practice would also reduce the educational time and

experience required to produce specialist M.D.'s- but, of course, such physicians would be recognized as marginally or totally incompetent. Should the standard be any different for optometrists who wish to medically diagnose eye disease that is so closely linked with the body as a whole functioning unit?

Thank you for your time and the opportunity to present this view indorsed by the State Ophthalmologic Association.

TABLE 2

PH. D. THESIS BY DON C. PEARSON, M. D. - APRIL 28, 1977 - WORTHEN
 THE OPHTHALMOLOGIC OPTOMETRIC INTERFACE T. A. A. O. O. 1977

Service offered by Optometrist and Ophthalmologist

<u>Service</u>	<u>Optometrists</u>	<u>Ophthalmologists</u>
Refraction	99%	99.5%
Ophthalmoscopy	92%	99.5%
Contact Lenses	79%	58%
Visual Fields	75%	94%
Tonometry	66%	99.5%
Orthoptics	50%	53%
Low-vision aids	40%	55%
Biomicroscopy	32%	99.5%
Aniseikonic Testing	8%	9%
Treatment of eye disease	1-2%	100%
West Virginia and North Carolina		
Surgery	0%	99%

TABLE I

SYMPOSIUM ON LEGISLATION

PH. D. THESIS BY DON C. PEARSON, M. D. - APRIL 28, 1977 - WORTHEN
 THE OPHTHALMOLOGIC OPTOMETRIC INTERFACE T. A. A. O. O. 1977

Comparison of Optometry and Ophthalmology

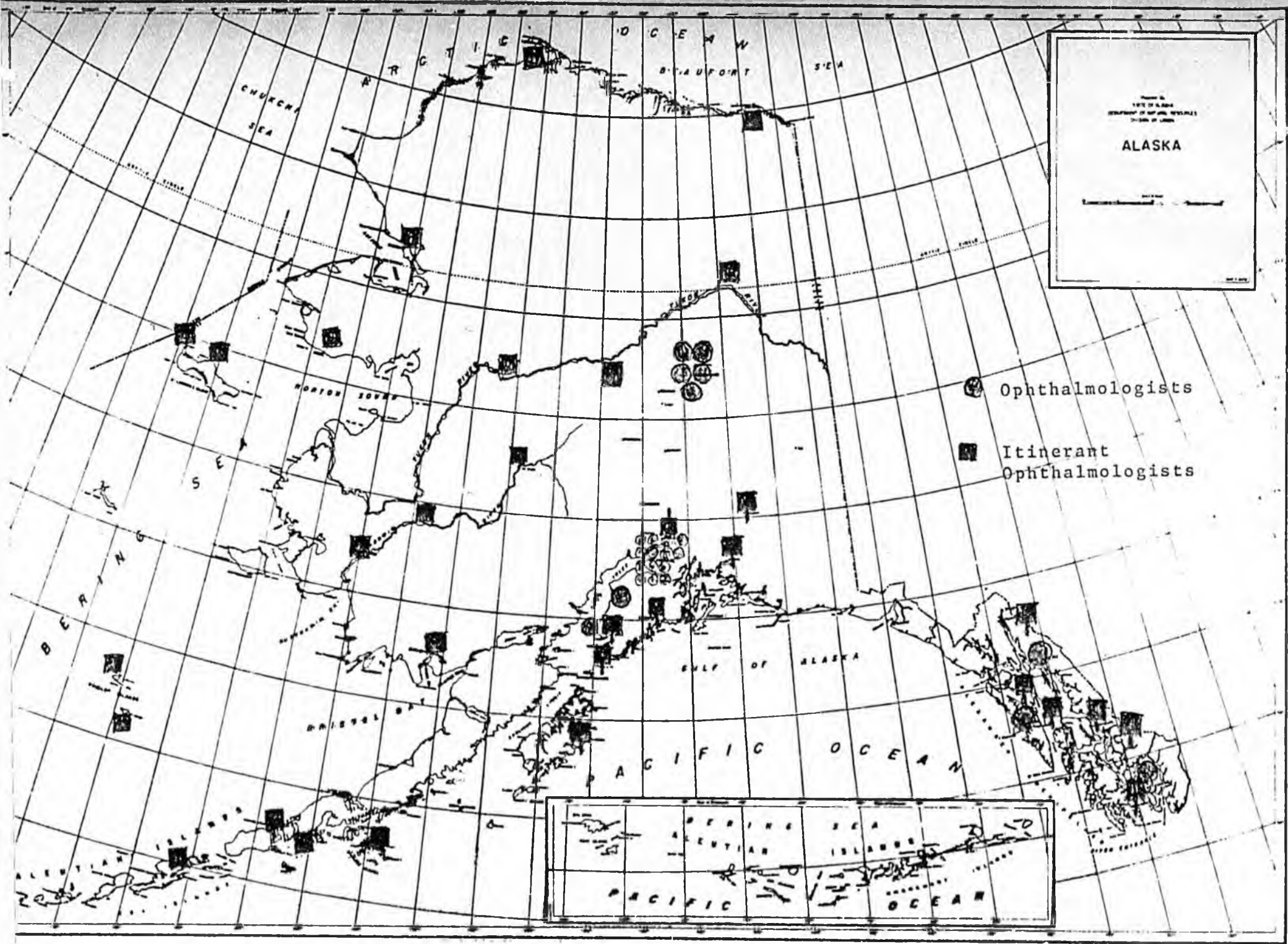
	Optometrists	Ophthalmologists
1 - License	In all states as optometrists	In all states as Physicians and Surgeons
2 - Prerequisite	2 yrs. of college (60% of beginning students have baccalaureate degree or higher)	Graduation from Medical School (M.D.) 3 - 4 years College
3 - Curriculum	School or College	Medical school internship, Postgraduate (residency)
Pharmacology	64 hours* 126 hours **	307*** (187 hrs. general with 18 months clinical and 120 hrs. ocular with 4yrs. 6mo. clinical)
Pathology	20-60 hours	200 hours general with 3 years clinical and 148 hours ocular with 3 years clinical
4 - Period of training	4 yrs (34-36 months)	3-5yrs. (36-60 months)
5 - Time for education after high school	6-8yrs (54-72 months) Max. 4yr. undergrad. Max. 4yr. Opt. college	11-14yrs. (120 months)
6 - Number of active practitioners	21,900	9,322
7 - Number of students	4,985	1,914 (residents)
8 - Total number of practitioners and students	24,933	10,496
9 - Total number of eye professionals	24,800 (70% of total)	10,629 (30% of total)
* Mr. George Hall's report on Pennsylvania School of Optometry to March 1, 1978 meeting of Legislative Coalition of Health Care Professionals.		
** 126 hours - Southern College of Optometry		
*** Mayo Clinic and Iowa		

TABLE 3

CIVILIAN CONSUMER SPENDING FOR VISION CARE AND SIGHT CORRECTION
SERVICES IN 1975

<u>A. Expenditures</u>	<u>OFFICES OF OPTOMETRISTS</u>	<u>OFFICES OF OPHTHALMOLOGISTS</u>
General examinations	\$525	\$510
Medical treatment and therapy	40	500
Ophthalmic Services:		
Corrective Eye glass Lenses	865 (49.6%)	180 (14%)
Contact Lenses	285	60
Other	<u>30</u>	<u> </u>
	1,745	1,250
		No optical shops No surgery

MAP TABLE 5



Division of
1972 of ALASKA
DEPARTMENT OF SOCIAL SERVICES
Division of Health
ALASKA
Division of Health
1972

- Ophthalmologists
- Itinerant Ophthalmologists



FOOTNOTES:

- 1 - Worthen: The Ophthalmologic-Optometric Interface. Transactions of American Academy of Ophthalmology and Otolaryngology *3:OP-155, 1977
- 2 - Representative of most ophthalmology residency programs, it is that of the University of Minnesota, Mayo Clinic Graduate School of Medicine. Following graduation from Medical school and a general or specialty internship, the resident enters a program which requires 65 hours a week of ophthalmologic instruction; of this, approximately 8 hours a week is devoted to formal, didactic lecture, the remainder is clinical or laboratory activity. This weekly schedule continues over a twelve month academic year, for three years. Some of a nine month written home study course administered by the Academy of Ophthalmology. Some programs require an additional one year of ophthalmology. Department of Ophthalmology, University of Minnesota, Mayo Clinic Resident 1974-1977.
- 3 - Curriculum, University of Minnesota College of Medicine. The basic curriculum required of any candidate for an M.D. degree includes 128 credit hours of 'medical' subjects; this does not include clinical studies which are specifically directed toward a specialty interest. Although optometrists may agree that these requirements are not appropriate for them, such an analysis ignores the fact that in expanding their role into the practice of medicine optometrists should be subjected to the same educational requirements. Unfortunately, there is no short-cut to professional competence. This is particularly true in the rapidly expanding and complex field of medicine. The public has a right to demand strict legislative requirements before practitioners are certified as competent.
- 4 - Worthen, note 1, OP-158, supra.
- 5 - Trapnell, The Impact of National Health Insurance on the Use and Spending for Sight Correction Service, 1976. (This study was underwritten by the American Optometric Association, and the Optical Manufacturers Association.) It reveals that optical device sales represent 66% of the funds expended for optometric services and 19% of funds expended for ophthalmologist services, at Tabel 1 of the Trapwell Study.
- 6 - This figure includes \$920 million spent for optician and \$220 spent by institutions. Those categories of service providers are not included in this discussion since they are not involved in patient care.
- 7 - This economic impact will be divided not only by optometrist and ophthalmologists, but also by opticians and lens/frames/contact lens manufacturers.

8 - Worthen, note , Op-157, supra.

9 - On Blue Shield Survey: In 1975, actuaries for Blue Shield in Connecticut requested of optometrists data necessary to project the cost of insurance covering optometric examinations. One hundred sixty six out of 266 active optometrists responded listing their age, number of years in practice, and number of eye examinations performed each year, and the cost of an eye examination, exclusive of the cost of glasses, so called service charges or visual training. Similar data was gleaned from ophthalmologists, It was concluded that the average optometrist see 23.3 patients per week. Exclusive of patients seen for medical surgical problems or for follow-up care, the average ophthalmologist, of whom there are 160 in Connecticut, sees 56 patients per week for complete eye examinations. Also, if this patients per examiner data is carried over to fit national figures for the number of practicing O.D.'s and ophthalmologists it indicates that about 60% of the primary eye care is rendered by ophthalmologists in the United States right now.

A report prepared for the Optical Manufacturers Association by a consulting actuarial firm (Trapnell Report-1975) presented data based upon national surveys conducted in 1975. The reporters estimated that approximately one-half of 50 million professional eye examinations were done by ophthalmologists and one-half by optometrists. This report dealt only with persons seeking entry into the eye services field for so-called "sight correction" services and did not count all of the services provided by ophthalmologists otherwise for persons who seek out an ophthalmologist otherwise for persons who seek out an ophthalmologist for treatment of medical and surgical problems. (Ophthalmologists obviously do 100% of significant eye surgery and treatment of major eye disease) It is remarkable to note that even though there were approximately 10,000 practicing ophthalmologists, as compared to 20,000 optometrists in the United States, that half of the 50 million so-called "routine eye exams" were performed by ophthalmologists during the year 1976.

10- Department of Commerce and Occupational Licensing

11- Obviously, where ophthalmologists are rare, optometrists see the bulk of patients. However, public education, assistance with payment of medical bills via Medicare and Medicaid, the high mobility of todays population, and the trend toward urban population clustering near ophthalmologists and other specialists certainly influence this bias toward ophthalmologists.

12- R.C.W. 18.53.005 Legislative Declaration: "The legislature finds and declares that the practice of optometry is a learned profession and affects the health, welfare and safety of the people of the this state, and should be regulated in the public interest and limited to qualified persons..." (Amendment 1975)

- 13 - Ellstad v. Swayze, 15 Wash. 2^d 281, 130 P2^d 354 (1942).
See also, Ketchum v. King Co. Medical Service Corp., 81 Wash 2^d 565, 502 P2^d 1197, 1200 (1973)
- 14 - Swayze, note 13, 353, supra.
- 15 - Kelly v. Carroll, 36 Wash 2^d 482, 219 P2^d 79, 90.
(1950)
- 16 - Campbell v. State, Id., at 462
- 17 - Gellhorn has recently argued that state licensing statutes are in fact attempts by the profession or occupation involved to control competition by means of restrictive admission to practice. Even Professor Gellhorn would admit that the licensing of health professions is necessary and probably rises above such criticism. Gellhorn, The Abuse of Occupational Licensing, 44 University of Chicago L.R.6, 1976.
- 18 - Semmler v. Oregon State Dental Examiners, 294, U.S.608, 611,
(1934); State v. Wilson, 11 Wn. App. 916, 528 P2^d 279 (1974)
- 19 - R.C.W. 18.53.140
- 20 - Laughney v. Maybury, 145 Wash. 146, 259 P.17 (1927)
- 21 - Ellstad v. Swayze, note 47, 353, supra, Accord. Dantzler v. Callison, 230 S.C. 75, 94 WE 2^d 177, app. dismd. 352 U.S. 939(1956)
- 22 - Kelly v. Carroll, note 15, 85, supra.
- 23 - Art. 20, 2
- 24 - Ellstad v. Swayze, note 13, 353, supra.
- 25 - State v. Bonham, 93 Wash 489, 161 P 377, 379 (1916)
- 26 - Kelly v. Carroll, note 22, supra.
- 27 - State ex rel Fleming v. Cohn, 12 Wash 2^d 425, 121 P2^d 954 (1942)
Accord, State v Hauk, 32 Wash 2^d 68; 203 P2^d 693(1949)
- 28 - 61 Am Jan 2^d, Physicians, Surgeons, and other Healers, 19;86
ALR 623, 624
- 29 - Ex parte Whitly, 144 Cal. 167, 77 P 879 (1904)
- 30 - "It is enough that...it might be though that the particular legislative measure was...rational..." Williamson v. Lee Optical Co., 348 U.S. 483, 488 (1955), Douglas, J., majority opinion)
- 31 - See note 15, supra.
- 32 - Campbell v. State, note 15, supra.
- 33 - "A law which reduces or prevents any increase in an ...evil tends to safeguard the public welfare..." Id. at 462. (emphasis added).
- 34 - Williamson v. Lee Optical, note 29, supra.
- 35 - State v. Houck, note 27, 700, supra.
- 36 - Worthen, note , Op-160, supra.
- 37 - "...the legislature was careful to require definite knowledge

- 38 - West Virginia Statute 30-8-5 requires those optometrists who wish to use drugs to complete those requirements which the board of optometry may see fit to establish. The board of optometry requires attendance at a pharmacology course similar to that described in note 43, infra.
- 39 - Ellstad v. Swayze, note 13, supra.
- 40 - Campbell v. State, note 15, supra.
- 41 - R.C.W. 18.54070
- 42 - R.C.W. 18.54.030 - In fact, the statute excludes from board membership any optometrist "...who has any connection with any school...of optometry..." It could be presumed that optometrists teaching at optometric schools would be best qualified to judge the qualifications of optometric candidates and possess the most currency in clinical information.
- 43 - A letter from Leon Candenberg, O.D., Director Pennsylvania College of Optometry describes the lecture outlining in pharmacology used by Kentucky, Florida, Pennsylvania and New Mexico. This course involves participation by the optometrist in six weekend sessions (Saturday and Sunday) and ends with a three hour examination covering the presented material. A letter from Sam A. McConkey, M.D. to the Honorable Charles Parr:

ON OPTOMETRISTS PRACTICING IN THE STATE OF ALASKA

According to figures obtained in February of 1978 from the Department of Commerce, Division of Licensing, there are 40 licensed optometrists in Alaska. Their educational background is as follows:

- 24 attended Pacific University College of Optometry (1951-1976)
 - 5 attended Illinois College of Optometry (ICO)
 - 4 from 1948 to 1960 and 1 graduated in 1977
 - 3 attended Southern College of Optometry
 - 2 attended the University of Houston College of Optometry
 - 1 attended Southern California College of Optometry
 - 1 attended Los Angeles College of Optometry (No longer listed as an optometric school)
 - 1 attended Northern Illinois College of Optometry (No longer listed as an optometric school)
- In one case, it is unknown to the Department of Commerce where he went to school.

The following is a summary of pharmacology training at these various institutions.

- Pacific College of Optometry has NO M.D., Ph.D., or anyone with a masters or bachelors degree in pharmacology teaching at that institution.
- Illinois College of Optometry, prior to 1960, had NO M.D., Ph.D., or anyone with a masters or bachelors degree in pharmacology teaching. The one graduate of 1977 may have been taught by one professor in the category of Ph.D. or masters or bachelors degree.

Southern College of Optometry has NO M.D., Ph.D., or anyone with a masters or bachelors degree in pharmacology teaching at that institution.

University of Houston College of Optometry has NO M.D., Ph.D., or anyone with a masters or bachelors degree in pharmacology teaching at that institution.

Southern California College of Optometry has NO M.D. teaching in pharmacology; has two instructors listed as either a Ph.D. or masters or bachelors degree.

It follows that at least from all the available evidence, the maximum number of optometrist in the state that had any pharmacology training from any qualified instructor at all, is two; one from the Illinois College of Optometry who graduated in 1977 and the one graduate of Southern Calidifornia College of Optometry. It appears that the maximum number of optometrists in the state that had any pharmacology training from any M.D. or M.D./PhD. in pharmacology is zero.

The maximum number of optometrist in the state that had any instruction at all from any full-time M.D. on the staff of the school is zero.

The maximum number of M.D.'s in even a part-time capacity on the staff of any school attended by 37 of the 40 optometrists in Alaska, is two. From a survey of the Blue Book of Optometry which was last issued in 1976, it appears that the maximum number of members of the State Board of Optometry that even have a bachelors degree from any school is two of the six board members that are listed. It would seem reasonable that there would be an ophthalmologist either in the teaching or in the clinical aspect of optometric education, but it appears from the available evidence, that the maximum number of optometrists currently practicing in Alaska that had any full or part-time instruction, either by lecture or in the clinical setting by an ophthalmologist is zero.

44 - State v. Spino, 61 Wash 2^d 246, 377 p2^d 868, 870 (1963)

45 - Pennington v. Benelli, 15 Cal App 2^d 316, 59 P2^d 448

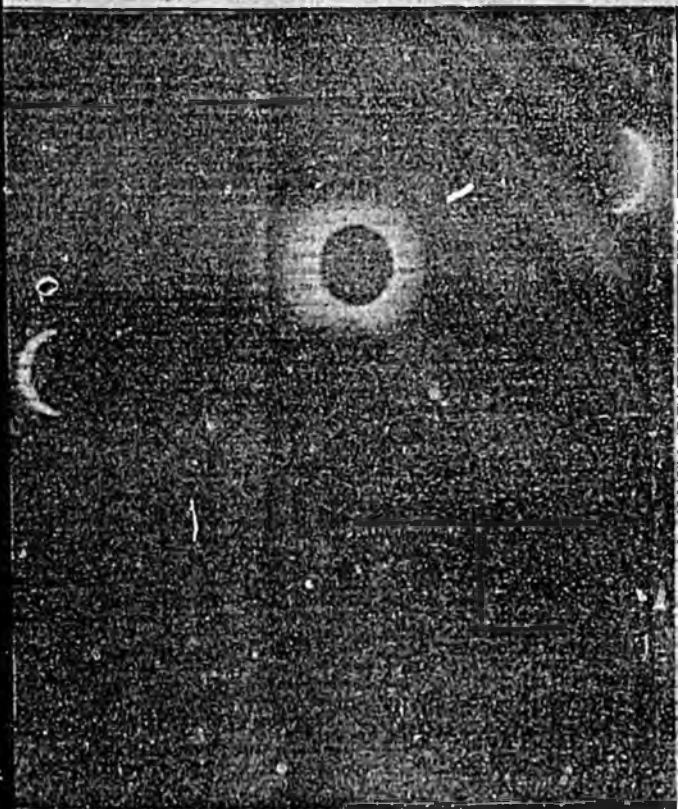
46 - Campbell v. State, note 15, 466, supra.

47 - The AAO Nov-Dec. 1977. "AGREEMENT REACHED ON DEFINITION OF MILITARY OPTOMETRIST- The army, Navy and Air Force have agreed on a common definition limiting the services optometrist may render to military personnel. Prior to the new definition, the three military branches had differing definitions which the AAO mailed to all state ophthalmological societies earlier in the year. On June 15th James W. Foristel, AAO Congressional Liason, met with Robert Smith, M.D., Assistant Defense Secretary for Medicine, who was attempting to have all three of the service's Surgeons General agree on a common definition. In September, they reached agreement on the following single definition.

'The optometric clinic provides optometric patient services under medical supervision. Optometrist examine the eyes and

adnexa to include refraction and other procedures, prescribe lenses to correct refractive errors and improve vision. They refer patients to physicians for diagnosis and treatment of suspected disease. Optometrists use appropriate drugs to perform optometric procedures. When using these drugs, immediate medical care is available in the event of adverse reaction."

48 - The optical Journal and Review of Optometry, June 15, 1976
Volume 113 No. 6



Associated Press wire photo

on can be seen eclipsing the sun in this series of Manitoba, west of Winnipeg.

watch in awe eclipses sun

At Olympia, the Washington state capitol, the clouds broke 10 minutes before total eclipse.

The curious broke out homemade pinhole projectors and makeshift viewers as scientists set up more sophisticated telescopes or conducted experiments in chartered aircraft above the clouds.

But a mattress of clouds several thousand feet thick covered most of the Pacific coast and many had to settle for a televised version.

At Goldendale, Wash., near the Columbia River, more than 1,000 persons had gathered, some from as far away as New England and California.

A cloud bank moved in at the crucial moment of totality, but a muted cry of awe and joy rippled over the hillside at the small public observatory as the last tiny sliver of sun fell behind the passing moon.

One of those traveling more than 3,000 miles to the snowcovered prairie of northwestern North Dakota was Jim Manning, assistant director of the Morehead Planetarium at Chapel Hill, N.C. He came with a party of eight which drove three days in a van and compact car to get there.

"You feel the awesome power of the laws of nature, how they affect things, and all you can do is sit there and watch," Manning said. "It's a gut feeling of helplessness and you say, 'My God, look what's going on.' It's a mystical experience."

The shadow crossed the earth at speeds over 3,000 miles an hour, beginning on the West Coast near Portland, Ore., and dissolving over Greenland.

Commerce panel urges

'Eliminate 7 health boards'

By ROSEMARY SHINOHARA
Our Juneau Bureau Chief

JUNEAU — A drastic housecleaning that would eliminate 7 of 11 state boards regulating the health professions was proposed Monday by majority members of the House Commerce Committee.

The commerce committee Democrats also propose that two of four health boards dealing with "life and death" professions be required to improve their work within two years, or face death by legislative action.

FRED BROWN, D-Fairbanks, chairman of the committee, presented the plan Monday, but no votes have been taken on it yet. The committee expects to finish considering the fate of the 11 boards audited under the 1977 Sunset Law by Thursday.

Brown said the proposal calls for the state Medical Board, which licenses and polices doctors, to be placed on "one-year probationary status." The committee is expected to recommend that the board hire an executive director to help straighten out its affairs, and return for another "sunset" review in 1980.

A legislative audit of the Medical Board said it had failed to "effectively police" the profession, and neglected to look into consumer complaints. The state Commerce Department's division of occupational licensing, responsible for investigating cases brought to light by the boards, shares the blame, the auditors said.

THE STATE DENTAL Board, meanwhile, should be given two years to shape up, the majority members of the committee suggest.

Unlike the Medical Board, the Dental Board is overly - restrictive in permitting outsiders to set up practice in Alaska, the representatives said.

The committee will recommend that the state boards of nursing and pharmacy, the two other "life and death" boards, be continued for four years, the normal period before another "sunset" review is required. However, significant changes were recommended for the pharmacy board.

Of the other seven health boards, those regulating psychologists, dispensing opticians and nursing home administrators should be phased out over the next year, and four others regulating veterinarians, chiropractors, optometrists and physical therapists should terminate within 1½ years, Brown said.

THE LICENSING functions of boards which terminate would generally be taken over the division of occupational licensing.

The legislative audit division, which prepared reports on all 11 of the health boards, was highly critical of many of them, but recommended that only two, those for nursing home administrators and dispensing opticians, be disbanded. The nursing home administrators agreed with the recommendation, as there are few of them in the state.

Asked to comment on the committee's proposal Monday, legislative audit chief Gerald Wilkerson said, "It would certainly put the fear of God into the rest of the boards."

AAO Program Attracts Residents

Over 150 ophthalmology residents attended a program sponsored by the American Association of Ophthalmology entitled "Tips on Starting Yourself in Practice." The program, as a special service to ophthalmology residents, was held during the Annual Meeting of the AAO in Kansas City, Missouri, and was conducted by George S. Conomikes, President, Conomikes Associates, Inc. Robert J. Crossen, M.D., Chairman, AAO Council on Ways, Means and Finance, opened the program by extending a welcome to the residents.

Conomikes Associates, Inc., a professional medical management consulting firm based in Marina del Rey, California, has worked with all types of medical practices throughout the United States and through the sponsorship of the AAO has conducted an annual series of workshops for ophthalmology residents and ophthalmologists in practice. For a complete schedule of practice management workshops for 1979 see page 14.

The AAO was happy to have served the residents by sponsoring the program in Dallas and hopes that all residents who attended benefited from Mr. Conomikes' expertise in the area of practice management.

U.S. Liable for Failure of Military Optometrist to Refer a Patient

The United States District Court for the District of Alaska (in *Robert K. Steele, etc. v. United States of America*, No. F75-27 Civil) on October 20, 1978, concluded that the failure of a military optometrist to refer a child patient, a medical military dependent, to a medical practitioner "was not a 'judgment call' but a violation of the governing principles of professional standards."

This ruling under the Federal Tort Claims Act (28 U.S.C. 1346 (b)) held that an eight-year-old boy, son of a soldier, who received medical care at the Eye Clinic, Bassett Army Hospital, Ft. Wainwright, Alaska, could recover for the loss of his right eye. The military optometrist examined the child in December, 1973, and in January, 1974, and found "no good reflex" and limited light perception. Eye-glasses were prescribed and the child was instructed to return for follow-up in four months. When seen on June 10, 1974, his right eye had limited eye perception. On

June 17, 1974, an ophthalmologist found the child's right eye essentially blind and inflammatory. It was involved with a tumor and a retinal detachment. The eye was later removed as life threatening.

In an 18-page opinion, District Judge James M. Fitzgerald held, "Optometrists are trained to recognize symptoms of many diseases which may be discovered by eye examination. They are not permitted under recognized optometric standards to undertake a definite diagnosis but recognize this as the responsibility of a medical doctor. Obviously, it is foreseeable that failure to refer to a qualified medical practitioner, when required to do so, will result in delay of diagnosis and the institution of treatment; so it proved to be in Timothy's case. At the time the referral was finally made to an ophthalmologist, it was too late. Time had run out, and the only thing that could be done was to remove the eye.

"I conclude that the plaintiff is entitled to recover in this action from the United States for the loss of Timothy's right eye."

Capt. Blais To Head Navy Eye Care Unit

Navy Captain Bernard R. Blais is the first ophthalmologist assigned to the Navy's Bureau of Medicine and Surgery in the capacity of an ophthalmologist.

Dr. Blais' responsibilities will include coordination of medical and visual eye care for Navy and Marine Corps personnel, plus the design and development of a sight conservation program within the Navy to fulfill the requirements of the Occupational Safety and Health Act (OSHA).

Assigned to the Occupational and Preventive Medicine Division of BUMED, Dr. Blais will serve as project manager of the Sight Conservation Program for active duty Navy and Marine Corps personnel specifically and Civil Service employees generally.

A Professor of Surgery (Ophthalmology) at the Uniformed Services University of Health Sciences, Capt. Blais has been actively involved for many years in the educational and socio-economic aspects of medical eye care.

He earned his M.D. from the College of Medicine of the University of Vermont in 1958 and served his internship at the Naval Hospital, Portsmouth, Va. His residency was in Ophthalmology at the Naval Hospital, Philadelphia, and he also spent a year at the Armed Forces Institute of Pathology in Washington, D.C., under a Fellowship in Ophthalmic Pathology.

Dr. Blais has been certified by the American Board of Ophthalmology since 1966 and is a long-term member of the American Association of Ophthalmology.

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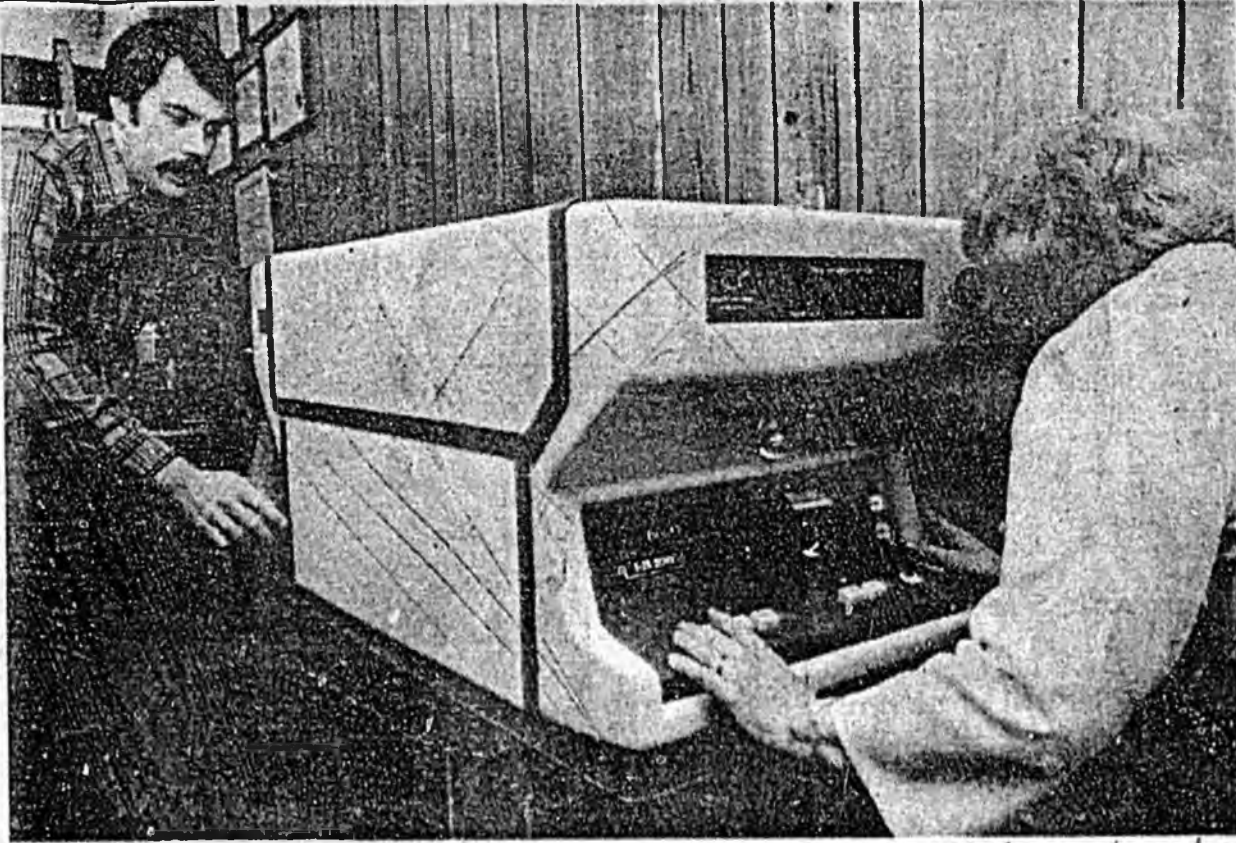
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MACHINE SIMPLIFIES EYE TESTS

With this space-age computerized device, technicians can have a patient's glasses prescription in hand in about a minute and a half. However, traditional procedures are still followed for much of the examination. At left,

Dr. Bill Faulkner adjusts controls for a seated patient. At the other end of the machine optometric technician Carolyn Hazel prepares to take the reading, printed out on a small slip of paper.

Computer Gadget Comes To Town To Help Determine Eyeglass Needs

An automatic vision refractor, born of space-age technology, now is in service in Anchorage.

The computerized machine takes just 90 seconds to establish the correct prescription for eyeglasses. The patient needs no eye drops nor does he need to make decisions as to which correction helps him to see better.

Even if the patient can't speak, the machine will read his eyes and pick out the proper correction, at least to a point.

Installed at the Anchorage Eye Clinic, 1345 E. Ninth Ave., the machine is the only one in Alaska.

Dr. Bill Faulkner, one of the physicians at the center, says that while the instrument "will not replace the traditional refraction techniques, it will prove invaluable in detecting the proper visual prescription. It will also be utilized in contact lens fitting

It can pick up early clues to glaucoma and cataracts by pointing out that not enough light is getting into the patient's eyes.

The computer-based machine was originally developed by the National Aeronautics and Space Administration to test the vision of astronauts.

Another space-age spinoff adapted to ophthalmologists' offices is the tonometer, which screens for glaucoma. Instead of actually touching the eyeball to test inner pressure, the new machine measures and records pressure by blowing a whiff of air into each eye. This device has been in use in local offices for a year

or so.

The refraction examination is simple. The patient looks directly into the computer screen, a technician at the opposite end presses a button, and he sees a pale green light, one eye at a time.

The readout tells the degree of nearsightedness or farsightedness, how much astigmatism is in each eye and where it's located on the eye's axis.

The machine, manufactured by Acuity Systems Inc. of Reston, Va., costs about \$28,000. Company technicians are here training clinic staff in use of the machine.

Of $\frac{20}{20}$ vision.



This amazing instrument is called a phoropter. It contains almost every possible lens combination. It can help determine which prescription is best for you.

you can practice good visual habits to prevent problems in the future, or keep a minimal vision problem from progressing.

If a vision problem is detected and you are already wearing glasses, your optometrist can update your prescription to make up for the changes that may have taken place in your eyes. If contact lenses are necessary or preferred to glasses, your family optometrist is highly qualified and skilled, through years of education and clinical experience, to provide you with the care and follow-up to ensure a proper fit and healthy eyes. Or a program of vision therapy



may be needed or recommended to improve inadequate vision skills.

You should know that besides being able to detect conditions such as glaucoma or cataracts, a doctor of optometry may detect signs of diseases that are not directly related to vision but that show up in the eye. By looking into your eye with a special instrument, an optometrist can see blood vessels and the optic nerve, the only visible part of the nervous system. Among conditions which may be detected by internal eye examination are hypertension and diabetes. When signs or symptoms are discovered you will be referred to your family physician or other health care practitioner if necessary.

WHEN SHOULD I SEE AN OPTOMETRIST?

The American Optometric Association recommends that regular eye examinations be considered a matter of routine preventive care. All children should have examinations by three years of age and regularly during school years. After age 20, you should see an optometrist at least every two years. After age 35 you should have an examination every year, or as often as recommended by your optometrist.

But basically the answer to the question of "when should I see an optometrist?" is "NOW."

Your eyes are always changing, and if you haven't had them examined recently, the American Optometric Association urges you to do so as soon as possible.

There is a lot more to good vision than just passing an eye chart test. 20/20 vision isn't enough.

HOW CAN I FIND OUT WHETHER MY EYES ARE WORKING RIGHT OR NOT?

It is important that you receive a thorough examination to determine how well your eyes are doing their job. A member of the American Optometric Association is a highly skilled doctor of optometry.

To become licensed to practice, today's optometrist must have a minimum of two to three years undergraduate college education plus at least four years at a specialized college of optometry. Doctors of optometry who are members of the AOA are totally committed to the ideal that every member of your family should receive the best vision care possible.

WHAT CAN AN OPTOMETRIST DO FOR ME?

Hopefully, the results of your optometric examination will show that you have no need for corrective lenses. If this is the case, suggestions may be made as to how

**Your Family Doctor of Optometry. The person to see.
And keep seeing.**



American Optometric Association