HB

79

# EYE CARE CRISIS

**PARTS I and II**

by Victor H. Krulak

As it appeared in THE PEN, Vol. 2, No. 6, Nov. 15, 1978

**V. H. KRULAK**

*The editors of THE PEN are grateful to THE COPLEY NEWS SERVICE for releasing publication rights to a two-part newsfeature essay which appeared in newspapers throughout the nation. California journalist V. H. Krulak has done extensive research into the complexity of the current invasion of medicine by non-medical measuring scientists and the effort of medicine to resist intrusion for the sake of the public health. Mr. Krulak's complete analysis, already exposed to millions of Americans, is published in this issue. PEN salutes Copley News Service for an outstanding public service.*

**LIEUTENANT GENERAL VICTOR H. KRULAK, U.S.M.C. (Retired) - General Krulak, a native of Denver, Colorado, now residing in California, was graduated from the U.S. Naval Academy in 1934. Prior to his retirement from the U.S.M.C. in 1968, he served in every quarter of the globe. He has won an impressive array of U.S. and foreign decorations, including the Navy Cross for heroism in World War II.**

**Upon retirement, General Krulak became Vice President and a Director of Copley Press, Inc., a position he held until 1977.**

**A member of many local and national civic organizations, he participates in a wide range of community welfare activities. As a journalist, he has written on Asian affairs, international politics, ecology and national defense. He has received national awards for his patriotic writing and speaking and honorary degrees from Loyola University and the University of San Diego.**

# EYE CARE CRISIS I

### V. H. KRULAK

One American in two wears glasses. 10 million have some sort of vision impairment not correctable by lenses. 31 million take their eye problems to some kind of practitioner every year.

Despite all of this, the average eye sufferer does not know much about the people he expects to treat his ills.

It is unlikely, for instance, that one in a thousand can explain the difference between an oculist, an optometrist, an ophthalmologist and an optician.

"Something to do with eye care," he would probably say, — and that is not enough, considering how precious his eyes are, how complex they are and how sensitive many of their problems are.

By reasonably accepted definitions, an optometrist is a man who examines the human eye to detect focusing errors and fits lenses to correct those errors; an ophthalmologist is a physician — an M.D. and surgeon — who diagnoses what is wrong with your eyes, whether you need glasses, medication or surgery, and then does what is necessary; an oculist is an ophthalmologist — the terms are synonymous; and an optician is a man who makes and fits glasses to your face in accordance with a prescription prepared by someone else.

Put more simply, an optometrist is a limited practitioner; an ophthalmologist — or an oculist — is a physician who specializes in the eye: and an optician is a technician.

These distinctions are important to the person who thinks he needs his glasses changed, or who



has blurred vision, headaches, reading difficulties, or any other problem that may be related to his eyes.

They are important not only to the preservation of his eyesight, but to what the diagnosis and treatment of his problem will cost him. Because eye care — critical as it is — has become big business. And, being big business, the customer — in this case the patient — along with his precious eyes and his pocketbook — all stand to suffer if they do not know what they are buying.

The business issue focuses on the optometrists and the ophthalmologists. The optometrist says that anyone who thinks he has an eye problem should see an optometrist first. The ophthalmologist says this is potentially dangerous and costly, that optometrists are not trained in the essentials of eye problem diagnosis and that anyone who thinks he has eye troubles should see a physician first.

The optometrists have advanced their ideas through an aggressive program of hard sell which, until recently, had generated only uncoordinated resistance on the part of the ophthalmologists. The optometrists' formula is simple — persuade the general public that they are "general practitioners of the eye" and thus the first contact point for an eye ailment and, second, to persuade state legislatures to enact laws which broaden the optometrist's function, requiring anyone seeking eye care under a public medical program to consult an optometrist first.

They are pursuing their plan with aggressiveness and skill. There are 21,000 of them in the United States, organized in a tight American Optometric Society that spends a third of a million dollars a year on public relations. The Society has a staff larger than the American Medical Association. It has powerful lobbying teams in Washington and many State capitals, seeking legal authority to use drugs in their practice and otherwise to broaden their function; and they are making real progress in creating both a state of mind, and a basis in state law—W. Virginia and North Carolina are examples — that sees them as the logical primary eye care resource.

The ophthalmologists oppose this program on purely professional grounds, contending that an optometrist, not being trained as a physician, cannot diagnose disease, or prescribe, treat or cure disease if detected, and thus should not be the portal through which everyone with eye problems should pass.

So, the individual, whose aim is simply to have his eyes put right quickly, efficiently and economically, and the health plan, that wants the job done at minimal cost, can be caught in the middle.

There seems to be little question that a good optometrist can test your eyes and prescribe glasses



to correct simple focusing errors. He will probably do the elementary job well, and the cost will be about the same as if the basic examination were performed by an M.D. eye specialist.

The real problem arises in the many cases where the blurred vision, squinting, headache or reduced ability to see is the product of something more than a simple congenital defect or the slow deterioration due to age.

These cases are by no means rare, nor can they be anticipated in advance. The eye complaint might stem from brain problems, kidney disorder, high blood pressure, diabetes, thyroid trouble, a tumor or any of a dozen other diseases recognizable only to a trained doctor who comprehends the whole body and can detect disease through the patient's eyes. There are, for example, probably 10 million diabetics today who are candidates for blinding ailments alone — and don't know it.

If this is the sort of complaint the patient brings, money spent at an optometrist's office is not going to buy what he really needs, because that kind of diagnosis and the treatment that must follow are outside the optometrist's field.

He is trained primarily as a technologist. The schools of optometry — of which there are thirteen in the United States — are, except in one case, not related directly to any medical institution. Unlike medical students who are obliged to see hundreds of sick people of all types during their educational life, the optometrist's education is largely technical in nature and remote from any medical setting. He requires a high school diploma prior to his formal college education, which extends to two years of college and about four years of optometric school. And those optometrists who are older than 50 are likely to have had even less formal education.

This stands in considerable contrast to the eye doctor whose education as an ophthalmologist requires about fifteen years, including three years as a hospital resident in his specialty.

The ophthalmologists, in defending their professional status, have begun a belated counterattack, on the ground that sheer lack of medical knowledge — as well as lack of practical medical experience — on the part of the optometrists has sometimes resulted in physical tragedy. Documented cases of optometrists failing to detect serious disease, glaucoma or tumor, with resultant grave effects, are beginning to come to the surface, leaving no doubt that the professional issue between the groups has definitely moved to a higher level of conflict. ●



# EYE CARE CRISIS II

### V. H. KRULAK

Emotions sometimes run quite high in this competition for the opportunity to look after John Q. Public's eye ills. Optometrists charge that the physician eye specialists are "attempting to smother us under the hand of medical tradition" and "We are the dentist of the eye, and ought to be recognized as such."

The dean of a large school of optometry declares that ophthalmologists are overtrained for the task of examining eyes, and that the solution is "a national health plan where the Federal Government refuses to pay practitioners high fees for doing work for which they are overtrained".

The ophthalmologists, for their part, declare "The optometrists are trying to substitute legislation for education" and "We have seen many cases of severe eye damage caused by the improper use of drugs by limited practitioners as well as numerous cases of disease overlooked by optometrists."

And, in contrast with the optometrists' view, the dean of a large medical school says, "Optometrists are undertrained for what they would like to do (ophthalmic care)," and that "The optimal solution is for optometrists to do all or most refractions in a group practice setting under the supervision of an ophthalmologist."

Optimal or not, this solution is not likely to come to pass, because the two groups are poles apart. Only public awareness of the facts is going to bring their functions into perspective.

In this connection the ophthalmologist has much the stronger case. There is much, for example, to validate their charge that the optometrist is bemused by efforts to generate legislation. The national optometric organization has created a "Legislative Manual" that minces no words. Some of its topic headings "On Organizing to Lobby", "On Cementing Ties with Legislators", "On Soliciting Support for a Bill" exhibit a no-holds-barred approach to carving out a position in society for the optometrist through legislation.

One of the most intensive of the current lobbying efforts relates to the desire of optometrists to use therapeutic drugs in their diagnostic work. This campaign has aroused widespread opposition among M.D.s of all types, who declare the optometrist to be incapable of handling some of the drugs involved, pointing out the many hazardous reactions that can arise from improper use and administration of drugs.

A leading ophthalmologist, Dr. David W. Parke, President of the Connecticut Society of Eye Physicians, laid the case out in hard terms, noting

that optometrists are not presumed "by background, training, or experience to have the capability to diagnose medically related eye problems or eye disease", and noting that the use of drugs by optometrists "could be extremely dangerous".

Despite this kind of opposition, optometrists have been successful in getting some limited legislative blessing upon their use of drugs.

Not all optometrists are happy with this development. One, Robert Greenburg of Reston, Virginia, recently told the Virginia Optometric Association, "Implicit in the decision (for optometrists to use drugs) is a major change in the scope and definition of optometric practice and the very real danger of re-defining ourselves right out of practice."

Another, David Surkin of Berwyn, Pa., wrote *Optometric Weekly*, "Dallying with military, health and drug bills — is about as insane as painting and improving your house as it burns down."

The bottom line in the conflict between the optometrists and the M.D. is, of course, in quality of service. In that regard the ophthalmologist — the eye specialist, physician, has all the edge — depth of education, breadth of training, diagnostic experience with the sick. If there is nothing wrong with the patient other than the need for simple corrective lenses then an optometrist could, indeed, do the job. But there is no certain way of knowing whether there is something more serious at the root of the patient's eye complaint — and the ophthalmologist — not the optometrist — is the one who can find out for sure.

Next to the bottom line is the cost to the patient — or cost to his medical plan.

In seeking to acquire some data on costs, seven ophthalmologists and seven optometrists were asked the same question: "How much will you charge to give me a complete eye examination, tell me if I need glasses and prescribe them if I do?"

The average price for the examination quoted by each group was about $36.

Each individual was then asked a second question: "When you examine my eyes, will you be able to give me a medical opinion as to whether I have disease symptoms for such things as diabetes or kidney trouble or thyroid trouble and, if so, can you tell me what to do about it?"

All seven ophthalmologists replied affirmatively — that they could give such an opinion, and prescribe treatment if necessary.

One optometrist said yes, that he could do it; one said it was not possible to appraise such things via the eye; four said frankly that their eye examination did not cover such things; and the last one evaded the question, declining to answer.

Two of each group were actually told to proceed with the examination. In the case of the two ophthalmologists, the procedures were similar — refraction, various tests for such things as depth of perception and glaucoma, and an inspection of the interior of the eye to give basis for an opinion on the existence or absence of other disease (diabetes, thyroid, etc.).

They each produced a prescription for glasses — the two prescriptions were identical — based on their conclusion that glasses were needed for reading only.

The two optometrists conducted what seemed to be a more limited examination, and both concluded that glasses were needed. One recommended bifocals, for reading and distant vision; the other recommended contact lenses. Both offered to sell the lenses (and frames) required.

When asked for their prescription the optometrists prepared them, and it was noted that they differed considerably — one calling for reading glasses only, and with a different correction than prescribed by the other optometrist.

This experience, while revealing in terms of what the patient got — or did not get — for his money, is less dramatic than a similar survey made by a national newspaper earlier this year. It disclosed that twelve optometrists out of seventeen consulted by a reporter, who had been certified by an eye specialist as having perfect vision, declared that he needed glasses. He was variously advised, according to the report, that he was near-sighted, that he was far-sighted, that he needed glasses for reading only, or that he needed them all the time. And the price varied between $5.00 and $85.00.

Only five of the seventeen concluded that the reporter did not need glasses. One of the seventeen was outspoken, declaring that anyone saying the man needed glasses, was "just trying to make a quick buck."

There is little likelihood that the two groups will come together on their own, and there is even less likelihood that any amount of Federal or State law or regulation designed to bring them together will do anything more than add to bureaucracy and cost, without increasing the assurance of quality eye care.

In the end the solution will have to lie with the patient. When he learns the seriousness of the stakes involved. When he knows what he needs and deserves in the way of diagnosis and economy, and when he demands it, the issue will fall into reasonable perspective.●

(9)

# COMMITTEE REPORT

## HOUSE

3/24/80

FURTHER:

Date: _____

Mr. Speaker:

The Committee on JUDICIARY has had HB 79

"An Act relating to the practice of optometry."

under consideration and (a majority of the committee) (the committee) reports it back with the following recommendations:

[ ] do pass [ ] do not pass

[ ] do pass with attached amendments(s)

[ ] replace with CS for _____ [ ] same title [ ] new title

and recommends _____

[ ] AND attaches a "Letter of Intent" [ ] New Fiscal Note

[ ] reports it back without recommendation

[ ] referred to the _____ Committee

MEMBERS SIGNING
DO PASS

_____

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MEMBERS HAVING
OTHER RECOMMENDATIONS:

_____

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_____

CHAIRMAN

H 60 (Rev. 12/78)

(7)

# COMMITTEE REPORT

## HOUSE

FURTHER: JUDICIARY

1-24-79 Date: 3/21/80

Mr. Speaker:

The Committee on HESS has had HB 79

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[ ] do pass with attached amendments(s)

[X] replace with CS for HB79 [X] same title [ ] new title

and recommends _____

[ ] AND attaches a "Letter of Intent" [ ] New Fiscal Note

[ ] reports it back without recommendation

[ ] referred to the _____ Committee

MEMBERS SIGNING DO PASS

[redacted]

Ira Hanson

T Buchholdt

MEMBERS HAVING OTHER RECOMMENDATIONS:

Herbert Horne

R Barnes No Rec

Mike Beam - do not pass

T Buchholdt
CHAIRMAN

H 60 (Rev. 12/78)

Copies to members
HB 79

JUNEAU MEDICAL CENTER
R.R. 3, BOX 3051
JUNEAU, ALASKA 99801

PRACTICE LIMITED TO THE EYE

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

January 31, 1980

Representative Charles H. Parr
Pouch V
Juneau, Alaska 99811

Dear Representative Parr:

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.

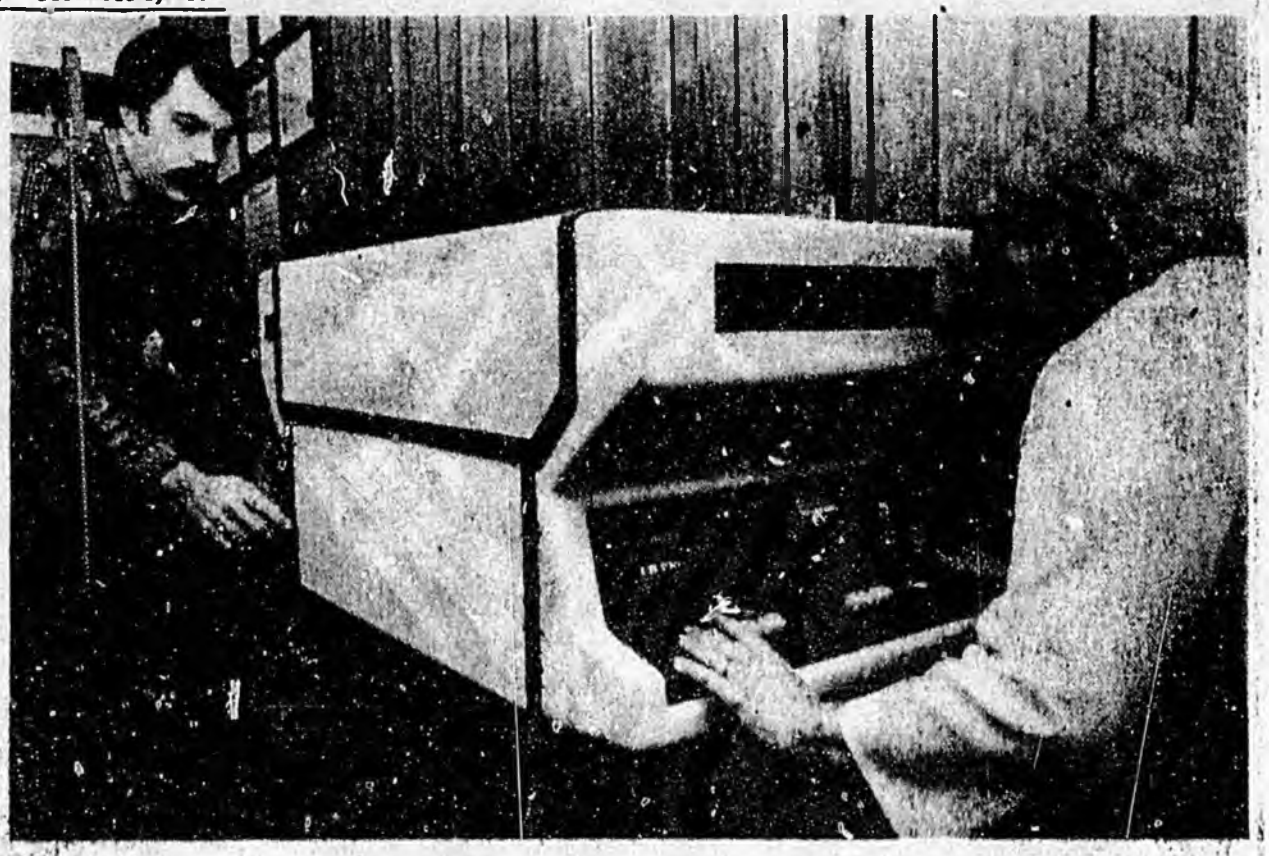
Please consider these points and call on me at any time if I can help.

Charlie, Thanks for your support
Many
M.D.

Sincerely,

Robert N. Page, M.D.

Enclosures



**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 procedures."

It's especially valuable in examinations of children or of patients with communication problems.

"We don't have to keep saying over and over to a patient, 'Which is clearer, this or this?' and that's a big help," the doctor said.

The machine, described as the 6600 auto-refractor, measures only distant vision. The ophthalmologist continues to make tests for glaucoma, muscle balance, near vision and general eye condition. And he refines the machine prescription to fit the patient.

To do this, he dials the machine's measurements into the trial lenses, then checks out its findings with his patient.

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.

**Municipality of Anchorage**

## ASSEMBLY AGENDA

**3500 Tudor Road**
**Assembly Chambers**
**December 6, 1977**
**6:00 PM-Special Meeting**

I. CALL TO ORDER

II. ROLL CALL

III. MINUTES OF PREVIOUS MEETINGS

A. Special Meeting of October 25, 1977

IV. APPEARANCE REQUESTS AND COMMUNICATIONS

A. Mr. Lafayette M. Williams, regarding a new type of Physical Fitness.

10/18/79 Sarasota (FL) Herald Tribune

# CHARLOTTE BRIEFS

## *Eye Diseases To Be Topic*

Dr. Philip Czyz will discuss diseases of the eye at Thursday's meeting of the American Association of Retired Persons.

The meeting will be at 1:30 p.m., in the Port Charlotte Civic Center, 440 South Easy Street. A question and answer period will follow the doctor's presentation.

NOTE!

10/25/79 Port Charlotte (FL)

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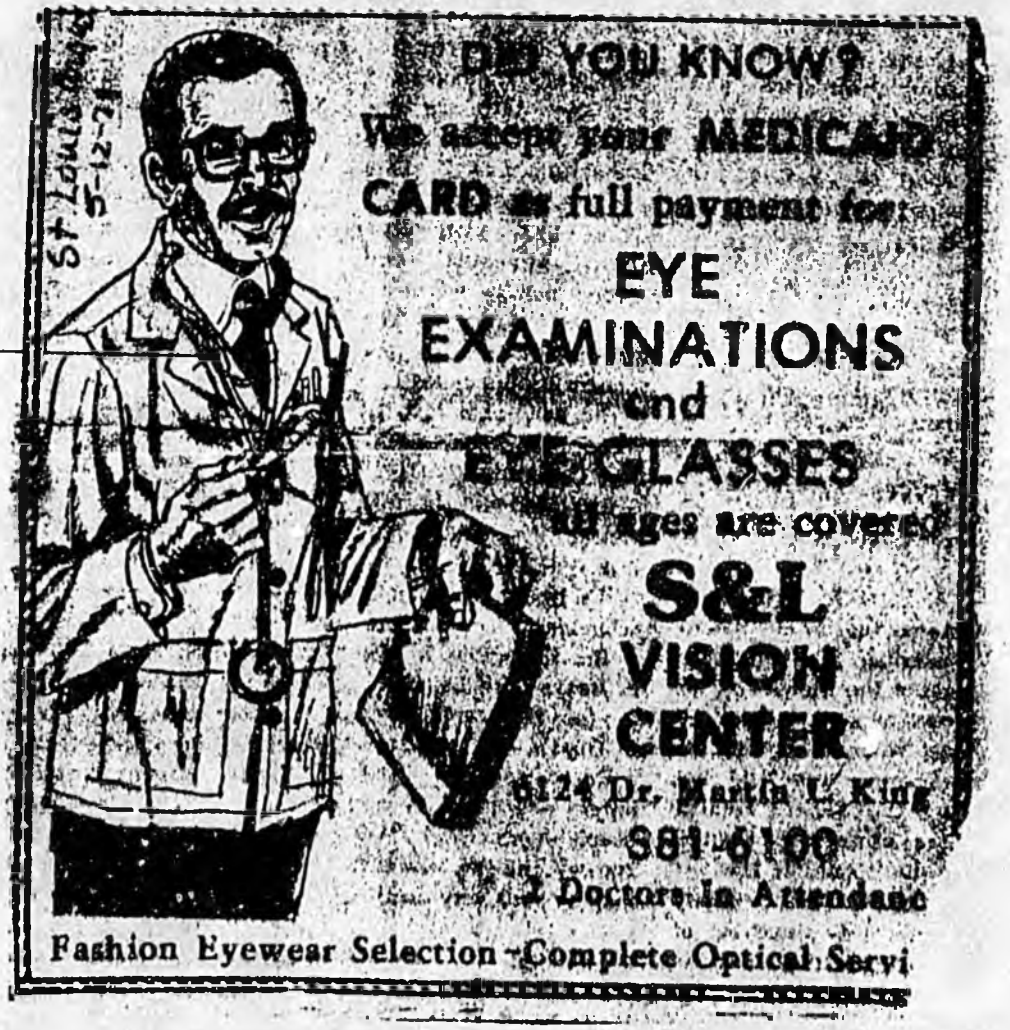
NOTE!

11/19/79 Sarasota (FL)
Herald Tribune

Stethoscope ?
Optomatrist



# We care for more than your glasses.

# We care for your vision.

## Call the State Association in your area for more information:

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P.O. Box 11442
Green Lantern Station
Montgomery, AL 36111
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Alaska Optometric Assn
348 Main Street
Ketchikan, AK 99901
(907) 225-3975

Arizona Optometric Assn.
3625 N. 16th St.
Ste. 120
Phoenix, AZ 85016
(602) 279-0055

Arkansas Optometric Assn.
416 Hospital Drive, S.W.
Camden, AR 71701
(501) 836-3618

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921 11th St.
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1726 Champa St.
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Connecticut Optometric Society, Inc.
100 Constitution Plaza
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Delaware Optometric Assn., Inc.
410 Foulk Road
Wilmington, DE 19803
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The Optometric Society of the District of Columbia
734 15th St., N.W.
Ste. 808
Washington, DC 20005
(202) 347-1622

Florida Optometric Assn
P.O. Box 6161-C
Orlando, FL 32803
(305) 425-3805

Georgia Optometric Assn
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Kansas Optometric Assn.
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Topeka, KS 66606
(913) 272-2054

Kentucky Optometric Assn.
41 Fountain Place
Frankfort, KY 40601
(502) 875-3516

The Louisiana State Assn of Optometrists
7400 Exchange Pl., Ste. 108
Baton Rouge, LA 70806
(504) 927-5656

Maine Optometric Assn., Inc
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(207) 784-3564

Maryland Optometric Assn., Inc.
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Baltimore, MD 21215
(301) 764-6700

Massachusetts Society of Optometrists, Inc.
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Boston, MA 02108
(617) 542-9200

Michigan Optometric Assn., Inc
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St. Paul, MN 55104
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(402) 463-4200

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Trenton, NJ 08648
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North Carolina State Optometric Society, Inc
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North Dakota Optometric Assn., Inc
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(803) 799-2305

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Pierre, SD 57501
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Tennessee State Optometric Assn., Inc
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1701 21st Avenue, South
Nashville, TN 37212
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Utah Optometric Assn
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419½ North Blvd.
Richmond, VA 23220
(804) 355-6841

Washington Optometric Assn., Inc
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(206) 455-0874

The West Virginia Optometric Assn., Inc
815 Quarrier St.
Suite 421
The Morrison Building
Charleston, WV 25301
(304) 345-4710

Wisconsin Optometric Assn., Inc
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The logo of the American Optometric Association signifies, in simplest terms, a commitment to all the elements of a good vision examination and care. Doctors of optometry who are members of the American Optometric Association are concerned with far more than your eyes or fashionable glasses and frames.

In fact, an examination by an optometrist is also a good place to begin guarding your family's total health. Besides diagnosing vision problems and prescribing the lenses to correct them, an optometrist is qualified to detect eye diseases and abnormalities as well as health problems such as diabetes or high blood pressure. To become licensed to practice, today's optometrist must have a minimum of 2 to 3 years undergraduate education plus at least 4 years at a specialized college of optometry.

The doctors of optometry who are members of the American Optometric Association are totally committed to the ideal that every member of your family should receive the best vision care possible. And, for that reason, they want you to know what to look for in a thorough vision examination:

**1** On your first visit, you should receive a comprehensive examination. This usually takes anywhere from 30 to 60 minutes.

**2** Your health history should most likely be taken before the examination begins. Allergies, diseases such as diabetes and ailments such as high blood pressure can affect the results of vision tests. So can certain prescription and non-prescription drugs you may be taking.

**3** The exterior of your eyes and the surrounding area should be inspected for eye disease.

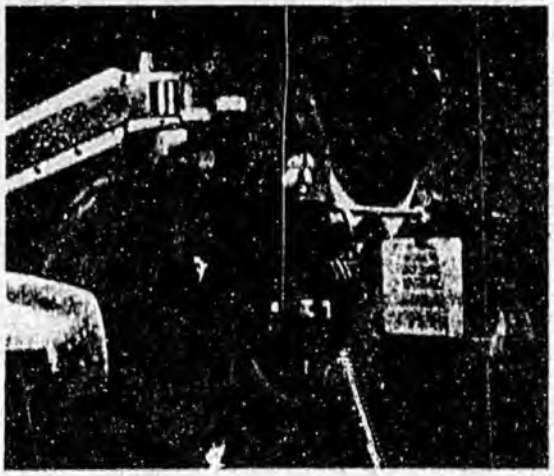
**4** Then the interior of your eyes should be examined for any signs of systemic or eye diseases. It is here that your optometrist can see blood vessels in their natural state and can therefore detect certain signs or symptoms of diabetes or hypertension. When signs or symptoms are discovered, you'll be referred to your family physician or a specialist if necessary.

**5** Your vision should be tested to evaluate how well you see at near and far distances. At the same time, the refractive state of your eyes should be measured to determine nearsightedness, farsightedness, astigmatism or other visual problems.

**6** Your eye coordination and eye muscle control should be examined to be certain your eyes are working together as a team.

**7** Finally, the ability of your eyes to change focus easily from far to near and near to far should be measured.

Those are the basics. However, if you are over 35 or if a need is indicated, it's likely that you'll be given other special tests such as one for glaucoma. You may also be tested for color perception, depth perception, field of vision, visual/perceptual abilities and other vision skills.



When your optometrist has completed your examination and evaluated all the results, corrective lenses or vision therapy may be prescribed. If that's the case, for convenience and quality assurance, your optometrist can properly fill your prescription. Or, if you decide to take your prescription elsewhere, have your optometrist verify that it was filled accurately.

Because people's needs and problems differ, you may find that your optometrist approaches your examination with variations from this list. However, one thing that you may be sure of: members of the American Optometric Association are dedicated to the principle that you and your family should have the highest quality total vision care possible.

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

American Optometric Association

Whereas; permanent, irreversible damage to eyes have resulted from the inability to diagnose and recognize serious eye disorders by optometrists, the following referral guidelines are recommended:

Sec. 2 AS or 300 (2) is amended by adding a new section to read:

When an optometrist examines any person, he shall inform that person or a parent or other responsible party, prior to prescribing or providing eyeglasses or any other service, that examination by a licensed physician is indicated whenever any of the following conditions is present. These conditions fall into the following categories:

I. ABNORMALITIES OF VISION
II. ABNORMALITIES OF TISSUE
III. ABNORMALITIES OF MOTOR FUNCTION
IV. OTHER ABNORMALITIES

ABNORMALITIES OF VISION:

A. Failure on the part of an individual to obtain 20/20 vision in each eye, 20/40 in children under eight years of age by refractive correction by lenses unless the cause has been medically determined by a physician and is stable.

B. A complaint by the individual of the sudden appearance of spots, flashing lights, scintillating images, transient dimming, less vision, or distortion in the shape of objects.

C. A complaint by the individual of a temporary or permanent loss of any portion of the visual field, such as a curtain coming over the vision.

D. History of seeing rainbows or halos around lights.

E. Diplopia (Double Vision) of sudden onset.

ABNORMALITIES OF TISSUE:

A. Presence of redness, swelling, masses, or ulceration of the eye or its surrounding tissue.

B. Opacities of the cornea, lenses or vitreous.

C. Changes in the appearance of the optic disc.
1. A difference in appearance between the optic discs of each eye.
2. A change in appearance of the optic discs from a previous exam.
3. Suspicion of elevation of the optic nerve head.

D. Observation of a deviation from the usual appearance of the retina or its vessels.

ABNORMALITIES OF MOTOR FUNCTION:

A. Strabismus, a deviation of the eyes from their normal parallel position in straight ahead gaze or gaze in any direction.

B. Difference in the size of the pupils or failure to constrict with illumination or with near vision.

C. Ptosis or Lagophthalmos (Drooping of the eyelids).

D. Nystagmus (Rapidly occilating eye movements).

OTHER:

A. Continuous tearing of longer than 24 hours duration or complaints of watering eyes not associated with visual tasks.

B. Intraocular tension of twenty-two or more, or family history of glaucoma.

C. Any other observation of deviation from the normal appearance of the eye and related tissues, or any complaint that is not attributable to the refractive state or muscle balance or which is not amenable to lenses or prisms.

D. Keratometry readings greater than 47.00 diopters or suggesting keratoconus.

Exception to any of the preceeding conditions would be previous evaluation by a physician and discharge from medical treatment and follow-up for that condition.

Failure to comply with the provisions of this act shall subject the offender to the revocation or suspension of his license to practice optometry.

Nothing in the provisions of this section or any other section pertaining to optometry shall appy to, nor in any way restrict the practice of medicine, or osteopathy, nor to any licensed physician, osteopath, nor any nurse, technician, medical assistant, optician, nor to any allied or auxiliary health personnel acting under their prescription, supervision or direction, nor to any eye screening, state or government eye testing program, nor to any eye teaching in any medical, osteopathic or nursing or allied health personnel school.

This act shall take effect immediately.

Over many years, ophthalmologists have seen the continued and perplexing problem of delayed or non-referral by optometrists. There are two reasons why ophthalmologists are concerned about this: 1. irreversible loss of vision can and has occurred. 2. the ophthalmolcgists eventually treat these people, and often we feel that some or more sight could have been preserved if earlier treatment had been instituted. The ophthalmologists feel that the optometrists are trained to recognize the symptoms of many diseases which may be discovered by history, visual acuity testing, refraction, tonometry and external examination. They are not permitted under recognized optometric standards to undertake a definitive diagnosis, but recognize this as the responsibility of the medical doctor, and to refer that person to a doctor. For these reasons, we feel that a 20/40 bill would help with the problem of delayed referral and non-referral.

In reviewing a small fraction of one ophthalmologist's files, we find 9 well documented cases of delayed or non-referral. It is our opinion that this resulted in harm or potential harm.

Case #1

This person compained of double vision to an optometrist. He was not referred to a medical doctor. Finally the patient came to an ophthalmologist where the diagnosis of myesthenia gravis was made. This disease can kill by respiratory arrest.

Case #2

This person went to an optometrist with an eye complaint and was told by the optometrist that he thought he had something bad and to come back tomorrow for a field. This patient finally went to an ophthalmologist and was determined to have a retinal detachment. It is well known by the ophthalmologists that the earlier the detachment is repaired the better the vision will be after the surgery.

Case #3

This person was a diabetic and had a cataract in the left eye. This person was told by an optometrist that it was not necessary to do anything about the eye. This person had an iritis or inflammation of the eye from leaking of lens protein. This

person finally went to an ophthalmologist and underwent immediate cataract surgery. It is well known by the opthalmologists that this can lead to adhesion of the iris to the diseased lens and/or cornea, resulting in permanent glaucome and irreversible loss of vision.

Case #4

This person went to the optometrist because of decreased vision. He was told that he had a cataract and to see an ophthalmologist about it. He was left with the impression that there was no hurry. This person's vision became worse and he then saw an ophthalmologist who determined that he had a retinal detachment. It is well known by ophthalmologists that early repair of retinal detachments not involving the central part of the retina most often results in 20/20 vision. But, if surgery is delayed and the central part of the retina (macula) detaches or pulls off, the visual outcome is poor.

Case #5

This child had difficulty with his school work and did not want to go to school. His parents were told by an optometrist that the child was malingering or faking. This child was seriously reprimanded by the parents. The child finally saw an ophthalmologist and was determined to have Stargart's disease. This condition is well known by the ophthalmologist to cause serious problem with vision.

Cases #6,7,8,9

All of these people were diabetics. The optometrists did not tell these people to see an ophthalmologist for their potentially serious eye manifestations of diabetes. By the time these people finally saw the ophthalmologist time had run out, serious eye problems of diabetes had already set it. It is well known by the ophthalmologist that early treatment with laser can preserve vision

Case #10

This is the well known Timothy Steele case. This child was seen by an optometrist in Fairbanks because his eyes were crossing. A dilating eye drop was used to dilate the child's eyes. The optometrist's record noted "No good reflex" in Timothy's right eye. He diagnosed Timothy's eye condition as accomodative esotropia, which is correctable by eyeglasses. He wrote a prescription for eyeglasses and made an appointment for Timothy to return to the clinic on January 29, 1974, for a checkup.

On January 29, 1974, Timothy reported to Mr Shank as requested. The optometrist wrote a different prescription for eyeglasses and instructed Mrs. Steele to make another appointment for Timothy four months after he would begin wearing the new glasses.

The testimony further reveals that in early May, Mrs. Steel noticed that Timothy frequently removed his glasses, saying sometimes he could not see well with them.

On June 10, 1974, Timothy was again examined by Mr. Shank and it was then that he discovered that the vision in Timothy's right eye was limited to light perception. At this point, Mr. Shank made an appointment for Timothy with ophthalmologist Bruce Wolf, M. D., of Fairbanks.

When Dr. Wolf, a medical doctor, examined Timothy on June 17, 1974, he found Timothy's visual acuity in the right eye limited to hand motions and capable of perceiving light. Essentially, his right eye was blind.

Recognizing the seriousness of the case, Dr. Wolf called in William Kinn, M. D., as a consultant. On July 9, 1974, Dr. Wolf and Dr. Kinn observed a retinal detachment of the right eye with a subretinal mass. Their diagnosis was possible retinoblastoma, but toxocara canis was also to be considered. Concluding that specific tests were necessary to identify the disease, Timothy was flown to Letterman Army Medical Center where he was examined on July 12, 1974.

At Letterman, it was determined that, because of the danger of retinoblastoma, a fast-spreading, life-threatening malignancy, Timothy's eye should be removed. With parental consent, the surgery

was performed by Major Bradley C. Black, M. D.

When the pathological report ruled out retinoblastoma, Timothy was returned to surgery and an implant was placed in the socket. Although recovery appeared to be good, Timothy continued to suffer from periodic socket inflammation.

In September of 1974, Timothy returned to Leterman Medical Center where a prosthesis was inserted in the socket. Testimony revealed that since the prosthesis could not be inserted immediately following the operation, it is unlikely that it will ever appear similar to a natural eye.

Dr. Black was also aware of several cases where inflammation of the eye was treated with steroids, and in isolated cases steroid treatment has decreased the inflammation, resulting in minimal scarring. But in Dr. Black's opinion, in most instances toxocara is not seen by the ophthalmologist until it has been quite destructive. However, assuming that visual acuity in Timothy's right eye was 20/30 in December of 1973 and treatment with steroids was instituted, some vision might have been salvaged.

In Dr. Wolf's opinion, if Timothy had been seen by an ophthalmologist in 1973, very possibly the eye could have been saved. Since a granulomatous inflammation is a cellular reaction to a foreign object, treatment would be taken to block the reaction. Steroids are a recognized form of treatment for granulomatous inflammation.

This case was tried by Judge James M. Fitzgerald, United States District Judge, District of Alaska. The Judges decision was:

> "I conclude that competent optometric practice required that Timothy's parents be notified and that the child be referred. The failure to inform and refer was not a 'judgement call' but a violation of the governing principles of professional standards.
>
> 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. DATED at Anchorage, Alaska, this 20th day of October, 1978."
>
> ss: James M. Fitzgerald

It is thus obvious if this bill were passed then statutory law would be completely consistent with common law or court decision.

You will hear from the optometrists that they cannot get their people in to see the ophthalmologist immediately. But, what they do not tell you is that there is a city call schedule in both Fairbanks and Anchorage with an opthalmologist available 24 hours a day to see people and all that has to be done is to call the emergency rooms to get the name of the ophthalmologist for that week, and that patient can be seen the same day. They have not told you that there are now new ophthalmologists that have started practice in the state and that more often than not they can get their people in with one of them the same day.

You will also hear from the optometrist that this bill will seriously restrict them, that this is a restraint of trade, that this bill is designed by the ophthalmologists to bring them more income. This simply is not true. The criteria of referral written into this bill are what is called the LeMoine criteria. This is what is taught in the schools of optometry as indications for referral to a competent medical doctor. This is even in their textbooks: "The Optometric Profession" by Hirsch and Wick. Why, then, are they apposed to this type of legislation when it merely reiterates in law what is considered by the textbooks of optometry as a standard of optometric practice?

The reason is economics, which is tied together very closely with a national attempt to change the standards of optometric practice, as well as public and governmental image. This is done by legislative "drug bills" and advertising. The essence of the court's desision in the Timothy Steele case was that optometrists, and schools of optometry (compared to Ophthalmology) will not be allowed to set their own standards as to what they can and cannot do. The court's cecision recognized that optometrists are not sufficiently trained to make the same kinds of decisions that opthalmologist M.D.'s can, and should make, in situations similar to that presented in Timothy's case. See Tables I, Ia, Ib

ECONOMICS AND PRACTICE?

Table 3[5] 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 legilation can be expected to impact heavily upon these figures. For example, if the Kennedy-Mills National Health Insurance 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 optometrists to ensure their fullest possible participation 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 optometrists in the State of Alaska suggest that this is not an "economic issue"---it is. The optometric opposition to this bill is due to continued effort toward the national optometric goal of attempting to become primary eye care providers.

This image change is being sold to the public by a sophisticated national advertising campaign. This multi-million dollar campaign is funded by the national optometric organization through dues and special assessments. They are trying to sell themselves as "your family doctor of optometry...the one to see and keep seeing". Calling themselves family doctors in the opinion of the ophthalmologists is misleading since they are <u>not</u> medical doctors as are the family practitioner or family doctor. These adds are occurring on national T.V., radio and magazines; such as, The Ladies Home Journal, Better Homes and Gardens, etc. Adds that show stethoscopes hanging around the neck of the optometrist is also misleading, as the general public associates the medical doctor with the stethoscope. One article in the Anchorage Times even referred to a group of optometrists as physicians and the word opthalmologist was used. (see supporting documents)

Let us examine the basis for supporting the Lemoine criteria. In an article "How the General Practitioner can Determine The Need for Ophthalmologic Referral", it was shown that by history (listening to the patient's story), visual acuity and external examination by hand-held flashlight, most of the initial clues to eye disease are determined, 85% in fact.

Examination Elements That Indicated Ophthalmologic Disease in 716 Patients.

| | | |
|---|---|---|
| History | 255 | (35.6%) |
| Visual Acuity | 198 | (27.7%) |
| External Examination by Hand-Held Flashlight | 157 | (21.9%) |
| Refraction | 4 | ( .6%) |
| Tonometry | 69 | ( 9.6%) |
| Slit Lamp | 23 | ( 3.2%) |
| Undilated Fundus | 9 | ( 1.3%) |
| Dilated Fundus | 1 | ( .1%) |
| | 716 | 100% |

All of the Lemoine criteria of referral are symptoms of disease and require no instrumentation except for two: looking at the optic disk through an undilated pupil and chicking the "K" readings on a keratometer. No eye drops are needed, since the optic disc is in the posterior pole of the eye and simply putting the small aperature disk in place on the opthalmoscope even the smallest pupil can be seen through. It is obvious from this article that detection of 99% of all eye disease is possible without dilation. All of these examining techniques can be done by the optometrist at this time in the State of Alaska.

In sum, to both the conscientious physician and the conscientious optometrist the need for referral of a patient to an ophthalmologist is usually obvious through the application of history, visual acuity, and external examination by hand-held flashlight, and does not require sophisticated instruments.

Most importantly, do not dilate the pupil. Routine tonometry according to established standards and viewing the fundus oculi through the undilated pupil are the additional needed methods. The use of mydriatic drugs to dilate the pupil risks precipitating acute narrow angle glaucoma by a 9:1 ratio over uncovering any hidden disease process.

By now you have heard from the optometrists that there is another law suit filed against an Anchorage optometrist. They also state that if they could dilate the pupil to look in that the law suit would not have been filed. Well, the optometrist dilated Timothy Steele's pupil and still a law suit was filed and was won by Timothy Steele. The falacy of this statement by the optometrists is clear in light of Judge Fitzgerald's decision and the article on what people need ophthalmologic referral.

If this bill were passed, it would clear up once and for all through statutory law that what is already clear through common law and optometric textbooks. Judge James M. Fitzgerald clearly states this in his decision:

> "I conclude that competent optometric practice required that Timothy's parents be notified and that the child be referred. The failure to inform and refer was not a 'judgement call' but a violation of the governing principles of professional standards.
>
> 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 responsiblity of a medical doctor. Obvdiously, 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.
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> I conclude that the plaintiff is entitled to recover in this action from the United States for the loss of Timothy's right eye.
> DATED at Anchorage, Alaska, this 20th day of October, 1978."
>
> ss: James M. Fitzgerald
> United States District Judge

Thank you for your time and the opportunity to present the views endorsed by the State Ophthalmologic Association.

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# How the General Practitioner Can Determine The Need for Ophthalmologic Referral

Henry S. Campell, MD, *Martinsville, Virginia*

WHEN should a patient be referred to an ophthalmologist? Are eye drops and sophisticated instruments needed to make the referral decision? These questions are crucial to the proper care of eye problems, whether the patient presents initially to a physician or to a non-medical practitioner.

This study delineates the ways in which the possibility of visual system disease can be recognized in non-ophthalmologic office practice.

## Method

The author, an ophthalmologist practicing in a semi-rural area of Virginia, documented 1,000 consecutive office patient visits from October 9, 1978, through December 14, 1978. Each of these visits was classified into one of three groups: no disease, new disease, and old disease. No disease meant that the patient had no significant complaints, may or may not have required glasses for normal visual acuity and had no findings of a significant medical problem. New disease meant that the patient gave a history suggesting significant visual system disease and/or was found to have significant visual system disease; new disease patients had not been seen or treated previously for this problem by the examiner or by his partner ophthalmologist. Old disease patients had a significant visual system disease which had been seen and/or treated previously by the examiner and/or by his partner ophthalmologist. Patients with concomitant old and new disease problems were classified according to the new problem. Patients with more than one old disease problem were classified according to the more serious problem.

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Submitted 1-12-79.

All patient examinations included history, visual acuity, external examination, slit lamp biomicroscope examination and a view of the fundus oculi through undilated pupils. Tonometry was done in all adult patients without infection. A dilated fundus examination was done in all patients scheduled for a routine examination plus those patients where history and/or other examination indicated the need. Visual field examinations were done where indicated.

## Results

In a mature ophthalmologic practice, one expects to see relatively few patients without disease. Indeed, the examiner in this study saw only 284 patients (28.4%) without disease and 716 (71.6%) with disease. In the diseased group, 491 (65.6%) were already under observation or treatment.

Table 1 lists the means by which disease was suspected. Notice the heavy preponderance of history, visual acuity, and external examination by hand-held flashlight as the initial clues to disease. These three are, of course, different facets of the same stone and could well be combined, i.e., if a patient states that he does not see well, and if his visual acuity is indeed decreased, then the patient's history is confirmed. In 610 (85.2%) of the 716 patients with disease, this triad

**Table 1. Examining Elements That Indicated Ophthalmologic Disease in 716 Patients.**

| | | |
|---|---|---|
| History | 255 | (35.6%) |
| Visual Acuity | 198 | (27.7%) |
| External Examination by Hand-Held Flashlight | 157 | (21.9%) |
| Refraction | 4 | ( .6%) |
| Tonometry | 69 | ( 9.6%) |
| Slit Lamp | 23 | ( 3.2%) |
| Undilated Fundus | 9 | ( 1.3%) |
| Dilated Fundus | 1 | ( .1%) |
| | 716 | 100% |

indicated visual system disease. Refracting four high myopes or noticing thick spectacle lenses would have indicated the need for careful indirect ophthaloscopy for peripheral retinal abnormalities.

The majority of patients with new disease presented with acute processes, such as infection, iridocyclitis, foreign bodies and the like; here history, visual acuity and external examination by hand-held flashlight again gave the clue. Those patients with old disease had chronic disorders such as cataracts and glaucoma; for these, tonometry and slit lamp examination added meaningful information. The 69 patients found to have glaucoma could have been suspected of the disease by using Schoitz tonometry or non-contact "air puff" tonometry. The nine patients found to have optic atrophy, glaucomatous cupping, diabetic retinopathy, and macular degeneration were suspected by viewing the fundus oculi through the undilated pupil.

Slit lamp biomicroscopic examination gave the clue in 23 of the 716 patients with disease, mainly for diseases of the cornea, silent iridocyclitis, and potential narrow-angle glaucoma. Two new and seven old patients with potential narrow-angle glaucoma were seen. Dilating the pupils of these nine patients could have precipitated disastrous attacks of acute narrow-angle glaucoma, and mydriatic eye drops were distinctly contraindicated.

An asymptomatic superior retinal hole was found in one patient because the history of retinal detachment in the other eye made an extraordinarily diligent search of the retina mandatory. Without this history and with only a routine examination of the retina, the hole would have been missed by the examiner.

Only one patient had a significant abnormality which was not suspected prior to dilating the pupil. Although her benign choroidal nevus was known to her from an examination about one year prior, she did not reveal this to the examiner initially.

Table 2 sums up how disease was suspected in the 716 patients found to have visual system problems.

**Table 2. How the Non-Ophthalmolgic Practitioner Could Have Determined the Need for Ophthalmolgic Referral in 716 Patients.**

| | | |
|---|---|---|
| History, visual acuity, external examination (the basic medical triad) | 610/716 | (85.2%) |
| History, visual acuity, external examination, undilated fundus | 619/716 | (86.5%) |
| History, visual acuity, external examination, undilated fundus, tonometry | 688/716 | (96.1%) |
| History, visual acuity, external examination, undilated fundus, tonometry, noticing thick spectacle lenses | 694/716 | (96.6%) |
| History, visual acuity, external examination, undilated fundus, tonometry, noticing thick spectacle lenses, slit lamp | 715/716 | (99.9%) |

**NOTE: In nine of the above 716 patients, dilation of the pupil with eye drops could have induced an attack of acute narrow-angle glaucoma.**

## Conclusions

How, then, can the non-ophthalmolgic practitioner know when a patient should be referred to an ophthalmologist? Most often, the study shows, through the basic medical triad of history, visual acuity, and looking at the external eye with a flashlight. Family physicians can take heart at this. And they may be cheered as well to know that the success of this triad obviates the need for sophisticated instruments: In only 23 of the 716 patients suspected of having disease was an instrument required that is not in the office of most physicians, namely, a slit lamp.

As for eye drops, the recommendation is BEWARE. Eye drops can, in certain cases, change a chronic visual problem into a dangerous emergency. Nine patients seen in this study, as noted, had the potential for acute narrow-angle glaucoma, and dilating the pupils of any of these nine patients could have produced an extreme emergency in the office of the general practitioner or non-medical optometrist. Moreover, eye drops may precipitate alarming side effects; in the course of this study two patients with corneal foreign bodies became faint, with decrease in blood pressure and nausea, after application of topical anesthetic drops (although neither patient had a seizure or total loss of consciousness).

In sum, to both the conscientious physician and the conscientious optometrist the need for referral of a patient to an ophthalmologist is usually obvious through the application of history, visual acuity, and external examination by hand-held flashlight, and does not require sophisticated instruments.

Most importantly, do not dilate the pupil. Routine tonometry according to established standards and viewing the fundus oculi through the undilated pupil are the additional needed methods. The use of mydriatic drugs to dilate the pupil risks precipitating acute narrow-angle glaucoma by a 9:1 ratio over uncovering any hidden disease process.

**Acknowledgment**

The author thanks Donald W. Richman, MD, and Douglas M. Rampona, MD, for their assistance and advice.

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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.

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) response 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.

Treating angle closure glaucome is very difficult and requires more than just putting a miotic eye drop in the eye. Treatment of this condition requires surgery in all cases. To break the angle closure attack before surgery, hospitalization, Diamox and intravenous Manitol is necessary in many cases. If angle closure glaucoma goes untreated, blindness results. All cycloplegics and mydriatics (dilating drops) can cause angle closure glaucoma.

It has been suggested to you by the optometrists that the incidence of angle closure glaucoma is only 1 in 18,400 cases. What they do not tell you is that a unique situation exists with the native Alaskan. The incidence of angle closure is 1 in 1,900 cases and even higher if dilating drops are used. This problem usually takes several hours to develop, long after the optometrist would have left the village. If we were to allow the optometrists to use dilating drops, this would result in many more unnecessary surgical emergencies and possible blindness. In view of this well known fact, ophthalmologists are hesitant to use mydriatics and cycloplegics in the Alaska native, especially in the bush areas.

Miotics are a therapeutic class of drugs and are listed incorrectly in the proposed bills as diagnostic drugs. Either the optometrists do not have a thorough understanding of the eye medications, or they are asking the legislators to allow them to treat glaucoma and other eye conditions. The proposed bill lists only broad general categories of the desired eye medications, no 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 (dilater 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 or use.

Optometrists are not medical doctors and cannot get a federal narcotics certificate. These drug bills are inconsistent with federal regulation on this point.

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. Phospoline Iodide, 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.

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 effecient vision."[1]

Although this definition is broad, the Alaska legistlators 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.

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

Furthermore, this construed dilemma is removed by a landmark decision by Judge James M. Fitzgerald, United States District Judge for Alaska in the Timothy Steele case in Fairbanks, Alaska. This is the case where an optometrist in Fairbanks used a dilating drop and noted an abnormality and did not refer the child to a medical doctor. The following is a direct and full quote of the Judge's conclusion:

> "I conclude that competent optometric practice required that Timothy's parents be notified and that the child be referred. The failure to inform and refer was not a 'judgment call' but a violation of the governing principles of professional standards.
>
> 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.
>
> DATED at Anchorage, Alaska, this 20th day of October, 1978."
>
> ss: James M. Fitzgerald
> United States District Judge

If these bills passed, the statutory law would be inconsistent with common law or court decisions. Let us examine the optometrist's construed dilemma a bit closer. In an article "How the General Practitioner Can Determine the Need for Ophthalmologic Referral", it has been shown that the initial clues to eye disease are determined by history, visual acuity and external examination by handheld flashlight. Only .1% of eye disease is initially determined by using dilating drops. See Table A.

In sum, to both the conscientious physician and the conscientious optometrist the need for referral of a patient to an ophthalmologist is usually obvious through the application of history, visual acuity, and external examination by hand-held flashlight, and does not require sophisticated instruments.

Most importantly, do not dilate the pupil. Routine tonometry according to established standards and viewing the fundus oculi through the undilated pupil are the additional needed methods. The use of mydriatic drugs to dilate the pupil risks precipitating acute narrow angle glaucoma by a 9:1 ratio over uncovering any hidden disease process. Thus it is obvdious that there is no dilemma at all. This dilemma was construed by the optometrist for legilative purposes.

By now you have heard from the optometrists that there is another law suit filed against an Anchorage optometrist. They also state that if they could dilate the pupil to look in that the law suit would not have been filed. Well, the optometrist dilated Timothy Steele's pupil and still a law suit was filed and was won by Timothy Steele. The falacy of this statement by the optometrists is clear in light of Judge Fitzgeralds decision and the article on what people need ophthalmologic referral.

The ophthalmologist is a medical doctor who has completed a 3-5 year residency program after one year internship preceeded 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. Further, refraction to the ophthalmologist is viewed as only one necessary step in a differential diagnosis of the patient's complaint. Table 1 demonstrates the overall education and numbers of optometrists and ophthalmologists. From Table 1 it is evident that the ophthalmologists have much more training in pharmacology and pathology than the optometrists. Still the optometrists continue to compare their curriculum hours to dental school hours. They continue to say that if the dentists can use medications, why can't we. 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 appropriate to compare ophthalmologists curriculum hours to optometric curriculum hours. (Please read Ref.#43, which explains this point in detail for the State of Alaska.) It is immediately obvious that the ophthalmologist has many more hours of classroom or book learning and many more years of clinical experience. The optometrists indicate that they can also take courses, but where do they get the years of clinical experience of putting drugs into the eyes of patients under close supervision of the clinical medical professors who are medical doctors. Optometrists simply do not get this type of training. Book learning is one thing, but clinical experience is most important.

Table 2[4] 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. The ophthalmologist is a complete eye care provider. Although the overlap of professional services is greatest for refractions, this is a source of considerable consumer spending in both professions.

ECONOMICS (AND PRACTICE)?

Table 3[5] 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 National Health Insurance 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 optometrists to ensure their fullest possible participation 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 primary eye care providers.

This image change is being sold to the public by a sophisticated national advertising compaign. This multi-million dollar campaign is funded by the national optometric organization through dues and special assessments. They are trying to sell themselves as "your family doctor of optometry...the one to see and keep seeing". Calling themselves family doctors in the opinion of the ophthalmologists is misleading since they are <u>not</u> medical doctors as are the family practitioner or family doctor. These adds are occurring on national T.V., radio and magazine; such as, The Ladies Home Journal, Better Homes and Gardens, etc. Adds that show stethoscopes hanging around the neck of the optometrist is also misleading, as the general public associates the medical doctor with the stethoscope. One article in the Anchorage Times even referred to a group of optometrists as physicians and the word ophthalmologist was used. (See supporting documents)

We should expect that in the future the Alaskan optometrists will follow the attempt of other state optometric associations to next try for the priviledge to use these same diagnostic drugs as therapeutic agents. An attempt was made in West Virginia to legislate the privilage 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 consumers and therefore are the point of first entry into the eye care system. Looking first at the source of this claim and national tatistics, 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 indicated 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 ophthalmologists 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 optometrists[10] 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 humber of eye consumers seen by the most active ophthalmologist in town - 40-50 eye consumers, as compared to the most active optometrists in town - 20-25 eye consumers seen in one day. The average ophthalmologist in Anchorage sees 30 people per day. The average optometrist sees 15 people per day. These figures would seem to indicate that although ophthalmologists are a smaller group than optometrists, the public will seek 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 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 the 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 which 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 the 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 1,200, not 1 in 20,000 as in caucasions. 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 practive of such professions.[14] The intent of such restrictive legislation is avowadly 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 practive 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 practive 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 incompetants 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 practive of medicine..."[24] Further, the state has the power to define what constitutes the practive of any profession and may then confine practitioners of various health disciplines to the particular system of practive 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 latitutde 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.

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 preseumes 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 appraoch are obvious. Again, such an approach does not satisfy the legislative duty to <u>reduce</u> 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

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 supervized 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

clincial 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 substitue[38] 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 doubtfull 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.

## IV. AGENCY ACTION FOR ASSURRANCE 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 theraputic 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 sercies 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 competencey; or

2) optometrists must work in an association with ophthalmologists close enough to provide for the day-to-day transmission of diagnotic 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 recoginzed 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 preceed 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 <u>all</u> 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 hole functioning unit?

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

FOOTNOTES:

1 - Worthen: The Ophthalmologic-Optometric Interface. Transactions of American Academy of Ophthalmology and Otolaryngology *3:OP-155, 1977

2 - Representativ 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 6 hours a week is devoted to formal, diadactic 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 includ clinical studies which are specifically directed toward a specialty interest. Although optometrists may agrue 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 ture 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 Manufactures 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/fram/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 responed 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 ophthalmologists 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. 2d 281, 130 P2d 354 (1942). See also, Ketchum v. King Co. Medical Service Corp., 81 Wash 2d 565, 502 P2d 1197, 1200 (1973)

14 - Swayze, note 13, 353, supra.

15 - Kelly v. Carroll, 36 Wash 2d 482, 219 P2d 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 critisism. 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 P2d 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 2d 177, app. dismd. 352 U.S. 939(195(

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 2d 425, 121 P2d 954 (1942) Accord, State v Hauk, 32 Wash 2d 68;. 203 P2d 693(1949)

28 - 61 Am Jan 2d, 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 safequard 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 crrency in clinical information.

43 - A letter from Leon Candenb, O.D., Director Pennsylvania College of Optometry describes the lecture outling 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 Angles 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 unkown 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., PhD., 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., PhD., 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 PhD. or masters or bachelors degree.

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

University of Houston College of Optometry has NO M.D., PhD., 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 PhD. 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 Calidfornia 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 issured 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 2d 246, 377 p2d 868, 870 (1963)

45 - Pennington v. Benelli, 15 Cal App 2d 316, 59 P2d 448

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

47 - The AAO Nove-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 imporve 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.'"

TABLE A. EXAMINING ELEMENTS THAT INDICATED OPHTHALMOLOGIC DISEASE IN 716 PATIENTS.

| | | |
|---|---|---|
| HISTORY | 255 | (35.6%) |
| VISUAL ACUITY | 198 | (27.7%) |
| EXTERNAL EXAMINATION BY HAND-HELD FLASHLIGHT | 157 | (21.9%) |
| REFRACTION | 4 | ( .6%) |
| TONOMETRY | 69 | ( 9.6%) |
| SLIT LAMP | 23 | ( 3.2%) |
| UNDILATED FUNDUS | 9 | ( 1.3%) |
| DILATED FUNDUS | 1 | ( .1%) |
| | 716 | 100% |

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 practicioners | 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 1A

OPTOMETRIC EDUCATION DEFICIENCY DOCUMENTED FOR REDBOOK SURVEY
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 | 5,240 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.

TABLE Ib

BREAKDOWN OF HOURS SPENT IN EDUCATION OF OPTHALMOLOGIST

| | | | |
|---|---|---|---|
| 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 wsk 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 |

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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

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

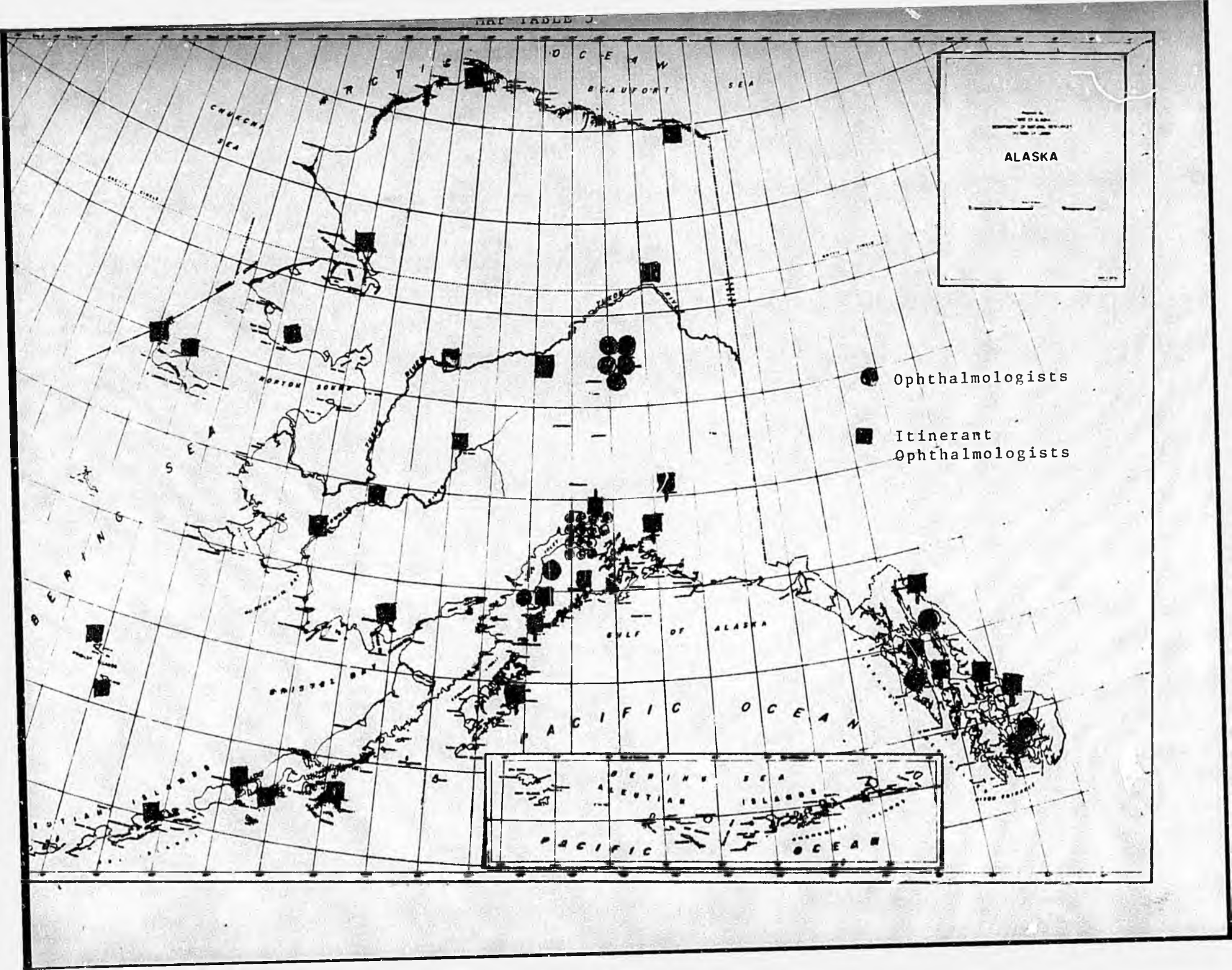
| Service | Optometrists | Ophthalmologists |
|---|---|---|
| Refraction | 99% | 99.5% |
| Ophthalmoscopy | 92% | 99.5% |
| Contact Lenses | 79% | 58% |
| Visual Fields | 75% | 94% |
| Tonometry | 66% | 99.5% |
| Orthoptics | 50% | 53% |
| Low-vision aids | 40% | 55% |
| Biomicroscopy | 32% | 99.5% |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

TABLE 3

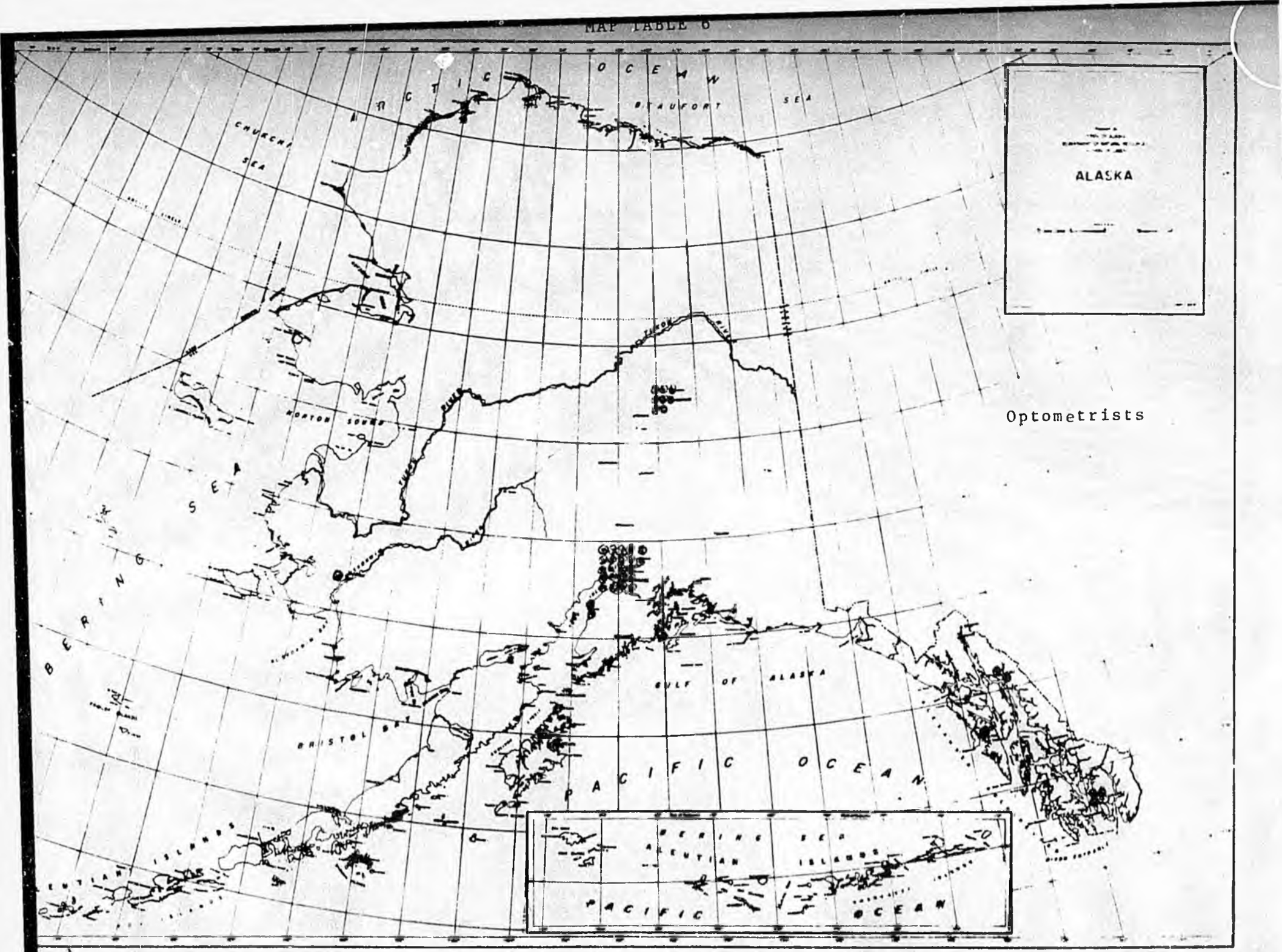
CIVILIAN CONSUMER SPENDING FOR VISION CARE AND SIGHT CORRECTION SERVICES IN 1975

| | OFFICES OF OPTOMETRISTS | OFFICES OF OPHTHALMOLOGISTS |
|---|---|---|
| A. Expenditures | | |
| 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 | 30 | |
| | 1,745 | 1,250 |
| | | No optical shops<br>No surgery |

MAP TABLE 3


ALASKA
Ophthalmologists
Itinerant Ophthalmologists
ARCTIC OCEAN
BEAUFORT SEA
CHUKCHI SEA
BERING SEA
GULF OF ALASKA
PACIFIC OCEAN
ALEUTIAN ISLANDS

MAP TABLE 6




Optometrists

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