

thetics, mydriatics or cycloplegics for diagnostic purposes. I am certain that somewhere there has been a death, but considering the millions of persons given topical drugs for diagnostic purposes, the risk is extremely low. The most common adverse side effect is an epithelial corneal abrasion following the topical use of an anesthetic for the measurement of the intraocular pressure, especially when the Schiottz tonometer is used. Although this will produce a temporary period of blurred vision and pain, I have never seen permanent loss of vision. This **must not** be confused with the use of a topical anesthetic for the removal of a foreign body that may produce a corneal ulcer and vision loss because this use of the topical anesthetic is for **therapy and not diagnosis**. The most serious threat to vision or blindness is acute closure glaucoma following pupil dilatation with the use of topical mydriatics or cycloplegics. It is unusual for blindness to result if an early diagnosis of angle closure glaucoma is made and treatment is provided. This condition is rarely difficult to diagnose, if one considers the possibility, and especially if one is limiting his practice to ocular and visual problems. The incidence of angle closure glaucoma, following pupil dilatation, is probably in the range of one in forty to fifty thousand persons who have had their pupils dilated. To me there are no other blinding conditions, secondary to the topical use of drugs for diagnostic purposes, that occur with any significant frequency. One of the most common objections to the topical use of drugs for diagnostic purposes by optometrists is that they will not recognize disease and seek consultation for definite diagnosis and therapy. **To me this is not germane to the issue of the use of drugs for diagnostic purposes because only the health care provider makes the diagnosis.** A failure of recognition of conditions where referral for definite diagnosis and/or treatment is serious. In my opinion, when an optometrist uses topical drugs for diagnostic purposes, he assumes exactly the same medical/legal responsibility as any other health care providers using drugs for the same purpose. In no manner can he or she be excused from the diagnostic error because he or she is an optometrist.

**III. THE RISK OF COMPLICATIONS AS AGAINST BENEFITS:** In my opinion, the benefits from the topical use of drugs for diagnostic purposes far outweigh the risk to life or vision. Despite all new instrumentation, there is no good way to obtain a satisfactory view of the interior of the eye unless the pupil is dilated. One area of controversy is the measurement of intraocular pressure by the use of a noncontact tonometer. In my opinion, the \$4,000 cost of the instrument is not insignificant when one can obtain more accurate intraocular pressure measurements with one of the contact tonometers in a majority of the patients. In my experience, and that of the majority of ophthalmologists whom I have asked, the applanation contact tonometer is the most accurate instrument available to measure intraocular pressure.

**IV. THE USE OF THE TERM DIAGNOSIS:** It is my opinion that this word causes more difficulty than all other issues combined when there is a discussion of optometrists using topical drugs for diagnostic purposes. The basic difficulty is the failure for both groups to recognize and accept the fact that they use the term diagnosis in a different manner. The word itself covers a broad spectrum of concepts. One can correctly use the term diagnosis when defining what may be wrong with an automobile engine, the economic system, the weather, etc. To the physician and ophthalmologist the term diagnosis is used in a very restrictive manner. It is used to define a disease or process, usually as the initial step in treatment or ordering other diagnostic tests. Despite this restrictive use of the word in medicine, there frequently is not agreement as to the specific diagnosis in a particular patient. One of the most obvious examples in the area of ocular diagnosis is the term glaucoma. Although there is agreement that

there is nearly always an increase in the intraocular pressure (low tension glaucoma being an exception), there is not uniform agreement as to just what is abnormal pressure or what, if any other parameters, are necessary to make a specific diagnosis of glaucoma. While physicians and ophthalmologists use the word diagnosis as above, in my experience, most optometrists use the term diagnosis and the diagnostic terms (glaucoma, iritis, keratitis, etc.) in a different framework. The optometric diagnosis of disease may more accurately be defined as a deviation from the normal with referral indications for definitive diagnosis and therapy. In other areas, the optometric diagnosis may be just as definitive as the ophthalmologist, e.g. refractive errors, muscle paralysis, muscle imbalance, etc. To me the fact that a diagnostic term is not preceded by a qualifying word, such as presumed, probable, possible, etc., does not present a serious problem. This is not true for most ophthalmologists and physicians who believe that to use specific diagnostic words is an invasion of their sphere of practice and expertise, which is definite diagnosis and therapy of ocular problems or problems of the visual system. It is at this point that I have strong personal convictions that many, if not most, of my colleagues in ophthalmology do not accept. It is my firm belief that ophthalmologists have a serious obligation to the public in providing educational opportunities to all health care professionals, including optometrists, at both the undergraduate and continuing education level. I am unable to comprehend that many of my colleagues do not wish to accept this responsibility in view of the ophthalmologists educational experiences in the diagnosis and treatment of problems involving the eye and visual system. It is imperative that we educate all health care providers to recognize abnormalities where referral to an ophthalmologist for definitive diagnosis and therapy is indicated if needless blindness is to be avoided. One cannot ignore the fact that there are more than 20,000 optometrists in active practice in the United States who are providing the initial or total eye care of a majority of the citizens. In rural states, the percentage is quite high because of the distribution of eye health care providers. Whether ophthalmologists like it or not, optometrists do and will continue to make diagnosis after an examination of a patient.

**V. LEGISLATION PERMITTING OPTOMETRISTS TO USE TOPICAL DRUGS FOR DIAGNOSTIC PURPOSES IS THE FIRST STEP IN LEGISLATION TO USE DRUGS FOR THERAPY:** I fail to see that this statement is germane to the present issue of the use of drugs for diagnostic purposes. In my opinion, the legislation permitting optometrists to use drugs for both diagnostic and therapeutic purposes, enacted in West Virginia, is not in the best interest of the public. There is no doubt that this law has provided a strong stimulus for organized medicine and ophthalmologists to unite against any legislation that will permit the optometrist to use drugs for any purposes. In my opinion, the present educational programs in optometric schools or their continuing education programs do not provide the necessary knowledge to use drugs for therapeutic purposes in any manner. I believe that the public will be endangered if optometrists are permitted to use drugs for therapeutic purposes, unless their education is essentially the same as that of a physician or osteopath. At the same time, I do believe that optometrists, at this time, should be able to use topical drugs for diagnostic purposes in order to enhance their ability to recognize ocular conditions where referral is indicated.

**VI. LEGISLATION PERMITTING THE TOPICAL USE OF DRUGS FOR DIAGNOSTIC PURPOSES BY OPTOMETRISTS WILL OPEN THE DOORS TO USE OF DRUGS BY NONPHYSICIANS:** It is obvious that this statement is not true because already legislation permits dentists and podiatrists to use both medicine and surgery for therapeutic purposes.

It is also true that nurse clinicians and physician assistants, in some states, are permitted to prescribe drugs, change drug dosage and perform minor surgical procedures. In each of the above instances there have been significant changes in the educational process of each group. In all instances there are definite restrictions as to what can be done and in none of these situations is there an open license to practice the healing arts as is true for the physician and surgeon or osteopath. Whether the future will bring about an alteration in the optometric education that would justify entering the areas of medical and surgical therapy of ocular problems, only time will tell. Because the eye and visual system may be involved in nearly, if not all, disease processes in the body, any type of restrictive license, such as in dentistry and podiatry, would be difficult to justify. In my opinion, the educational programs, to protect the public, would need to be essentially the same as an ophthalmologist. When one considers the vast demand for eye service is in the area of refraction and contact lenses and not medical and surgical treatment, the type of eye health care provider is significant. What is needed is more cooperative efforts to provide a team approach to eye health care, at least in the area of dense population concentration.

**VII. THE DISTRIBUTION OF OPTOMETRISTS AND OPHTHALMOLOGISTS:** Although this issue is rarely considered as a distinct entity beneath all discussions, it is important in the present legislative conflicts. All data indicates that there is a significant difference in the distribution of optometrists and ophthalmologists. Ophthalmologists, in general, practice in urban and suburban areas, whereas, percentage-wise more optometrists practice in rural areas and the inner city. It is in the areas where there is a surplus of ophthalmologists and optometrists for the population that conflicts occur. If one is honest the primary conflict in this latter situation is economic.

In summary, on the issue of legislation for the use of drugs by optometrists, I support the following positions:

**I.** The topical use of drugs for diagnostic purposes, in specific anesthetics, mydriatics and cycloplegics by optometrists may provide significant benefits to the public with minimal danger to either life or vision. I find it difficult, if not impossible, to justify the inclusion of miotics for diagnostic purposes.

**II.** I am unequivocally opposed to the use of drugs, either topical or systemic, for the therapeutic purposes by optometrists.

**III.** I am opposed to any legislation that would "grandfather" the optometric use of drugs for diagnostic purposes by optometrists.

**IV.** Legislation should require the passage of an examination on the action of drugs and **in particular the clinical effects and side effects of drugs** used for diagnostic purposes before an optometrist is licensed to use them.

I hope that this lengthy response to the question of the use of drugs by optometrists is justified, because this is a highly complex issue, of concern to the public that has evoked extreme emotional response from both ophthalmology and optometry. In my opinion, the time has passed when we can retain the status quo and it behooves all involved (health care providers and members of the legislature) to carefully examine the facts and provide the best possible legislation for the public welfare at this time. If I can be of further assistance in this matter, please feel free to contact me.

Sincerely yours,

Albert N. Lemoine, M.D.

VII.  
DR. HOWARD C. LUCAS,  
FLORIDA OPHTHALMOLOGIST  
TESTIMONY BEFORE THE SENATE  
ECONOMIC AFFAIRS COMMITTEE

Mr. Chairman, Members of the Committee:

Briefly my background is a medical degree from the Cornell Medical College in 1951 followed by two years rotating internship at Genesee Hospital, Rochester, New York. I then practiced general medicine for three years in Winter Haven, Florida. In 1957, I served a three year residency in Ophthalmology at the Institute of Ophthalmology, Columbia Presbyterian Medical Center, New York City. In 1960 I started my private practice of Ophthalmology in Winter Haven, Fla. and in 1961 was certified by the American Board of Ophthalmology.

You are here to decide the question of who has the right to use mydriatics, cycloplegics, and topical anesthetics, referred to as diagnostic pharmaceutical agents. The medical doctors claim squatters rights to the territory of diagnostic pharmaceutical agents, demand an absolute monopoly in their use. The optometrists feel that their patients would also benefit by using diagnostic pharmaceutical agents to make the eye examination more precise and complete.

**The diagnostic pharmaceutical agents belong neither to the optometrists or the medical doctors. They are the property of the patients and should be used to benefit the patients who are your constituents.** The proper question here is "Who is to be awarded the exclusive use of these agents to be administered for the benefit of the patients?" Both medical doctors and optometrists use the same tools, lenses, prisms, tonometers, biomicroscope, and ophthalmoscopes to determine the presence or absence of disease and the correct prescription for glasses. Enlarging the pupils with drops makes the examination easier and more precise in many cases. The use of topical anesthetics makes the measurement of intraocular pressure more accurate, and this facilitates the diagnosis of glaucoma.

**The prime consideration here is what is best for the patient. Since both optometrists and medical doctors are performing similar examinations with the ultimate goal of arriving at the best refraction and diagnosis then both medical doctors and optometrists should be using the diagnostic pharmaceutical agents.**

The next question is safety or danger of these diagnostic agents. I have been practicing ophthalmology for twenty-two years. I have not had any serious reaction to diagnostic pharmaceutical agents. The serious and lethal reactions as described by the medical doctors are not subtle or difficult to recognize. They describe convulsions, anaphylactic shock, strokes, cardiac arrest and death due to these agents. I have never had to do cardio-pulmonary resuscitation, call an ambulance, or send one of my patients to the morgue as a result of using diagnostic pharmaceutical agents.

It is true that these agents are dangerous if improperly administered such as being swallowed or injected, or multiple drops being used over a period of one hour or more. One or two drops in each eye, with the excess being blotted out with a tissue will not cause a serious reaction. This is not difficult to do. The optometrists know how to do this properly.

Here, the proper question is:

Why are certain medical doctors getting so many dangerous reactions to these diagnostic pharmaceutical agents?

The majority of medical doctors do not get serious reactions when using diagnostic pharmaceutical agents. Therefore, the ones who are getting the bad reactions must be doing something wrong. They should carefully and critically examine their techniques and take a refresher course in pharmacology to discover the cause of these bad reactions.

Diagnostic pharmaceutical agents, when properly used, are safe and essential to an adequate eye examination. Optometrists should use them. Respectively submitted.

Howard C. Lucas, M.D.  
560 Ave K, S E.  
Winter Haven, Florida 33880

## **Distinguishing among eye specialists**

In this morning's mail were letters from two readers in different parts of the country. Both asked questions about optometrists and how they differ from medical eye specialists.

Ophthalmologists are medical doctors who have had special training in the medical and surgical aspects of diseases of the eye.

Optometrists are not M.D.s, yet they, too, have had excellent training. Their field is limited to the diagnosis and correction of defective vision. It does not include any aspect of surgery.

The eye is a remarkable index of diseases that may exist elsewhere in the body. Vascular disturbances, neurological problems and diabetes are only a few of the many conditions that are diagnostically recognized by a careful inspection of the eye. Intrinsic diseases of the eye itself — infections, glaucoma, cataract formations, viral infections, allergies and tumors — are treated by the ophthalmologist.

It should be pointed out that many skilled optometrists recognize when a problem exists and immediately refer their patients to an eye specialist for confirmation and treatment.

Dr. Coleman welcomes questions from readers. Please write to him in care of The Daily News, Pouch 6618, Anchorage 99502.



**dr. lester  
coleman**

SUPPORTIVE LETTERS

from

MEDICAL DOCTORS AND OPTOMETRISTS INSIDE ALASKA

These letters speak of authorized use of diagnostic agents by optometrists throughout Alaska.

# MEMORANDUM

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Public Health Service  
Alaska Native Medical Center  
P.O. Box 7-741  
Anchorage, Alaska 99510  
DATE: October 21, 1977

TO : SEE BELOW

FROM : ANC-EYE

SUBJECT: Use of Diagnostic Medications by Staff Optometrists

Drs. Donald E. Rigelow and James N. Matson, Staff Optometrists, conduct field eye clinics as part of the Eye Care Program. Often it is necessary to use cycloplegics in order to obtain a refraction on certain individuals and anesthetic drops to take ocular pressures. Both doctors are aware of the possibilities of provoking an acute angle closure glaucoma, or an allergic reaction by the use of these drugs. They have my permission to use these ocular diagnostic medications when they feel the medications are needed, and I take full responsibility for any adverse reactions that might occur.

Should an acute angle closure be provoked, the following steps should be initiated:

1. Pilocarpine Ophthalmic Solution, 4% 1 gtt. installed q. 15 min. 4 doses; then, q. hour x4 doses, or until pupil constricts. Once constricted, the patient should be maintained on Pilocarpine 1 gtt. O.U. q.i.d. until referred in for surgery.
2. Simultaneously, at the initiation of Pilocarpine, the patient should be given Diamox 250 mg. I.M. and Osmoglyn (if available) 6 oz. mixed with grapefruit juice P.O.  
*DIAMOX ONE TABLET EVERY SIX HOURS BY MOUTH*
3. He should be referred to ANMC as soon as possible for evaluation and surgery.

*Donald W. Dippe*  
Donald W. Dippe, M.D.  
Chief, Ophthalmology

DIST: Clinical Directors - All Service Units  
Chief, A-OPCSSE  
Eye Care Coordinators and Assistants  
Public Health Nurses and Community Health Aides



2320 Palos Verdes Drive  
Eagle River, Alaska 99577  
May 2, 1978

Rep. Randy Phillips  
Pouch V  
Juneau, AK 99811

Dear Rep. Phillips:

I am presently practicing with the Public Health Service at the A.N.S. Hospital in Anchorage and anticipate going into private practice in the very near future. I am interested in the progress of House Bill #664 and would like to urge you to support the passage of this legislation. I am a graduate of Pacific University, College of Optometry, which is in Forest Grove, Oregon. Oregon has had similar legislation to House Bill #664 for several years which, of course, is mandated that Pacific University provide experience in the use of these agents along with a complete pharmacological background for its graduating students. I've also been a medic in the Army and have had some experience with the various drugs and agents used in emergency medical treatment. It has been my experience with the Public Health Service and in the military that there are no serious adverse reactions from the agents optometrists will use and I've had experience as an observer in the military and, of course, first hand with the Public Health Service where the Alaskan Public Health Service optometrists have had directive from Dr. Dippé to use these agents both at the hospital clinic in Anchorage and whenever we are on bush eye clinics. These agents are used in the bush eye clinics by the optometrist as an independent practitioner with only telephone and mostly not very good radio contact with the Public Health Service Hospital in Anchorage which would be much poorer in case of emergency than the in office setting most private practicing optometrists in Alaska now enjoy. I also work directly with the ophthalmological staff at the A.N.S. Hospital in Anchorage and have heard the various arguments that have been presented concerning optometrists' ability to manage patients when they use these drugs and can say from personal experience that these arguments are a smoke screen and that the few minor side effects caused by some of these agents are relieved by either reducing the dosage or stopping the cycloplegic agent in the case of cycloplegia. I have had an opportunity to also work with the Public Health Service optometrist who has served with the Public Health Service for many years and have had discussions with the military optometrist in Anchorage and can find no instances where patients have suffered serious adverse affects from these drugs, but know from personal experience that they do aid in earlier detection

of eye disease. I also know from my close association with the ophthalmological community in Alaska that if any serious effect had occurred in either the Public Health Service or military use of these agents your committee would have heard about it. The unexplainable morbid fear ophthalmologists have from optometrists granting the use of these drugs is ridiculous in my opinion and can only result in their possible fear of losing patients which I also don't understand because as I viewed the situation as a non-private practicing optometrist the ability of the doctor to make people like him and provide good services are what draw patients to offices and not whether or not they use eye drops. If the fear is based on loss of patients from ophthalmology offices, which is the only thing I can see could be the real source of their concern, then it certainly should not be a concern of the legislature. Again I would like to urge you to support the passage of House Bill #664 as it will aid the private sector optometric patient as it has aided the Public Health Service and military optometric patient.

Yours very truly,

James N. Matson, O.D.

JNM:jc



DEPARTMENT OF THE ARMY  
HEADQUARTERS, US ARMY MEDICAL DEPARTMENT ACTIVITY, ALASKA  
FORT WAINWRIGHT. [REDACTED]  
ALASKA 99703

AFZT-MD-CL

28 February 1978

STATEMENT

I am presently an Alaska licensed optometrist (#85) practicing in the U.S. Army at Fort Wainwright, Alaska. I have been here over three years, and in the military for over seven years. During all my years as a practicing optometrist in the U.S. Army, I have been authorized to use diagnostic pharmaceuticals in my practice. The use of diagnostic anesthetics, mydriatics, miotics, and cycloplegics are required for flight physicals, tonometry, internal examinations, cycloplegic exams, etc., required by military regulations.

Upon arriving at Bassett Army Hospital here at Fort Wainwright in 1974, I submitted a request to the hospital Credentials Committee to use certain diagnostic drugs in my practice of optometry which was approved by the committee and endorsed by the Hospital Commander. In my experience in using diagnostic drugs on thousands of patients, I have never had an adverse drug reaction.

*Robert P. Hammond*

ROBERT P. HAMMOND, O.D.  
CPT, MSC  
Chief, Optometry

RECOMMENDATION OF  
LEGISLATIVE ADVISORY COMMITTEE OF  
THE MUNICIPAL HEALTH COMMISSION

LEGISLATIVE REVIEW

*file - do pass*

BILL NUMBER AND TOPIC: Senate Bill 75  
House Bill 79

BRIEF SUMMARY: An Act relating to the practice of optometry. These bills are the same. They define the term "optometry" and define what is included in the practice. The bill also outlines the use of drugs for diagnosis.

BILL STATUS: House Bill 79 was introduced by Representatives Martin, McKinnon, Meekins, Miller and Parr, and was referred to health, Education and Social Services and Judiciary Committees.

Senate bill 75 was introduced by the Rules Committee by request, and was referred to the senate Health, Education and Social Services and Judiciary Committees.

The series of questions below are presented to assist persons responsible for reviewing proposed legislation. Answering each question will help the reader to better understand the intent or meaning of a specific bill. Question #12 asks the Legislative Advisory Committee to formulate a recommendation, which will then be forwarded to legislators, lobbyists, other review bodies, etc., as appropriate. Action taken by this committee automatically sends the bill and comments through 1) Municipal Legal Department, 2) Municipal Administration, and 3) Municipal Health Commission, time permitting.

1. What is the time frame for influencing the bill's outcome by this committee or Commission? This legislative session
2. What does the bill do? Defines the term "optometry" and defines what is included in the practice; and outlines the use of drugs for diagnosis.
3. Who does it affect? Both the medical and consumer areas.
4. How much does it cost? Unable to determine
5. Is it directed to a specific geographic area? No  
What area? \_\_\_\_\_
6. How would enactment of this bill affect Anchorage? IT WOULD INCREASE THE AVAILABILITY. IT ALSO ACTS AS AN ALTERNATIVE TO WHAT IS CURRENTLY IN PLACE TO IMPROVE THE HEALTH SYSTEM. IT WOULD ALSO HELP REDUCE COST. IT WOULD ALLOW THE USE OF TOPICAL DRUGS IN OFFICES

7. Is it directed to a specific group? Yes  
Which group? Optometrist.
8. How does it affect others? IT DOES NOT AFFECT OTHERS
9. What are its strengths? <sup>①</sup> ALLOW USE OF TOPICAL DRUGS IN OPT.  
<sup>②</sup> IT WOULD BE COST EFFECTIVE. <sup>③</sup> EDUCATIONAL REQUIREMENTS  
<sup>④</sup> INCREASE AVAILABILITY. <sup>⑤</sup> WOULD ACT AS AN ALTERNATE  
NATIVE ENTERING POINT INTO HEALTH SYSTEM.
10. What are its drawbacks, weaknesses? NONE
11. Is the concept new? NO Are there precedents? YES  
Where? IN THE LOWER 48 (24 STATES HAS PASSED THIS LAW)
12. Is there pending or existing legislation which is similar in focus, and/or which would impact implementation of this bill? PROPOSED DRUG  
BILLS IN STATE LEGISLATION
13. How would this bill affect the Anchorage Health Services Plan? IT WOULD  
INCREASE AVAILABILITY, IT WOULD ACT AS AN ALTERNATE  
NATIVE ENTERING INTO THE HEALTH SYSTEM.
14. What is the Committee's recommendations? DO PASS
15. What agencies or bodies should this committee notify regarding action on this legislation? SENATE RULES, HEALTH SOCIAL SERVICE  
MUNICIPAL ADMINISTRATION, HSA

✓  
HSA  
BILL FAULKNER Committee Chairman of the following Committees  
A. BARBER, B. FAULKNER, J. HOUSE  
R. H. GEE, C. HEINKE, C. RIGDEN,  
L. SHERWOOD, H. KER SANDERSON, K. AULTON  
A. COMROSSO, K. BROWNBERGER

Individual Committee Members of the following Committees

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State Health Coordinating Council

Governor

Bill Sponsor

Other: list

Committee procedure automatically sends the bill through:

1. Municipal Legal Department
2. Municipal Administration
3. Municipal Health Commission, if timely

REFERENCE QUOTATIONS FROM AUTHORITATIVE AND QUALIFIED  
PERSONS REGARDING USAGE OF DIAGNOSTIC AGENTS BY OPTOMETRISTS

A. SUBSTANTIATING MINIMAL RISKS TO ADVERSE DRUG REACTIONS

1. "In a series of more than 1000 patients anesthetized with benoxinate, no toxic effects were encountered, either locally or systemically."  
Havener, William H., M.D., M.S. (Ophth.), Ocular Pharmacology, P. 51.
2. "There have been no reported systemic toxic reactions in amounts used for topical anesthesia for the eye."  
Leopold, Irving, M.D., Ocular Therapy Vol. 1, p. 16
3. "None of the drugs I shall be discussing were available fifty years ago...they are all less toxic, less irritating and shorter acting than their predecessors."  
Garston, Mathew J., O.D., "A Closer look at Diagnostic Drugs for Optometric Use", Massachusetts College of Optometry Boston, Mass.
4. "After having seen the use of local anesthetics discussed here in over 20,000 patients I have yet to see any adverse reactions. I have seen the dilating agents discussed here in over 10,000 patients and likewise have seen no ill effects. (this includes not causing an angle-closure glaucoma)."  
Garston, Matthews, J., O.D., *ibid.*
5. Seventy to eighty percent of drug reactions are predictable and most are preventable."  
"New England Journal of Medicine" Vol. 285, pg. 1361, June 1971 cited by Lyle W.M., O.D., "Relationship of Pharmaceuticals to Optometry", American Academy of Optometry, 1971.
6. "Abraham in 1933 surveyed the literature for reports of acute glaucoma produced after the use of mydriatics in patients previously free from clinical signs of glaucoma. He calculated an incidence of one case of acute glaucoma for each 18,400 instances of application of anticholinergic eyedrops for refraction of other eye examination.

In Abraham's data it was strikingly evident that age was an important factor in determining susceptibility to acute glaucoma from topical application of anti-cholinergic drugs. In nearly all instances of acute glaucoma the patients were over 30 years of age. Among patients younger than 30 years, Abraham found only four instances of this type of adverse effect in the literature. Also, it must be emphasized that the above one case in 18,400 patients was from a population group who were dilated without the aid of angle evaluation techniques."

Leopold, Irving, M.D. (ed.) Ocular Therapy, Vol. III, Chapter 4 "Conservatism in Glaucoma Management" by Robert Shafferf, M.D. and John Hetherington, Jr., M.D. p. 63

7. "Beach noted that increased intraocular tension from the use of a mydriatic does not occur one in 10,000 examinations."  
Lyle, W.M., O.D. Op. Cit.
8. "Havener says that a physician who dilates many eyes may expect to precipitate not more than one case of acute glaucoma in his lifetime."  
Havener, W. H., Synopsis of Ophthalmology cited by Lyle, W.M., O.D. ibid.
9. "It was reported in Australia that in only one case out of 12,000 can glaucoma be precipitated and then only in people who have a predisposition to react in that way to the drug."  
Parliament, 2nd Session, Vols. 59, 60, 73, Act. No. 34, 1963 the Optometrists Act. 1963, Cited by Lyle W.M., O.D. ibid.
10. "After the child is first examined, the doctor usually tells the mother to instill atropine drops or ointment into the child's eye...Atropine is used because it is the most powerful cycloplegic drug...One in 500 children develops a sensitivity reaction to this cycloplegic drug... The mother should not become alarmed; she should simply discontinue the drug."  
Abrahamson, Ira A. Jr., M.D. Know your Eyes, Medcom Press, 1972, pp. 76-77.

B. ESTABLISHING THE LARGER RISK TO THE PUBLIC HEALTH IF THESE DRUGS ARE NOT ADMINISTERED BY OPTOMETRISTS:

1. "Newell reports that there is more danger of missing a significant ocular or systemic disease by failing to dilate than there is of precipitating glaucoma by dilation."  
Newell, F.W. Ophthalmology, Principles and Concepts, 2nd Edition, C.V. Mosby Co. 1969, p. 140, cited by Lyle W.M., O.D., "Relationship of Pharmaceuticals to Optometry", American Academy of Optometry, 1971.
2. "In their role as the first line of defense against glaucoma and other vision-threatening conditions (Optometrists) must be free to utilize all appropriate tests if they are to continue to bear these responsibilities."  
"Should the patient be deprived of a variety of tonometry test, or of gonioscopy or of tonography because his optometrist was not permitted to utilize a broad spectrum of diagnostic procedures?" Cited by Lyle, W.M., O.D. Ibid p.6
3. "A recent opinion of the attorney general of New York State affirms that it is the duty of the optometrist to use his training to uncover any need for the patient to seek further medical advice."  
Forgotson, E.H. et al Report of the National Advisory Commission on Health Manpower, Vol II, Nov. 1967, U.S. Gov't Printing Office, cited by Lyle W.M. O.D., Ibid p.7
4. "...In view of the unavailability of appropriate medical services, for example in remote areas and in other unusual circumstances, there appears to be a need for optometrists to employ topical anesthetics...optometrists...in many cases... are the first trained person consulted."  
Anon, Joint Declaration on Behalf of Ophthalmologists and Ophthalmic Opticians (optometrists). The Ophthalmic Optician, Feb., 21, 1970 p. 173, cited by Lyle W.M., O.D. Ibid p.7.
5. "In those parts of the world where high quality vision care is generally available, 60% to 80% of this health service is the responsibility of optometrists."  
Lindsey A. Socialized Medicine in England and Wales, National Health Service, 1948-1961, University of North Carolina Press 1962.
6. Woodruff, M.E. "Statement Relating to the Effective Utilization of Optometry and Optometric Services in Fulfillment of the Aims and Objectives of the United States Dept. of HEW", American Optometric Assoc, 1964 cited by Lyle W.M., O.D., Ibid p. 11

7. "With regard of mydriatics, most ophthalmologists agree that any risk produced by employment of mydriatics is far outweighed by the potential risk from failure to see more of the fundus."

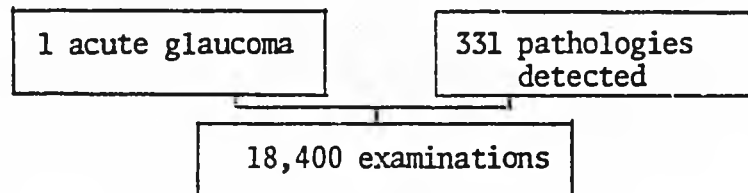
Lyle, W.M., O.D., Ibid p. 13

8. "Teachers and research workers in the field of vision use mydriatics, miotics, cycloplegics, topical anesthetics and other drugs."

School of Optometry, Faculty of Science, University of Waterloo, Optometry Education, "The practice and Services of Optometry in Ontario" Part 3 of a Brief supporting and supplementary to the College of Optometry's Brief Submitted to the Committee on the Healing Arts, Nov. 1967, cited by Lyle, W.M., O.D., "Relationship of Pharmaceuticals to Optometry", American Academy of Optometry, 1971.

ABRAHAM: One case of acute glaucoma for each  
18,400 instances of application.

HEW: 1.79% of all eye examinations yield an  
eye pathology.



Safety factor for the one case of glaucoma precipitated:  
include in the bill:

"Miotics for emergency use only."

*M.L. Copy  
Return to J.C.H.  
via mail*

THE USE OF DIAGNOSTIC DRUGS  
IN RHODE ISLAND -  
A SURVEY

by

Herbert L. Moss, O.D., F.A.A.O.  
Associate Professor of Optometry  
Pennsylvania College of Optometry

Additional remarks regarding the use of DPAs:

1. Greatest advantage to patients, pathology referrals increased, integrity of the profession increased.
2. Mydriatics and binocular ophthalmoscopy are the greatest benefit.
3. Uses ophthaine only for tonometry, hard contact lenses, and first aid.
4. Applanation tonometry with anesthesia is accurate and reliable. Stops over-referrals and promotes proper referral. Perfectly safe in trained hands.
5. Beneficial to patients. Speeds referral to proper practitioner without delay.
6. Patient acceptance is gratifying. I.O.P. measurements are easier, smoother, and faster.

#### SUMMARY

In summarizing the results of this survey, several generalizations seem to stand forth:

1. From the optometrists' viewpoint, the overall impact on practice and professional status has been positive to very positive.
2. The overall effect upon most segments of the public and other professions has been positive although not as much so with public health and elected officials.
3. The use of DPAs is higher as the age bracket of the patients increases and this could be anticipated because of the high usage of topical anesthetics in tonometry.

4. The 9.5% usage of mydriatics seems to be in keeping with the statistics on the usage of mydriatics in general ophthalmological practice.
5. The very low incidence of the use of miotics as a post-mydriatic also reflects the state of the art today.
6. In regard to the effect upon practice, it appears that DPAs tend to simplify optometric practice, but increased the time spent per patient in collateral activities.
7. DPAs seem to have increased the number of procedures and the variety of equipment that optometrists utilize.
8. One crucial issue raised during the legislative hearings was the supposed adverse reactions to DPAs that would occur. The responses to this survey indicate that those claims were totally unfounded.
9. One area that should be stressed is the increase in the referral rate across the board and particularly the increase in the referral for suspected glaucoma by more than two thirds of the responding optometrists.
10. The question of whether optometrists should become involved in limited ocular therapy brought a 72% favorable response. However, five of those responding in the affirmative made an unsolicited point that additional education and clinical training should be part of this activity.

In substance, it appears that the use of DPAs by optometrists in Rhode Island has been beneficial to all parties involved, even those who opposed the legislation, and that the concerns raised by the opponents were exaggerated.

## CONCLUSION

We, the optometrists of Alaska at this point in our development, submit our qualifications in an effort to protect our patients against preventable eye disease. We must now close the gap between what the courts are demanding of us and what the laws are allowing of us.

With emerging national health care, we see only a future of increased visual and eye health care needs. We enthusiastically accept that with a sincere dedication. Yet, in so doing, we find ourselves in need of some diagnostic tools.

The optometry motto remains clearly in the minds of all Alaskan optometrists: "Next to life itself, God's greatest gift is sight."

1979--TESTIMONY BEFORE  
HOUSE HES COMMITTEE

TESTIFYING

Dr. Sam McConkey: Physician and surgeon, diplomat of the American Board of Ophthalmology, Fellow in the American Academy of Ophthalmology, Practicing ophthalmologist in Fairbanks.

Dr. Marvin Grendahl: Physician and surgeon, Ph.D. in Physiology, Practicing ophthalmologist in Anchorage.

Dr. Roger Page: Physician and surgeon, board certified ophthalmologist, practicing ophthalmologist in Juneau.

Dr. Boyd Walker: Optometrist, private practice in Anchorage.

NO ALASKA OPTOMETRIST HAS BEEN TAUGHT  
BY A M.D. OR PH.D. OR OPHTHALMOLOGIST

Dr. McConkey speaking: "After reviewing the professionals and staff of their schools, I can tell you that not one optometrist in Alaska has had any pharmacology training from any M.D. or Ph.D. in pharmacology. I can tell you that not one optometrist in Alaska has had any instruction in anything that a full time M.D. on any staff and not one optometrist in Alaska has had any full or part time instruction either in class or in clinic study by an ophthalmologist."

Answer by optometric legislative committee--not on tape

University of Alabama Optometry Faculty (total instructors 65)

Jerry Christensen, B.Sc., M.Sc., Ph.D.  
Kenneth Cinffreda, B.A., Ph.D.  
Boyd Eskridge, B.Sc., M.Sc., Ph.D.  
Jack Geer, B.S., M.D.  
Thomas Johnson, B.S., M.S., Ph.D.  
Robert Kleinstein, B.S., M.P.H., Ph.D.  
Homin Liu, B.S., Ph.D.  
Michael Loop, B.S., Ph.D.  
Andrew Lorincz, Ph.D., B.S., M.D.  
Jerry McGhee, B.S., Ph.D.  
John McKibbin, B.A., M.S., Ph.D.  
Thomas Norton, B.A., Ph.D.  
Clyde Oyster, B.S., Ph.D.  
John Pierce, B.S., M.S., Ph.D., O.D.  
William Rosenblum, B.S., M.S., Ph.D.  
Harold Schnuper, A.B., M.D.  
James Sheetz, M.S., Ph.D.  
Richard Shoemaker, B.S., M.S., Ph.D.  
Ellen Takahuski, B.S., M.Opt., Ph.D.  
David Whikehart, B.S., Ph.D.  
Bradford Wild, A.B., B.S., M.S., O.D., Ph.D.  
Graeme Wilson, M.Sc., O.D., Ph.D.

University of California School of Optometry (total instructors 96)

Irving Fatt, Ph.D.  
Darrell Carter, O.D., Ph.D.  
Hans J. Bremeumann, Ph.D.  
Russell L. DeVolvis, Ph.D.  
Merton Flem, O.D., Ph.D.  
Ernest K. Goodner, M.D. (ophthalmologist)

Monroe J. Hirsch, O.D., Ph.D.  
 Russell Jones, Ph.D.  
 Robert Mandell, O.D., Ph.D.  
 Elwin Marg, O.D., Ph.D.  
 Robert Mishell, M.D.  
 Meredith Morgan, O.D., Ph.D.  
 Lawrence Stark, M.D.  
 Anthony Adams, O.D., Ph.D.  
 Richard Brand, Ph.D.  
 Theodore Cohn, Ph.D.  
 Ralph Freeman, O.D., Ph.D.  
 Wayne Hubbell, Ph.D.  
 Kenton Kerr, O.D., Ph.D.  
 Robert Stamper, M.D.  
 Howard J.D. Abreva, Ph.D.  
 Julie Jose, O.D., Ph.D.  
 Sheldon Miller, Ph.D.  
 Clifton Schor, O.D., Ph.D.  
 Richard Van Sluyters, O.D., Ph.D.  
 Howard Cohen, M.D.  
 Robert Johnson, O.D., M.D.  
 Leon Metz, M.D.  
 Robert Litwin, M.D.  
 Joseph F. Terdiman, M.D.  
 Tommy Y. Hayashi, Ph.D.  
 Gary Liberman, O.D., Ph.D.  
 Frank Zisman, O.D., Ph.D.

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THE TREND IS CLEAR, INFORMED PUBLIC  
 AND LEGISLATURE WILL DECIDE. 31 STATES  
 ALLOW DPA'S

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Dr. McConkey speaking: "In 1977, 17 states defeated this form of legislation. There were four states that allowed it. In 1978, fifteen states said no. Two allowed. The trend is clear. That once an informed public and legislature is aware of the fact, it has been overwhelmingly defeated in legislature across the country."

Answer by optometric legislative committee--not on tape

<u>Name of State</u>	<u>Date of Enactment</u>
Rhode Island	July 16, 1971
Pennsylvania	March 1, 1974
Tennessee	May 8, 1975
Oregon	May 20, 1975
Maine	June 24, 1975

Louisiana	July 6, 1975
Delaware	July 10, 1975
*West Virginia	March 4, 1976
California	July 9, 1976
Wyoming	February 17, 1977
New Mexico	March 4, 1977
Montana	April 12, 1977 (at 10:10 a.m.)
Kansas	April 12, 1977 (at 2:00 p.m.)
*North Carolina	June 3, 1977
Kentucky	March 29, 1978
Wisconsin	April 29, 1978
Nebraska	February 13, 1979
South Dakota	March 15, 1979
Utah	March 21, 1979
North Dakota	March 22, 1979
Arkansas	April 2, 1979
Nevada	May 25, 1979
Iowa	June 8, 1979

\*Both diagnostic and therapeutic

In addition, there are eight (8) other states that do not statutorily prohibit the use of DPAs by optometrists; several of these states have attorney general opinions (+favorable) (-unfavorable) on this point:

Alabama (AG-)  
 Florida (AG+)  
 Idaho (State Board Statement +)  
 Indiana (AG+)  
 Michigan  
 Minnesota  
 New Jersey (AG+)  
 Virginia (AG-)

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DIALATING THE EYES IS NOT NECESSARY IN MAKING  
 A DIAGNOSIS OF EYE DISEASE OR SUPPLYING CHILDREN  
 WITH PROPER GLASSES CORRECTION.  
 (CONTRARY TO DR. GRENDahl'S TESTIMONY)

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Dr. McConkey speaking: "Dialating the eyes is not a prerequisite of making a diagnosis of eye disease. The truth is that general practitioners and other physicians across the country routinely exam eyes thousands of days without dialating eyes that are quite capable of diagnosing problems that they see. Dialating the eye with drops is not a prerequisite to supplying children with the proper glasses correction.

WHY DO YOU DIALATE THE PUPIL?

Legislator's question to Dr. McConkey: "Can an adequate examination be made of the eye without dialating pupils, and if it can, as I think you indicated here, then why do you use, why do you dialate the pupil when you are examining the eye?"

MY OBLIGATION IS TO DETECT ANY ASPECT OF  
DISEASE AND DIALATING THE EYE GIVES ME A BETTER CHANCE.

Dr. McConkey's Answer: "To the first question, the answer is yes, an adequate exam can be done but the second part, why do I dialate the eye? My obligation is to detect any aspect of disease that might be present and in some cases of decreased vision, sometimes I can't even tell that even if dialating the eye but it would give me a better chance. You're suppose to know what to look for. Some of these conditions are very far peripheral and can't be seen easily but their vision is decreased. It certainly helps us in evaluating what the problem is, and I think I have an obligation with the first time patients to make sure that's what kind of base we are starting on."

DIAGNOSIS NOT IN OPTOMETRY LAW.

Dr. Grendahl speaking: "The state statutes in Alaska specifically limit the definition of optometry. Not only do they not use drugs, no language is put in there about diagnosis."

Answer by optometric legislative committee--not on tape

Sec. 08.72.300 Definitions.

- (3) "Practicing optometry" means the diagnosis by mean 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, prism or ocular exercises for the correction or relief of the human eye or the holding of oneself out as being able to do so;

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IF DROPS ARE SO HAZARDOUS, WHY DO YOU USE THEM?

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Legislator's question to Dr. Grendahl: "I hear considerable testimony on the hazardous nature of the drops in question and the question I have for you is that if, in fact, they're such a hazardous nature at the present time that you elect not to use it on many of the natives, why do you use it on anyone?"

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YOU HAVE TO DIALATE TO SEE IF  
THE BACK OF THE EYE IS FREE OF DISEASE.

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Dr. Grendahl's answer: "Let me describe the eye as a sphere, okay? Front aspect of it is a lens system. Back surface is a film. If a person comes in with a complaint of flashing lights or seeing spots, or a white curtain comes down over the eye. We have to dialate the eye with, like with the element in neosynophrin, in order to see that retinal detachment, okay? In order to see that retinal detachment you have to get way out to the periphery, way out to the front edge of the film. . . . So by dialating the eye fully we can get way out to the periphery but we need to know their systems. . . . That's why we use dialating drops in the eye for that instance."

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YOU HAVE TO USE DROPS TO GET  
A PRESCRIPTION FOR A CROSS-EYED CHILD.

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Another instance why we use dialating drops is that the patient comes in, a little child comes in with a crossed eye, okay? If a child has a crossed eye, we have to do a psychoplegic refraction. All that means is we put a drop in the eye not to dialate the pupil but to put the lens at the primary station. That way we can determine the whole

refractive error of the eye and determine the therapy. Number one would be to prescribe the whole psychoplegic refraction of the glasses. If they have the eye deviating in after the full psychoplegic refraction, with glasses prescribed, then surgery has to be done. . . . So that's why we as ophthalmologists use dialating eye drops.

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IF DROPS ARE DANGEROUS, WHY DOES MY  
EYE DOCTOR USE THEM EVERYTIME ON MYSELF AND MY CHILDREN.

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Legislator's question to Dr. Grendahl: "I wear glasses. I've had drops several times. My two children that I've taken in have their eyes examined. There was no black curtain or crossed eye or any of these particular things you've described and every, every time I've gone in, their eyes have been dialated, and I guess what I'm hearing is that the drops are very dangerous. All sorts of things can happen. . . . They've been used very frequently when I've gone in."

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DIALATE EVERYONE OVER 52 YEARS OLD.

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Dr. Grendahl's answer: "If you come into my office, if I don't see any indication to use the drops, I don't use them. I will use it though in someone that's over age, like 52 or 53. Why? Because the incidence of pathology in a 52 year old and older is higher, namely methostatic breast cancer, prostatic cancer, lung cancer. So in those cases, I will dialate everyone over that particular age, but for routine refraction, and if you were not in that age group, I wouldn't probably dialate your eye unless I saw some real reason to: visual imbalance, field imbalance, pupil abnormality, pigmentation of the iris. My only comment is that other physicians have other feelings about it."

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PHYSICIAN ASSISTANTS DIAGNOSE  
AND PRESCRIBE MEDICINE.

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Legislator's question to Dr. Page: "Is it not a fact that physician assistants in this state do diagnose and prescribe medicine without the same benefit of training as the medical doctor?"

Dr. Page's Answer: "That's true."

HOUSE BILL #79  
"PRACTICE OF OPTOMETRY"

To Include

DIAGNOSTIC AGENTS

## TABLE OF CONTENTS

### I. WRITTEN TESTIMONY

1. GEORGE HALL, O.D.  
President, Alaska Optometric Association

Doctor Hall represents approximately 95% of the state's optometrists. He shows how the diversity of the state's population and the need for vision care in remote areas make it essential that optometrists be allowed to use diagnostic agents.

2. ROBERT HOLCOMB, O.D.  
Past President, Oregon Optometric Association

Doctor Holcomb represents approximately 80% of the Oregon optometrists. He indicates the concerned need to enact legislation which would allow optometrists an increase in their visual examination capabilities through the use of diagnostic agents.

3. WILLARD BLEYTHING, O.D., M.S.  
Dean, College of Optometry  
Pacific University

Doctor Bleything refers to the professional curriculum which presently qualifies optometrists to utilize diagnostic agents. Over 50% of Alaska's optometrists obtained their professional training at Pacific University.

4. RONALD H. WINTERS, Ph.D.  
Assistant Dean, School of Pharmacy  
Associate Professor of Pharmacology and Toxicology  
Oregon State University

Doctor Winters has reviewed the pharmacology curriculum at Pacific University, College of Optometry, and found it to be appropriately constructed and the use of diagnostic agents by optometrists to be a safe procedure for the improvement of patient care.

II. SUPPLEMENTARY INFORMATION REGARDING HB #79  
(OPTOMETRISTS DIAGNOSTIC AGENTS USAGE)

A. The Usage of Topical Eye Examination Drugs by Optometrists

By: Darrell B. Carter, O.D., Ph.D.  
Clinical Professor of Optometry  
School of Optometry  
University of California

This paper was prepared to present to members of state legislatures and to other interested persons the reasons why optometrists desire legislative authorization for the use of ocular examination drugs.

B. Questions and Answers on the Optometry Bill (HB #79)

This summarizes and briefly answers the key questions most frequently asked.

C. Some Points Relative to the Use of Drugs by Optometrists

By: Leonard Levine, Ph.D.  
Professor  
College of Optometry  
Pacific University, Oregon

Dr. Levine has received numerous grants to research the chemistry and physiology of diseases such as muscular dystrophy. He is highly respected as a professor as well as researcher in the areas of physiology and neurophysiology. In order to be effective as such, a special understanding of pharmacology is inherent.

He makes a number of important points relative to the use of drugs by optometrists.

D. Statutory and Judicial Aspects

1. House Bill #79

This bill would re-define A.S. 08.72.300(2) "OPTOMETRY" and (3) "Practicing Optometry".

Addition of a new A.S. § 08.72.305 "USE OF DRUGS FOR DIAGNOSIS".

A.S. 17.15 is amended by adding to Article 1, § 17.15.055 "Sales to Optometrists".

2. Complete Alaska Revised Statutes

3. Supreme Court of Oregon, 1947

State ex rel. Sisemore v. Standard Optical Co.,  
182 Or. 452-467

The following are some points made in this case:

- a. An optical company cannot employ an optometrist because this interferes with the optometrists' trusted and fiduciary relationship with his patient.
- b. Optometry must be classified a true "profession" and not a "trade".

". . . an optometrist . . . training enables him to diagnose pathological conditions . . . The fact that he is trained to diagnose pathological conditions in itself indicates that the optometrist is not a mere skilled craftsman or mechanic."

(The entire Supreme Court case may be obtained upon request.)

4. Civil Action No. F 76-35 Civ.

Ferdinard v. Board of Dispensing Opticians (page 104 and 105) defines "routine visual examination" as given by optometrists. The extensiveness the optometrist must examine for eye pathology is expressed:

- d. External Examinations (lids, cornea, sclera, etc.)
- e. Internal Ophthalmoscopic Examination (media, fundus, etc.)
- f. Ocular motility
- g. Neurological integrity
- k. Confrontation fields
- l. Tonometry

5. Diagnostic Drugs Terminology Clarification from Oregon Law

- a. Oregon Attorney General Opinion #5807 (1964) clarification regarding the term: DIAGNOSIS.

This Oregon Attorney General Opinion states that the "Practice of Optometry" includes pathology diagnosis. In addition, Oregon statutes governing the practice of medicine, do not prevent diagnosis by optometrists

after reference to the 1947 Supreme Court case, State ex rel. Sisemore v. Standard Optical Co., 182 Or. 452, Attorney General Thornton says:

". . . an optometrist, as a part of his services . . . has a duty to use his professional training, skill and knowledge, while he is performing his primary function, to determine whether his patient is afflicted with an abnormal or pathological condition of the eye . . . ."

- b. Alaska Statutes Clarification regarding the term: DRUGS.

The inclusion into the Optometry Statutes of the term diagnostic pharmaceutical agents does not conflict with Chapter 64, Medicine.

Section 08.64.380 definitions:

- (2) "Practice of medicine" or "Practice of Osteopathy" means:

- (D) for a fee prescribing, directing, or recommending for the use of a person, a drug or medicine for the treatment, cure or relief of a disease, infirmity, bodily injury or defect; . . . .

Diagnostic drugs are not mentioned in the practice of medicine, only drugs or medicine for treatment are spoken to.

6. Report from the Secretary of the Department of Health, Education and Welfare (HEW), 1971

This report concerns itself with the optometrists' responsibilities for disease detection.

E. How the Diagnostic Agents relate to:

1. Other States:

Thirty-one states allow optometrists to use diagnostic agents. Other states are making legislative efforts.

2. Other Countries:

- a. Within the large english speaking countries of Canada, Australia, and England, optometrists may use diagnostic drugs.

b. England's joint declaration February, 1970, by optometrists and ophthalmologists confirm the many beneficial years and announce the continuation for the usage of diagnostic agents by optometrists in the future.

3. The United States Armed Forces:

All branches of the military either allow or specify in their regulations that optometrists shall be permitted the usage of diagnostic drugs.

F. Educational Qualification by Oregon Optometrists

1. Statement on Pharmacology Training in Optometry in Oregon, 1975

By: L. Levine, Ph.D.

2. Curriculum Comparison on Pharmacology between:

Oregon Medical School  
Oregon Dental School  
Oregon College of Optometry

3. Association of Schools and Colleges of Optometry (ASCO)

This study suggests pharmacology curriculum guidelines for continuing education courses for practicing optometrists. Should legislation pass, this guide would serve as a framework for setting up such a program.

4. 1973 National Board of Examiners in Optometry

All applicants for Board certification to practice optometry in Alaska must pass all of the written sections of the National Boards with a minimum score of 70%.

Enclosed copies of sections related to diagnostic agents:

Hours of Testing

Ocular Pharmacology	1 hr.
Ocular Pathology	2 hrs.

Other sections of the Boards not included but available upon request:

	<u>Hours of Testing</u>
Ocular Anatomy	2.0 hrs.
Visual Science I	2.5 hrs.
Visual Science II	2.5 hrs.
Theory and Practice of Optometry	2.5 hrs.
Theoretical Optics	3.0 hrs.
Ophthalmic Optics	2.5 hrs.
Social, legal, ethical, economic and professional aspects of optometry	1.0 hrs.
	<u>19.0 hrs. testing</u>

5. List of the United States Optometric Colleges and Schools

G. Oregon State University, School of Pharmacy statement

By: Charles O. Wilson, Ph.D.  
Dean of Pharmacy  
Oregon State University

Emphasis is on the importance of bringing the patient into the Health-Care System. He states:

"This Bill will make it possible for optometrists to carry out diagnostic procedures to identify any pathological condition during the course of the examination . . ."

University of Maryland, School of Pharmacy statement

By: Peter P. Lamy, Ph.D., F.C.P.  
Director of Pharmacy Programs  
University of Maryland

Dr. Lamy concludes saying:

"The benefits from the topical use of drugs far outweighs the risk to vision. There is simply no good way to obtain a satisfactory view of the interior of the eye unless the pupil is dilated."

H. Alaska Board of Examiners in Optometry

Just as all other regulatory responsibility on optometrists is placed with this Board, likewise, it would be charged with the additional responsibility of certification of optometrists for diagnostic drug use. This Board would see that not only the

educational course work had been completed but that through examination, a clear understanding of pathology and disease detection with the use of diagnostic agents does in fact exist.

I. Alaska Manpower Regarding Vision and Eye Health Care

The optometrists of Alaska are geographically more evenly distributed so as to meet the needs of the people. Ophthalmologists are primarily concerned with eye surgery and, therefore, are concentrated around larger population areas where more extensive hospital facilities are available.

As the National Health Care program emerges, along with other increasing group insurance programs, the need for better referral channels must be established. Diagnostic agents can make pathology detection more effective and resulting referrals more accurate.

Enclosed:

1. Alaska Distribution Map on Vision and Eye Health Care
2. 1979 listing on:
  - a. Resident Optometrists in Alaska (32)
  - b. Resident Ophthalmologists in Alaska (17)

J. Probable Objections to HB #79

K. American Association of Ophthalmology Public Relations Pamphlet on "Drops"

The emphasis is that only a proper examination can be made with eye drops. It then strongly states that only ophthalmologists are allowed to use them. The P.R. results are obvious.

L. Supportive Letters from Medical Doctors Outside of Oregon

These letters speak directly to the minimal adverse side effects and maximal benefit to the patient.

M. Supportive Letter from Medical Doctors and Optometrists Within the State of Alaska

These letters speak directly to the use of diagnostic agents by optometrists in the State of Alaska.

N. Reference Quotations from Authoritative and Qualified Persons Regarding Usage of Diagnostic Agents by Optometrists

1. Substantiating minimal risks to adverse drug reactions.
2. Establishing the larger risk to the public health by not having these drugs administered by optometrists.

O. Long-Term Study of the Use of Diagnostic Agents in Rhode Island by Optometrists

For eight years optometrists have been using diagnostic agents with the overall effect of increased number of referrals, with no adverse effects. The overall benefit to the patient was emphasized because of pathology detection and speedy, proper referrals. (Only summary and conclusion included. Further information can be had on request.)

P. Conclusion

*The*  
**ALASKA OPTOMETRIC ASSOCIATION**

AFFILIATED WITH  
AMERICAN OPTOMETRIC ASSOCIATION

PRESIDENT

- I. My name is George L. Hall, O.D. I am a Doctor of Optometry. My education consists of a B.S. in Math and Biology in 1967 from Regis College, Denver, Colorado, and received my Doctorate of Optometry from the University of Houston in 1971. I have practiced full time in a group practice in Anchorage.

Today you are going to have to make a very difficult decision between two points of view from two well-meaning professions. There may be emotion and accusation in some of the statements made, but I urge you to decide on fact and fact alone.

By introduction of this bill, Optometry is asking to use a very limited number of drugs in furthering its attempt to provide the finest vision care to all Alaskans. We feel passage of this bill will enable early detection of pathology in all patients and at the same time provide a more efficient, less costly eye health care system. We intend to use these only in a limited diagnostic manner, and in no way, or at no time, intend to extend their use to therapeutics. Don't be misled by critics who see in our request to use diagnostic agents the desire of optometrists to treat pathologic conditions. Our sole aim is to improve our detection skills and refer--not treat. Diagnostic agents are not treating agents. We do not wish to practice medicine!

- II. Major questions concerning HB 79.

1. Is the legislation necessary?

Statistics from the Health, Education and Welfare Department show that 52% to 58% of the population is estimated to have correctible vision disorders (Myopia, Hyperopia, Astigmatism, etc.).

The Better Vision Institute says that 45% of the population wears glasses and that one-third of those wearing them are in need of re-examination at any given time.

H.E.W. says that 63% of visual examinations last year were conducted by optometrists. Here in Alaska I feel the number may be as high as 75%.

H.E.W. says 17.9 per thousand patients have a condition that requires further medical care.

These statistics point to the need for this legislation since it is well known that many who seek vision care do not routinely seek general medical care, and, therefore, the optometrist is the first to see many pathological conditions which need to be referred for medical care.

It was for these, and other reasons that the Secretary of H.E.W. in 1971, Elliott Richardson, filed a report with the President and Congress which says in part ". . . the Optometrist is a primary entry point into the health care system since he sees the majority of patients seeking eye care in the nation."

In addition, the report contained the following language concerning optometry's role in the health delivery system.

"Optometrists are trained to detect any departure from the optimally healthy eye. The scope of optometric services has expanded beyond basic clinical refractions, fabricating, and dispensing eyewear; now included are visual screening examinations, clinical instrumentation, contact lens fitting, visual training, orthoptics, low-vision aids for the partially sighted, artificial eyes, industrial vision consultation and public and community health . . . The Optometrist is trained, and bound by professional ethics, to refer patients in whom indications of disease have been found, to a physician or other health practitioner for definitive diagnosis and appropriate medical, surgical, or other treatment."

H.E.W., in its desire to promote the highest quality of health care for the public, has made a number of policy decisions concerning optometry.

In its Health Professional Project Grant for 1975, it has mandated the optometric profession to ". . . devise, demonstrate, and implement provision for inter-discipline training which will encourage the use of health care teams, and to devise projects to develop affiliation between optometric training programs and medical, osteopathic, and other health professions training programs, and academic institutions, . . . including programs for cooperative interdisciplinary training in the use of the team approach to the delivery of health services."

Therefore, to the question "Is there a need for this legislation?", the answer we strongly feel is Yes!

In 1947, the Supreme Court of the State of Oregon in the case of Sisemore v. Standard Optical, 182 Or 452, 460-461, 188 and 309-312-313, has unequivocally answered the question. The court stated on page 460:

As to the liability of Optometry in the area of diagnosis, the practice of Optometry is undoubtedly one of the subdivisions of the practice of medicine.

The court went on to say on page 461:

While it is true that an optometrist is not permitted by law to treat diseases of the eye, nevertheless his training enables him to diagnose pathological conditions, and his duty requires him to refer the patient to a practitioner who is qualified to treat such conditions. The fact that he is trained to diagnose pathological conditions in itself indicates that the Optometrist is not a mere skilled craftsman. His failure to diagnose a pathological condition, with resultant delay or neglect in proper treatment therefore, might result in serious impairment of the patient's eyesight, or even in blindness.

In a letter from Robert Thornton, Attorney General, State of Oregon, dated May 12, 1964, to Mr. Howard Bobbitt, Executive Secretary, State Board of Medical Examiners, citing the same decision he says:

It thus appears that the term practice of optometry as construed by our Supreme Court contemplates that an Optometrist as a part of the services he renders his patient, has a duty to use his professional training, skill and knowledge while he is performing his primary function, to determine whether his patient is afflicted with an abnormal or pathological condition of the eye which may require treatment by a person legally qualified to render such service. He is also required to advise such patient if he finds what appears to be a pathological condition so that the patient may seek treatment from a legally qualified person.

Therefore, the answer to the question of whether we as optometrists are qualified to detect pathology has been already, very explicitly, answered by the courts in Oregon and nationwide.

From our early beginnings as a profession, we have over the years vastly improved, through our educational institutions, the state of the art and science of optometry to a place where we are recognized now as a highly specialized member of the health care team devoted to the visual well being of the public.

Use of these drugs can aid in the early detection of both eye diseases such as retinal tears, glaucoma, cataract formation and in the systemic diseases such as diabetes, arterial sclerosis, high blood pressure or cancer, to name a few. According to literature put out by the American Association of Ophthalmology in which they answer the question of the necessity of using drops, the literature answers by stating that it enables the doctor to observe the first signs of eye disease or sometimes the first signs of disease elsewhere in the body. It goes on to say that these drops are especially useful in older people and children and are necessary to test for glaucoma. It closes by saying that these drops are "often the key to the prevention to blindness and even the saving of the eye itself."

It should be clear that both the profession of optometry and the profession of medicine are in agreement on the value of these drops even though there may be a few individuals who feel threatened by passage of this type of legislation.

The issue then stems not from whether these drops are safe or unsafe, good or bad, but on whether an optometrist is sufficiently trained to diagnose eye disease and to use these drugs in a proper manner.

I am certain that you will be told by a few ophthalmologists that only they should be able to use these drugs. They have chosen to ignore our responsibilities and our extensive training in what they refer to as medical subjects. They may tell you that these drugs could have some side affects such as increasing a patient's blood pressure, his heart rate, or result in an allergic reaction.

We do not disagree with the possibility of this happening but wish to point out that these reactions are considered in ophthalmological literature to be extremely rare. I would also like to point out that all optometry

students are being trained in contraindications for the use of these drugs and the bill provides that all practicing O.D.s who wish to use them must return for this additional schooling and re-certification by the State Board of Examiners.

It is also worthy to note that according to ophthalmological literature, one case of angle closure glaucoma will occur in every 18,400 patients whose eyes are dilated in a routine basis. Optometrists who will be dilating eyes, however, are trained to screen out those individuals for whom this procedure could be hazardous.

Along with this extremely minimal risk, however, should be mentioned the great benefits which will result. H.E.W. tells us that in those same 18,400 individuals there will be 329 cases of disease which, if undetected, could cause possible blindness or have other serious consequences. It is also interesting to note that our opponents have chosen not to complain about other professions such as dentistry who have similar training and responsibilities or medical emergencies and yet use stronger injectable drugs.

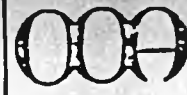
As stated previously, optometry conducts a great majority of visual examinations: 63% nationwide to possibly as high as 70-75% in Alaska. In my practice alone, there are five optometrists seeing between twenty to sometimes thirty people per day, and there are six to seven other practices in Anchorage just as busy not to mention the rest of the state where ophthalmological density is even lower than it is in Anchorage. NOTE: Distribution may included.

In 80% of our patients there is little difficulty seeing the back of the pupil, but, in the rest, difficulty in seeing the retina can produce doubt; therefore a referral may be necessary.

On the one hand we are expected to continue to do a most thorough visual examination of our patients and are encouraged by governmental agencies such as H.E.W. to expand our efforts to work with other health care professions in providing wider health care.

On the other hand we are held legally responsible for the detection of pathological conditions but are denied the use of important aids to detect them for the Alaska Optometric Law excludes our employment of valuable tools such as diagnostic agents to aid in the detection of pathologic conditions in the eye.

We ask for relief from that situation.



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american  
optometric  
association

Oregon  
Optometric  
Association

My name is Robert Holcomb, I am a Doctor of Optometry and President of the Oregon Optometric Association. The object of our Association as stated in our constitution is to improve the vision care and health of the public.

Before I get into the Association's reasons for supporting this bill I would like to clear up two areas of confusion. They have to do with the safety of these pharmaceuticals and with an optometrist's training in this area. So that you might have an opportunity to hear and question the top men in these fields, I have asked both the Deans of the College of Optometry Pacific University, Dr. Willard Bleything and the Assistant Dean of the Pharmacy School at Oregon State University, Dr. Ronald Winters, to speak to these points.

You have heard the facts about the relative safety of these drugs and the extensive training of an Optometrist. I would now like to go into the detail about the two reasons that Optometrists wish to use these drugs. First of all, I am sure that every Doctor of both optometry and medicine would agree that it is in the interest of the public to have their eyes routinely examined for both vision problems and health problems which can be observed within the eye. Ophthalmologists have been saying for years that these drugs are necessary tools for the early detection of disease and for the evaluation of vision problems.

A few of the off hand remarks heard in earlier testimony expressed the opinion that the diagnosis of disease conditions is outside the scope of the practice of optometry. I respect the opinions of these individuals but wish to point out that they are only opinions in direct contrast to the law written as the Optometric Practice Act and interpreted by the highest court in our state, the Oregon Supreme Court. If I may quote from their decision handed down in the case of Sisemore versus Standard Optical "the practice of optometry is undoubtedly one of the subdivisions of the practice of medicine."

The court went on to say "his training enables him to diagnose pathological conditions ... his failure to diagnose pathological conditions with resultant delay or neglect in proper treatment therefore might result in serious impairment of the patients eyesight or even in blindness." The Attorney General has so informed the State Board of Medical Examiners. Despite this opinion of the Optometric Practice Act by the Supreme Court there are a few individuals who insist on issuing their own opinions.

The first reason for this bill then is simply that since Optometrists have the responsibility to detect disease they should have the tools with which to carry it out.

The second reason is that the use of these diagnostic agents would be in the interest of the public. Health Education and Welfare tells us the 63% of all vision examinations in the United States were conducted by O. D. s in 1974. H. E. W.

identifies optometry as an entry point into the health delivery system since we see many patients who routinely get vision examinations — but not physical exams.

The State of Oregon Department of Human Resources tells us that in 1974 85% of all Welfare patients were examined by Optometrists.

Use of these drugs can aid in the early detection of both eye diseases such as retinal tears, glaucoma, cataract formation and in the systemic diseases such as diabetes, arterial sclerosis, high blood pressure or cancer, to name a few. According to literature put out by the American Association of Ophthalmology in which they answer the question of the necessity of using drops, the literature answers by stating that it enables the Doctor to observe the first signs of eye disease or sometimes the first signs of disease elsewhere in the body. It goes on to say that these drops are especially useful in older people and children and are necessary to test for glaucoma. It closes by saying that these drops are "often the key to the prevention to blindness and even the saving of the eye itself."

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We do not disagree with the possibility of this happening but wish to point out that these reactions are considered in ophthalmological literature to be extremely rare. I would also like to point out that all optometry students are being trained in contraindications for the use of these drugs and the bill provides that all practicing O.D.s who wish to use them must return for this additional schooling and re-certification by the State Board of Examiners.

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individuals there will be 329 cases of disease which if undetected could cause possible blindness or have other serious consequences. It is also interesting to note that our opponents have chosen not to complain about other professions such as dentistry who have similar training and responsibilities for medical emergencies and yet use stronger injectable drugs. If you have any questions we stand ready to answer them.

Robert Holcomb, O.D.  
President  
Oregon Optometric Association

TESTIMONY

House Bill 2740 Practice of Optometry to include Diagnostic Agents

Willard B. Bleything, O.D., M.S., Dean  
Pacific University College of Optometry  
Forest Grove, Oregon  
April 22, 1975

My name is Willard B. Bleything and I am the Dean of the Pacific University College of Optometry, the only professional institution in the Northwest in the discipline of optometry. In addition to the Bachelor of Science (B.S.) degree I have a Doctor of Optometry degree (O.D.) from Pacific University along with a Master of Science degree (M.S.) in Clinical Optometry. I have been on the faculty of Pacific University and the USAF School of Aviation Medicine, Air University. My experience also includes sixteen years of private practice. Offices held include President of the Oregon Optometric Association, Oregon Board of Optometry (Examiners) and a member of the Professional Development Division, American Optometric Association. I am a Fellow of the American Academy of Optometry.

It is my pleasure to present these remarks on HB 2740. The bill is well constructed, technically sound and is consistent with the well-founded direction that public policy is taking in the other states. Most important of all, it is consistent with the best interests of the public welfare and the ways by which optometry better can serve public need. The legislature of Oregon first caused the profession of optometry to be recognized, licensed and regulated in 1925. The optometry law, much like that in each of the states prescribes the conditions by which a recent graduate from one of the schools and colleges of optometry, following rigorous and well standardized inquiry by a multi-faceted written and practical board examination, is then licensed to practice

and is regulated in the practice.

Today the curriculum of the thirteen (soon to be fifteen) schools and colleges of optometry consists of an intensive four years of professional collegiate work preceded by a minimum of two years of pre-professional undergraduate collegiate experience. The vast majority of students are entering the optometric colleges with a bachelor's degree. Thus six, and in most instances eight years of university level education and training comprise the very substantial background of the modern optometrist. The number of qualified and acceptable applications for each seat available are better than thirteen to one with outstanding academic and personal credentials.

Our clinical program at Pacific University encompasses care in a variety of social and professional settings including a full scope general and specialty clinic on the main campus and in downtown urban Portland; a general practice clinic in the Albina Action Center and a geriatric-low vision clinic in the Masonic Home, Forest Grove. Students are also exposed to public health optometry in their involvement in visual screening clinics throughout the state serving more than 4,000 citizens annually in this activity alone. Many of these are conducted at the request of County Health Departments and local school districts. Incidentally, I must add that in more than thirty years of clinical operation encompassing hundred of thousands of patient-visits the institution has never experienced a malpractice suit-indeed a remarkable record in the field of health care. More than fifty professionals make up our faculty - all with earned doctorate degrees represent expertise as anatomists, physiologists, microbiologists, neuroanatomists, biochemists, clinical psychologists, optometrists, and ophthalmologists. To follow a general pattern it can be seen that the Ph.D. offers instruction in the basic sciences, the O.D., - Ph.D. combination offers

instruction in the visual sciences, and the O.D. and M.D. offer instruction in the clinical sciences. The optometric student thus gets formal transcript quality university level courses in Human Anatomy, Ocular Anatomy and Physiology, Human Physiology, Microbiology, Neurology, General Pathology and Ocular Pathology and Ocular Pathology Detection and Visual Fields, or a method of examining for and differentiating between various eye disease processes. They also receive a didactic comprehensive course in Pharmacology. All of this material is taught by doctorates in the appropriate disciplines parallel to the same professional positions of any health professions school. In addition to this one of the various specialty clinics during the clinical years is entitled Pathology Detection. Patients suspected of having pathological disorders are referred for consultation to this clinic. Presently this is staffed by a Board Certified Ophthalmologist (M.D.). Patients suspected of having conditions that may benefit from the services of a physician are referred to sources in the community for consultation. For example, over the past years Pacific University Optometric Clinic (Portland) has sent an average of two hundred and fifty patients per year to the Good Samaritan Hospital Devers Eye Clinic for consultation purposes.

During the past generation as optometric education significantly increased its scope of learning and competence with the attendant expansion of all knowledge in the sciences of health care it was recognized that the use of diagnostic pharmaceuticals would add a useful and important opportunity to render more comprehensive visual care services to the public it now serves. In recognition of this newer direction courses for the profession in core areas in the basic sciences were substantially strengthened.

The Bill proposed deserves the support of this legislative body.

1. Optometry is prepared educationally and intellectually to undertake the use of diagnostic pharmaceuticals in the practice of the profession.

2. Passage of the proposed legislation does not advance professional responsibilities of the scope of the license of the optometrist as a vision care practitioner. Rather it offers the public a more rational and intelligent use of the present educational expertise.

3. There is no fiscal implication in this legislation since the methods not the scope of legal responsibility would be advanced.

4. Like our professional counterparts in dentistry and podiatry, two professions outside the discipline of medicine, the use of pharmaceuticals with an appropriate knowledge and educational base have been well established in law and in practice. There is provision in this Bill for additional education. Pacific University College of Optometry stands ready to provide this additional education to the practicing community of optometry.

In looking into the future I close with this comment. Dr. Albert N. Lemoine, a physician, professor and chairman of the Department of Ophthalmology, University of Kansas Medical Center states, "The number of residents in training in ophthalmology programs will be reduced in the near future!" He goes on to say, "One year of the optometric students educational experience should be where they can observe patients with disease. Optometry will be recognized as one of the primary care entrances to the eye health care system and especially in rural areas and smaller cities. Optometrists will be able to use topical drugs for diagnostic purposes in all or nearly all states and an increasing number of optometrists will be practicing in the multi-disciplinary setting." Dr. Lemoine goes on to say, and I quote "I realize that many of my

colleagues will not agree with the above position but if we are truly interested in the public welfare this should and can be done."

It seems there is general agreement among the educators in ophthalmology and optometry as to the new trends and mode of practice. We, as an institution, are committed to supplying these educational needs of the future. Legislative assistance is needed to carry out this commitment.

School of Pharmacy

Oregon  
State  
University

Corvallis, Oregon 97331 (503) 754-3725

29 January 1975

In studying and evaluating the proposed legislation authorizing the use of diagnostic pharmaceutical agents (DPA's) by optometrists, three principal questions have emerged relative to my areas of expertise as an educator specializing in curricular design and as a pharmacologist: 1) is the overall curricular design utilized by the College of Optometry at Pacific University appropriate for the education and training of optometrists to use DPA's in their practice; 2) is the specific curricular component concerned with pharmacology appropriately constructed; 3) from the perspective of a pharmacologist, is the use of DPA's by optometrists a safe procedure likely to result in an overall improvement in patient care?

In the course of my efforts over the past three years to coordinate the redesign of the professional curriculum of the School of Pharmacy at Oregon State University, I have had considerable occasion to review the curricula of a large number of health profession schools, both in Oregon and elsewhere. Further, as my own graduate training in pharmacology was conducted largely at the University of Oregon Medical School in Portland, I am especially familiar with the curriculum of that institution, with emphasis on the pharmacology component. Finally, I have participated in a number of national and international meetings of professionals concerned with curricular design and implementation in many of the health-related fields. In comparing the curriculum of the College of Optometry at Pacific with the curricula of other health profession

schools utilizing a pharmacological component, I am convinced the approach developed by Pacific is both efficient and effective, and is clearly educationally sound. Moreover, that structure includes what I consider to be the sine qua non of proper instructional design--the competency of the graduate is evaluated in a series of prescribed and standardized formats (i.e., institutional, Oregon State Board of Optometry, and national board examinations) prior to the awarding of a license to practice. Thus, individuals who may have succeeded in passing individual courses but who have not adequately integrated the body of knowledge as a whole are not permitted access to the public as professionals. This safeguard, in my view, is instrumental in protecting the public, the institution, and the profession, and should stimulate your confidence in the proposal at hand.

Examination of the pharmacology component of the curriculum has also led me to a favorable conclusion. It is clear that the student is well-prepared for his first exposure to courses dealing with DPA's and other drugs, and is carried through this portion of his coursework in an effective manner. It is my judgment that a program designed to prepare practitioners to utilize DPA's must rest on a sound didactic base, capped by supervised clinical experience in the use of the agents in question. I feel strongly that a quality didactic base is offered at Pacific, and that passage of the proposed legislation will quickly result in the implementation of an appropriate clinical component as already outlined by the school.

The question of the relative safety and productivity of the proposed procedures must be addressed, and in my view, these two issues cannot be rationally separated; that is, neither safety nor efficacy are unidimensional characteristics, but instead are inter-related as a cost/benefit ratio or in medicine, a therapeutic index. Three important considerations relate to the expected safety in the use of DPA's by optometrists: 1) what agents are to be used; 2) what doses of these agents are to be employed; 3) how will these agents be administered? The four principal

categories of DPA to be used are miotics (agents that constrict the pupil), mydriatics (agents that dilate the pupil), local anesthetics (substances that reduce feeling in the cornea), and cycloplegics (agents that alter the ability of the eye to focus on near objects). The most salient pharmacological feature of these compounds is their relatively short duration of action, generally measured in minutes. If nothing else, this characteristic itself tends to minimize the likelihood of an adverse reaction simply because the drug is effectively inactivated by the body in relatively short order. Secondly, the doses to be utilized in diagnostic procedures are indeed very small. Using one to two drops of solutions of one-half to two and one-half percent strength in each eye provides the patient with a total dose far less than is obtained in many over-the-counter cold remedies readily available to the patient on only his/her discretion. Thirdly, by limiting the administration of these compounds to the topical route (dropped in the eye), it is not likely that more than twenty percent of the total dose will be absorbed into the blood for general circulation in the body. At that concentration level, these agents are essentially devoid of pharmacological activity. When coupled with the virtual absence of reported adverse reactions in states where this practice is common, one cannot help but conclude that the use of DPA's in the format proposed is extremely safe.

How much benefit is to be derived from this practice is, as I've said, the other side of the coin. In my judgment, the judicious use of DPA's will permit a substantial increase in the ability of the optometrist to detect potentially harmful diseases of the eye. By allowing this health-care professional to examine the patient more completely, the optometrist will be in a better position to refer to physicians (ophthamologists, internists, pediatricians, and family practitioners) those patients requiring further diagnosis and possible treatment. In view of the established fact that optometrists serve as the primary eye-care professionals for a majority of the population, it is apparent that the anticipated gain for the patient is large.

It would appear, therefore, that a near optimal situation prevails here: the proposed use of DPA's by optometrists is clearly both very safe and likely to be most effective in patient eye care. Further, it is evident that considerable planning has been conducted by the College of Optometry at Pacific, and that the school is ready, capable, and indeed has already begun providing educationally sound classroom instruction in the use of diagnostic pharmaceutical agents, with implementation of actual clinical instruction awaiting legislative approval. Thus, with the cost/benefit or therapeutic ratio a very favorable one to all parties concerned, I respectfully encourage the swift passage of the proposed legislation.

Ronald H. Winters, Ph.D.  
Assistant Dean  
Associate Professor of  
Pharmacology and Toxicology

## THE USES OF TOPICAL EYE EXAMINATION DRUGS

BY OPTOMETRISTS<sup>1</sup>

Darrell B. Carter, O.D., Ph.D.  
Clinical Professor of Optometry  
School of Optometry, University of California

### Introduction

Eye examination drugs (topical anesthetics, mydriatics, miotics, and cycloplegics) are used by optometrists to facilitate the examination of patients' eyes for the possible presence of disease conditions or to aid in determining the refractive error of the eye. These drugs are for examination purposes only and are not for treatment.

Until about 1960, only a few optometrists in the United States used examination drugs as part of their examination procedure. Optometrists in England have used these drugs for over 25 years.

During the period of 1960 to the present time (1974), some optometrists have started to use these drugs whenever it is in the patients' benefit to do so. However, in only eight states (as of July 1974) are optometrists specifically authorized to use these drugs by either legislative act or by a ruling of the attorney general of the state.

At present, efforts are being made by optometrists in many states to secure legislative authorization of the use of these drugs for examination purposes only. The recent efforts by optometrists in the United States, Australia, Canada, and elsewhere to obtain legislative authorization for the use of examination drugs is not an attempt to enter into the field of therapy for ocular disease.

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<sup>1</sup>This paper was prepared to present to members of state legislatures and to other interested persons the reasons why optometrists desire legislative authorization for the use of ocular examination drugs.

Optometrists recognize the desirability of limiting the scope of their practice to the correction of refractive errors of the eye and anomalies of binocular vision. The use of examination drugs is for the purpose of allowing more effective and earlier discovery of eye disease when such disease exists. Patients with the possible presence of eye disease or general disease are referred to an ophthalmologist or other physician for medical evaluation and care. In this way, the most efficient use of the skills of both optometrists and ophthalmologists is obtained.

### Topical Anesthetics

Topical anesthetics are used primarily by optometrists to facilitate tonometry in evaluation of the eye for the possible presence of glaucoma. While tonometry can be done without anesthesia of the cornea, it is usually more accurate when done with anesthesia. Moreover, the most accurate tonometer, the Goldmann applanation tonometer, requires anesthesia of the cornea.

Some ophthalmologists have objected to the use of corneal anesthesia by optometrists. This objection is based on the assertion that these drugs can cause fatal heart or respiratory stoppage. Anesthetics are dangerous when injected. The death rate in eye surgery by ophthalmologists is apparently about one in every 2000 to 5000 operations. While local injection into tissue is necessary in eye surgery by ophthalmologists, only topical (dropped on the surface) use of anesthetics is employed by optometrists. There are no reports of fatal reactions from eye topical anesthetics.<sup>2</sup>

There are three topical corneal anesthetic agents used by optometrists: tetracaine (trade name, Pontocaine), proparacaine (Ophthaine), and benoxinate (Dorsacaine). None of these three drugs are used for local injection anesthesia.

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<sup>2</sup> The real objection of ophthalmologists to the use by optometrists of pharmaceutical agents, including topical anesthetics, arises from economic and prestige reasons. Unfortunately, in the United States, strong economic rivalry over the examination of eyes for glasses and contact lenses have often resulted in economic and prestige considerations playing a major role in the attitudes of many members of both groups.

-2-

These drugs are toxic and are dangerous if absorbed by the body in large quantities as could happen if these drugs were used topically on the throat. For example, 5 ml. of a 2% solution of tetracaine (the most toxic of the three drugs) is considered to be a potentially lethal dose if completely absorbed.<sup>3</sup> However, it should be understood that 5 ml. is 100 drops and that the strength used by optometrists is 0.5%. Thus, in using one drop of a 0.5% solution in each eye, the optometrist is using 1/200 of the potential lethal dosage. Moreover, drugs placed on the normal eye are very poorly absorbed (approximately one-fifth) into the blood stream. In topical use on the eye, the optometrist thus is using only 1/1000 of the potential lethal dosage. This is a wide safety margin.

Proparacaine and benoxinate are less toxic than tetracaine. According to James R. Householder, M.D., and John E. Harris, M.D.,<sup>4</sup> these drugs are safe for topical application to the eye. On Ophthaine, these authors state "there have been no reported systemic toxic reactions in amounts used for topical anesthesia for the eye." However, "the chemical structure would predict such reactions if large amounts were to be applied to a vascular area such as the upper respiratory tract," (page 100). On Dorsacaine, these two authors state "there has been no reported systemic toxic effects from its use in 1 cc. amounts," (page 99). One cc. is 10 times the dosage that is used by the optometrist in preparation for tonometry.

According to William Havener, M.D.<sup>5</sup> fatal reactions "occur from ignorant use of excessive quantities of anesthetic" (page 47). These rare reactions

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<sup>3</sup> William Havener, M.D. Ocular Pharmacology, Mosby 1970.

<sup>4</sup> In Ocular Therapy, Mosby 1966. Edited by Irving Leopold, M.D.

<sup>5</sup> William Havener, M.D. Ocular Pharmacology, Mosby 1970

have occurred following anesthesia of the throat for throat or lung examination, or from injection of an anesthetic. Havener states "since generalized reactions to the topical application of anesthetic solutions are due to systemic absorption of excessive quantities of drug, such reactions are virtually nonexistent after topical ocular anesthesia," (page 47).

In England, optometrists have been using corneal anesthesia for over twenty-five years. No report of any fatality from ocular anesthesia by optometrists has been received by the British Ministry of Health during this entire period.

On rare occasions, patients faint because of apprehension of something being placed on the eye. Such fainting (syncope), has been mistaken for a toxic reaction. However, the patient quickly regains consciousness. In summary, the use by optometrists of anesthetics applied topically to the eye is an entirely safe procedure. Such use by optometrists will result in the saving of the eyesight of patients by allowing early detection of glaucoma.

#### Mydriatics and Miotics

Drugs which dilate the pupil are called mydriatics. The common mydriatic drugs are phenylephrine (Neosynephrine), hydroxyamphetamine (Paradrine), and tropicamide (Mydriacyl). The use of these drugs is to facilitate the ophthalmoscopic examination of the inside of the eye for pathological changes. Miotic drugs are used to shrink the pupil following the use of a mydriatic drug. The only miotic used by optometrists is pilocarpine.

Mydriatic drugs can produce an attack of angle-closure glaucoma (a special type of glaucoma) in a person with anatomical predilection. Before the use of mydriatic drugs, the eye should be examined with a biomicroscope for the presence of a narrowed angle, an anatomical abnormality. About two or three persons in 100 of those who are over 50 years of age have an anatomical narrow angle such that they could have an attack of angle-closure glaucoma under

adverse conditions.<sup>6</sup> This two percent can be detected by prior examination and mydriatics should be avoided or used only under controlled conditions.

The actual incidence of angle-closure glaucoma is approximately 1 in 1000 (4 in 4123) persons in the general population over the age of 50, according to the careful study of Hollows and Graham.<sup>7</sup> The low incidence of actual angle-closure glaucoma compared with those who have narrow angles, 2 or 3 in 100, shows that the vast majority of individuals with a narrowed angle go through life without developing an actual attack, and thus do not suffer from their narrow angle.

Some ophthalmologists do not examine the eyes of patients for the presence of a narrowed angle prior to routine use of mydriatic drugs. The drug is instilled by a nurse prior to the patient seeing the ophthalmologist. This routine is justified on the basis that if a mydriatic drug will trigger an attack of angle-closure glaucoma, the patient is almost ready to experience an attack even without the mydriatic drug. The argument is made that it is better to trigger an attack while the patient is in a professional office and treatment for the attack can be quickly instituted. These ophthalmologists consider this to be a useful provocative test.

It has been estimated by S.V. Abraham, M.D.<sup>8</sup> that the use of a strong mydriatic - atropine or homatropine - (stronger than those used by optometrists) without prior examination for the presence of a narrowed angle would result in a glaucoma reaction in one in 4600 patients over the age of 30 and much less often for patients under 30 years of age. The incidence of glaucoma reaction

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<sup>6</sup> Van Herick, Shaffer and Schwartz. American Journal of Ophthalmology, October 1969.

<sup>7</sup> F. C. Hollows and P. A. Graham. Intra-ocular pressure, glaucoma, and glaucoma suspects in a defined population. British Journal of Ophthalmology, pp. 570-58 1966.

<sup>8</sup> S. V. Abraham, M.D. Mydriatic glaucoma. Archives of Ophthalmology, pp. 757-762, 1933.

is further reduced when mild mydriatics are used and when a miotic is used following the use of a mydriatic. While the author of this paper does not believe that optometrists should ever use mydriatic drugs without prior biomicroscopy study of the angle of the eye, it is obvious that adverse reactions are rare even without the precaution of prior examination of the eye.

It is possible, although quite rare, for an attack of angle-closure glaucoma to occur after use of a mydriatic drug even with prior screening by the optometrist for narrow angles. In these rare cases an optometrist will send the patient for medical care. The patient will have had the advantage of having his attack under conditions where medical care is available. In optometric use of mydriatics, with prior evaluation of the anterior angle and with use of the milder mydriatics, a glaucoma reaction can be expected no more than once in every 15,000 to 25,000 patients over 30 years of age. These attacks will only occur in persons who are in great danger of such an attack even without the use of the mydriatic drug. Discovery of the potentiality of angle-closure glaucoma will help save the vision of these patients.

The author strongly supports the use of mydriatic drugs by optometrists. The use of mydriatic drugs will enable earlier detection of retinal disease conditions. Such earlier detection will result in the saving of vision or even life. The potential of earlier detection of disease by the use of mydriatic drugs far outweighs the very rare situation of a glaucoma reaction.

### Cycloplegics

Cycloplegic drugs temporarily paralyze the accommodative mechanism of the eye and thus facilitate measurement of refractive error with some patients, chiefly children less than seven or eight years old. Rarely is the use of a cycloplegic desirable with an adult patient.

The only cycloplegic drug used by optometrists is the 1% solution of Cyclopentolate (Cyclogyl). There have been no reported serious side-effects

with the use of this drug. From its low toxicity, none would be expected. There have been a few literature reports of temporary (up to four hours) of faulty orientation and hallucinations in children following use of several drops of the 2% solution of cyclopentolate or repeated usage on several days of the 1% solution.<sup>9</sup> These temporary psychological disturbances have not been reported to occur with the use of one or two drops per eye of the 1% solution - the mode of usage by optometrists.

#### Summary

- (1) The most efficient use of the skills of optometrists in supplying vision care will be obtained by the use of examination drugs by optometrists.
- (2) Use of examination drugs by optometrists will allow earlier detection of eye disease and the saving of vision or even life.
- (3) The use of drugs by optometrists is for facilitation of examination and not for treatment purposes.
- (4) Patients with the possible presence of eye or general disease are referred by optometrists for medical evaluation and care.

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<sup>9</sup> William Havener, M.D. Ocular Pharmacology, Mosby 1970, page 198.

HOUSE BILL #79

QUESTIONS AND ANSWERS ON THE OPTOMETRY BILL

1. Why was the "Diagnostic Agents" Bill introduced?

- a. In Oregon, May 12, 1964 (Attorney General Opinion No. 5807), the Attorney General said that an optometrist "has a duty to determine whether his patient is afflicted with an abnormal or pathological condition of the eye." (Reference to Supreme Court Case: State ex rel. Sisemore v. Standard Optical, 182 Or. 452.)
- b. In malpractice lawsuits throughout the nation, optometrists have been charged with the responsibility of eye disease detection.
- c. In 1971, the HEW Secretary Elliot Richardson said "Optometrists are trained to detect any departure from the optimally health eye. The scope of optometric services has expanded beyond basic clinical refractions."

Optometry has been charged with the responsibility of a primary entry point to health care. This bill will increase the examination capabilities to allow better eye or systemic pathology detection for referral for medical diagnosis and treatment.

2. What is the current role of the optometrist in patient care?

The optometrist is the general practitioner in the field of vision care. His emphasis is on the functional aspects of vision--the ability of a child to learn or a person to function optimally in his occupation or environment. However, in examining a patient he also makes a comprehensive internal and external examination of the eyes to detect evidence of eye or systemic diseases revealed through the eye for referral for medical diagnosis and treatment. This latter feature is particularly important to the many persons who due to various factors do not routinely seek medical care.

3. What is the experience of other states in the use of diagnostic agents by doctors of optometry?

Since HEW Secretary Richardsons' statement, Rhode Island, Pennsylvania, Oregon, and twenty other states have enacted positive legislation. Other states which previously had no prohibitive laws and thus allow for the usage of diagnostic agents include: Florida, Idaho, Indiana, Minnesota, Nevada, and New Jersey.

New Jersey optometrists have had the right to use these agents since 1919. In that state "there have been no cases reported regarding any problems caused by optometrists using any of the diagnostic drugs." On the contrary, this report states "the use of diagnostic drugs by optometrists is definitely in the public interest."

4. What is the experience of the Armed Forces in the area of diagnostic agents used by optometrists?

All three branches of the military, either in the regulations or at local hospital options, require or allow optometric commissioned officers to utilize diagnostic agents to aid them in their examinations or aid or consult with other commissioned health professionals. In the critically important visual examinations of aviators, diagnostic agents have been widely utilized by optometrists.

5. What is the current educational background of an optometrist?

Alaskan optometrists presently receive eight years education in order to receive a doctor of optometry (O.D.) degree.

4 years undergraduate education  
(Some applicants are admitted with a minimum of two years undergraduate.)  
4 years professional optometric education  
8 years total

Today's optometric education includes such scientific studies as: optics, pharmacology, disease processes, disease detection, microbiology, zoology, neurology, physics, physiology, anatomy, psychology and public health.

6. How do practicing optometrists keep up with advances?

To assure that optometrists who are currently in practice are kept abreast of new developments and techniques, the Alaska Board of Examiners in Optometry requires a minimum of twenty-four hours of continuing education every two years. The quality and certification of these courses is controlled by the state Board.

7. Are optometrists educated in the use of pharmaceutical agents for ocular examinations, including adverse reactions?

Yes. Pacific University, College of Optometry, in Forest Grove, Oregon, educates its students in pharmacology. Adverse reactions are covered in the courses which are taught by qualified experts. In addition, an important portion of the four-year professional curriculum covers pathology and related subjects.

8. Under this bill, would every optometrist be able to use diagnostic agents in eye examinations?

No. There would be no "grandfather" clause. Only those optometrists currently in practice who fulfill educational requirements set by the Board of Examiners in Optometry would be able to use such diagnostic agents.

9. Under this bill, what limited types of diagnostic agents would optometrists be able to use?

Only topically applied (placed on the eye, like "eye drops") diagnostic agents could be used for examination purposes. Other agents such as for treatment purposes could not be used.

Generically, these diagnostic agents would be limited to: dyes, anesthetics, mydriatics, miotics, and cycloplegics.

10. Will this bill permit an optometrist to make a definitive medical diagnosis?

No. The optometrist would retain his professional responsibility to recognize any abnormalities of a pathological nature, make a tentative diagnosis, and then refer the patient for definitive medical diagnosis and treatment.

11. What about adverse reactions to diagnostic agents?

According to medical literature, the possibility of adverse reaction on persons to whom these topical diagnostic agents are applied is considered rare or virtually non-existent. However, should a reaction occur, a physician would be consulted.

12. How often would an optometrist use diagnostic agents in examinations?

These agents would not be used routinely but only in those instances when considered appropriate in the examination for possible visual or pathological defects.

13. Do practitioners other than physicians use diagnostic agents?

Yes. Dentists and podiatrists not only use pharmaceutical agents for diagnostic purposes, but for treatment purposes as well. It may be worthwhile noting that the optometrists' educational foundation regarding pharmacology is comparable to the pharmacology background received by both dentists and podiatrists.

Some Points Relative to the Use of Drugs by Optometrists

by: Leonard Levine, PhD.  
Professor  
College of Optometry  
Pacific University, Oregon

Dr. Levine has received numerous grants to research the chemistry and physiology of diseases such as Muscular Dystrophy. He is highly respected as a professor as well as researcher in the areas of physiology and neurophysiology. In order to be effective as such, a special understanding of pharmacology is inherent.

He makes a number of important points relative to the use of drugs by optometrists.

## SOME POINTS RELATIVE TO THE USE OF DRUGS BY OPTOMETRISTS

Leonard Levine, PhD.

- A. Optometrists have been using "drugs" both diagnostically and therapeutically for some time.
1. Optometrists routinely use a corneal dye, fluorescein, as an aid to facilitate contact lens fitting. This is a substance not normally found in the body, hence a pharmaceutical agent, and its widespread use means that optometrists have already been involved with diagnostic pharmaceutical agents (DPA's).
  2. Flexible contact lenses are classified as drugs by the Food and Drug Administration (FDA). Since optometrists fit these lenses, technically they are applying drugs to the eye for therapeutic purposes.
    - a. Optometrists may also use flexible contact lenses for diagnostic purposes, as part of a gonioscopic procedure concerned with measurement of the internal angle of the eye.
  3. Thus the question is not really the qualitative one of whether or not optometrists are to be allowed to use drugs, but rather the quantitative one relating to which and how much.
- B. The public may now buy without prescription, examples of the types of drugs which optometrists wish to be allowed to use.
1. There are a number of ophthalmic preparations which are available to the lay public without prescription ad libitum, for treatment of certain ocular conditions, so-called "over-the-counter" (OTC) drugs. There are also a large number of other preparations for treatment of non-ocular conditions (such as allergies, colds, coughs, insomnia, motion sickness, and surface pain) which the public may buy in unlimited amounts without prescription. These preparations are usually intended for systemic administration, and contain one or more active ingredients which affect the ocular structures and/or vision.

2. The active ingredients of these OTC preparations include examples of all of the types of drug classes which optometrists wish to be allowed to use in a controlled manner for specific diagnostic purposes. The only exception is the drug class which causes the pupil to constrict, and optometrists would use this type only in a limited and specialized way.

C. The classes of DPA's which optometrists wish to use are:

1. Corneal dyes: Fluorescein is an innocuous, non-prescription drug already used by optometrists in contact lens practice.

2. Local anesthetics: Optometrists wish to be able to use these kinds of drugs to permit them to check intraocular pressure in glaucoma screening, to measure the internal angle of the eye with a gonioscope as part of the check on the possibility of "narrow-angle" glaucoma, and in exceptional cases as an adjunct to contact lens practice. The purpose of the local anesthetic is to eliminate the corneal blink reflex for a few minutes while the diagnostic procedure is performed, and not for the elimination of pain per se, since none of the procedures employed by the optometrist is inherently painful. Optometrists wish to be able to use relatively few local anesthetics of very low risk, to be applied directly to the eye in the form of eyedrops, in a controlled fashion and with observance of any needed precautions to insure their patients' safety. Preferred agents are proparacaine and benoxinate.

At least one OTC ophthalmic preparation (M-Z eyedrops, Tilden Yates) is available to the public without prescription which contains a concentration of a local anesthetic, piperocaine, which is approximately that sought by optometrists.

3. Mydriatic agents: Optometrists wish to use such drugs to cause the pupils of certain patients to dilate so that the interior of the eye may be examined with special instruments such as the ophthalmoscope and the biomicroscope. Such diagnostic examinations are important in cases of cataract, glaucoma, and vision-threatening conditions of the

retina. But they are also important with respect to diagnosis and prognosis of systemic conditions such as diabetes mellitus and arterial hypertension.

Technically there are two classes of drugs which dilate the pupil by different mechanisms. The simpler of these acts directly on the dilating muscle, while the other acts by inhibiting the constricting muscle.

Optometrists need to be able to use drugs belonging to both categories because the simpler drug type will not work satisfactorily in subjects with very dark eyes. The drug of choice in the first category is phenylephrine, an agent found in low concentration in many OTC ophthalmic preparations. It is also available without prescription in many non-ophthalmic preparations, in concentrations as high as 1% (NeoSynephrine nose drops, Winthrop), which is approximately the level at which optometrists wish to use it.

The other type of drug which optometrists wish to use for causing the pupil to dilate includes the specific agents, cyclopentolate and tropicamide. Both of these are synthetic products developed specifically for the purpose for which optometrists wish to use them, and are much safer and preferred to several naturally occurring substances, which have been widely used by ophthalmologists in the past. It should be noted that these latter, more dangerous drugs are all available to the public without prescription in OTC cough medicines and sleeping aids.

Thus optometrists seek only to use drugs of the types already on the market to the lay public without prescription, and to employ them in a controlled manner for specific diagnostic tests, entailing a minimum of risk to their patients.

4. Miotic Agents: The only other type of drug which optometrists wish to use is one which constricts the pupil. Drugs of this type would be used only to reverse the effect caused by a dilating drug following the diagnostic examination, in select patients. These are the limited number of patients in whom it is not desirable to allow the pupil to remain dilated for the several hours needed for the dilating drug to wear off.

The pupil constricting drugs which optometrists wish to use are physostigmine and pilocarpine. Both drugs have been widely in use as ophthalmic products for over 100 years, and are of low toxicity and high safety margin, especially in the way in which optometrists will use them.

D. British optometrists, whose professional training is on a lower level and less thorough than that of their counterparts in the U.S., have had legal entitlement to use all of the drugs sought here (and more) for many years, and have used them with intelligence and skill, the only effect on their patients being improved vision care.

## STATUTORY AND JUDICIAL ASPECTS

### 1. House Bill #79

This bill would re-define A.S. 08.72.300(2) "OPTOMETRY" and (3) "PRACTICING OPTOMETRY".

Addition of a new A.S. § 08.72.305 "USE OF DRUGS FOR DIAGNOSIS".

A.S. 17.15 § 3 is amended by adding to Article 1, § 27.25.055 "SALES TO OPTOMETRISTS".

### 2. Complete Alaska Revised Statutes

### 3. Supreme Court of Oregon, 1947

State ex rel. Sisemore v. Standard Optical Co., 181 Or. 452-467

The following are some points made in this case:

- a. An optical company cannot employ an optometrist because this interferes with the optometrists' trusted and fiduciary relationship with his patient.
- b. Optometry must be classified a true "profession" and not a "trade".

" . . . an optometrists' . . . training enables him to diagnose pathological conditions . . . The fact that he is trained to diagnose pathological conditions in itself indicates that the optometrist is not a mere skilled craftsman or mechanic."

(The entire Supreme Court case may be obtained upon request.)

### 4. Civil Action No. F 76-35 Civ., December 7, 1977

Ferdinand v. Board of Dispensing Opticians (pages 104-105) defines "routine visual examination" as given by optometrists. The extensiveness the optometrist must examine for eye pathology is expressed.

- d. External Examination (lids, cornea, sclera, etc.)
- e. Internal Ophthalmoscopic Examination (media, fundus, etc.)
- f. Ocular motility

- g. Neurological integrity
- k. Confrontation fields
- l. Tonometry

5. Diagnostic Drugs Terminology Clarification from Oregon Law

- a. Oregon Attorney General Opinion (1964) No. 5807 clarification regarding the term: DIAGNOSIS.

This Oregon Attorney General Opinion states that the "Practice of Optometry" includes pathology diagnosis.

In addition, Oregon Statutes governing the practice of medicine do not prevent diagnosis by optometrists after reference to the 1947 Supreme Court case (State ex rel. Sisemore v. Standard Optical Co., 181 Or. 452), Attorney General Thornton says:

" . . . an optometrist, as a part of his services . . . has a duty to use his professional training, skill and knowledge, while he is performing his primary function, to determine whether his patient is afflicted with an abnormal or pathological condition of the eye . . ."

- b. Alaska Statutes Clarification regarding the term: DRUGS.

The inclusion into the Optometry Statutes the terms: diagnostic agents, diagnostic drugs, or diagnostic pharmaceutical agents does not conflict with Chapter 64, Medicine. (Section 08.64.380 Definitions):

- (2) "Practice of medicine" or "practice of osteopathy" means:

- (D) for a fee prescribing, directing or recommending for the use of a person, a drug or medicine for the treatment, cure or relief of a disease, infirmity, bodily injury or defect, . . .

Diagnostic drugs are not mentioned in the practice of medicine. Only drugs or medicine for treatment are spoken to.

- c. A.S. 17.15 § 3 addition to Article 1 "Sales to Optometrists" § 17.15.055.

Chapter 15, Drugs, is included to show how the addition of the amendment is necessary under Alaskan law.

6. Report from the Secretary of the Department of Health,  
Education and Welfare (HEW), 1971

This report concerns itself with the optometrists' responsibilities for disease detection.

BY MARTIN, MCKINNON, MEEKINS,  
MILLER AND PARR

1 IN THE HOUSE

2 CS for HOUSE BILL NO. 79

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 ELEVENTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act relating to the practice of optometry."

7 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

8 \* Section 1. AS 08.72.300(2) and (3) are amended to read:

9 (2) "optometry" is the employment of means or methods [,  
10 OTHER THAN THE USE OF DRUGS,] for the diagnosis of an optical deficiency  
11 or deformity, visual or muscular anomaly of the human eye, or the pre-  
12 scription or application of lenses, prisms or ocular exercises for the  
13 correction or relief of the human eye;

14 (3) "practicing optometry" means the diagnosis [, BY MEANS OF  
15 METHODS OTHER THAN THE USE OF DRUGS,] of an optical deficiency or defor-  
16 mity, visual or muscular anomaly of the human eye, or the prescription  
17 of lenses, prisms or ocular exercises for the correction or relief of  
18 the human eye, or the holding of oneself out as being able to do so;

19 \* Sec. 2. AS 08.72 is amended by adding a new section to read:

20 Sec. 08.72.305. USE OF DRUGS FOR DIAGNOSIS. (a) No person prac-  
21 ticing optometry may use drugs for diagnostic purposes unless he has

22 (1) passed the board's examination on the subject of pharma-  
23 cology as it relates to optometry and the use of topically applied  
24 drugs; and

25 (2) completed courses and clinical experience approved by the  
26 board and offered by a recognized and accredited school or college of  
27 optometry and passed an examination, given by that school or college,  
28 which relates to topical application of drugs to the eye, including  
29 proper responses to reactions which may result from topical applications

1 of drugs to the eye.

2 (b) No person practicing optometry may administer drugs except for  
3 recognition of pathology and diagnosis of a vision anomaly.

4 (c) Topical anesthetics, mydriatics, miotics and cycloplegics may  
5 be used by a person practicing optometry under conditions approved by  
6 the board.

7 \* Sec. 3. AS 17.15 is amended by adding a new section to Article 1 to read:

8 Sec. 17.15.055. SALES TO OPTOMETRISTS. A person licensed to  
9 practice optometry under AS 08.72 who has been authorized by the Board of  
10 Examiners in Optometry to use topically applied drugs under AS 08.72.305  
11 may purchase topical anesthetics, mydriatics, miotics and cycloplegics.  
12

ALASKA REVISED STATUTES