



MINNESOTA ACADEMY
of OPHTHALMOLOGY

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January 26, 2024

Senator Melissa Wiklund
Chair, Senate Health and Human Services Committee
95 University Avenue W.
Minnesota Senate Bldg., Room 2107
St. Paul, MN 55155

Re: Opposition to SF659– Optometric scope of practice expanded

Dear Chair Wiklund:

On behalf of the Minnesota Academy of Ophthalmology, representing over 400 ophthalmologists across Minnesota, I write to convey our strong opposition to SF659. After numerous discussions within Minnesota's medical community, including the leadership of the Minnesota Optometric Association, and a thorough review of the most current data and medical literature, we continue to have serious concerns about the proposed legislation.

Simply put, optometrists do not have the necessary training and requisite expertise to perform injections or surgery in and around the eyes safely. Allowing unlimited duration prescribing for certain oral medications by optometrists is not necessary, increases health care costs due to delayed diagnoses of and inexperienced care for serious medical conditions, and most importantly, raises serious safety concerns for the quality of eye care for all Minnesotans.

Optometrists Have Significantly Less Education and Training than Physicians

The training for ophthalmologists and optometrists is vastly different. Ophthalmologists are licensed medical doctors or doctors of osteopathy who have completed four years of an undergraduate degree program, four years of medical school, one year of hospital-based general medical/surgical training, three years of ophthalmology residency training (completed by 100% of ophthalmologists), and often, one to two years of specialty fellowship training following residency. Ophthalmologists are trained to treat patients with complex medical and surgical conditions.

Ophthalmologists have the full medical and surgical training required for all medical doctors and doctors of osteopathy, with the knowledge and understanding of the human body as a whole. More importantly, ophthalmologists have the skills and training necessary to understand when certain procedures are necessary, when interventions are unnecessary, and how to recognize and address

systemic complications. Hands-on, supervised clinical/surgical training in academic medical centers ensures that ophthalmologists have the necessary breadth of medical and surgical knowledge and experience to manage the full range of therapies, including pharmaceutical, radiation, and surgical treatments to cure and/or mitigate disease and trauma. Ophthalmologists have the skills needed to recognize a complex diagnosis, to provide appropriate interventions, to manage possible side effects, and to navigate difficult complications.

Optometry education, on the other hand, typically involves a four-year undergraduate degree and a four-year optometry school program. The clinical experience obtained during optometric training is with a largely routine patient population that rarely has significant disease (i.e., patients seeking glasses, contact lenses, and comprehensive, periodic eye exams). Optometrists report that only 26% percent of them pursue one additional year of post-optometry school training.¹ This additional year represents just 2,000 hours of training, as compared to the minimum 17,280 hours of training required of every ophthalmologist. Ophthalmology residency training requires 3,000 patient visit encounters. Optometry training has no requirement for a minimum number of patient visits.

Minnesota has Excellent Geographic Access to Eye Care Providers

There are no known cases of blindness due to lack of access or triage for ophthalmology care when timely, proper procedures are followed. Minnesotans currently experience very high-quality eye care and enjoy excellent access to ophthalmology care. In Minnesota, there are 74 ophthalmologists per 1M population, whereas the USA national average is 55 ophthalmologists per 1M.²

The Minnesota Optometric Association inappropriately uses geographic access to ophthalmology care as a false justification for the proposed expansion in their scope bill. Yet even the optometrists within Minnesota only serve people in 77 of the 87 counties.³ Optometrists fail to recognize the standard triage process that occurs throughout all organized healthcare and that telemedicine is always an option for those with mobility challenges.

Estimates of drive time using point of service data from the Medicare Physician Compare File shows that over 95 percent of Minnesotans live within a 30-minute drive of an ophthalmologist. Three percent of Minnesotans live greater than a 30-minute drive to either an ophthalmologist or an optometrist. The remaining two percent living within a 30-minute drive to an optometrist, but greater than a 30-minute drive to an ophthalmologist. Of this two percent, approximately half will likely have no need for vision care services, and the vast majority of the remaining half will likely have vision care needs that can be fully addressed by optometrists under current scope laws.

Epidemiological calculations based on national ocular disease prevalence show that only 0.002%, **just 130 people in Minnesota**, are likely to have significant eye ailments that would require one of the three oral medications proposed for optometric scope expansion by SF 659.⁴

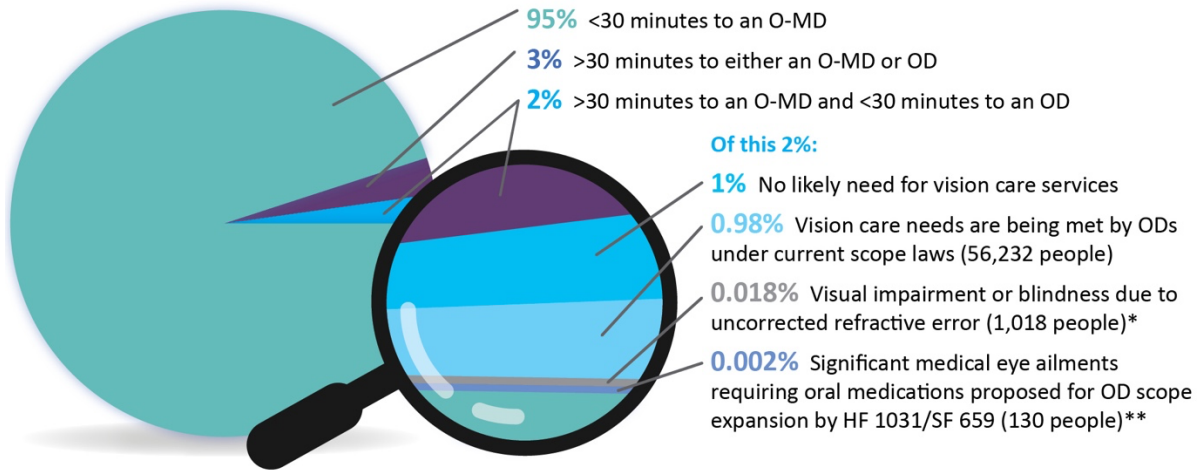
¹ Minnesota Optometric Association letter to MN House and Senate, Oct. 2023.

² American Academy of Ophthalmology, state and national ophthalmological catchment data, available upon request.

³ Minnesota Optometric Association letter to MN House and Senate, Oct. 2023, at p. 3.

⁴ For a full list of sources and references, see Attachment 1 on pg. 7 of this letter.

**Estimates of Drive Time to Ophthalmology (O-MD) and Optometry (OD) Points of Service in Minnesota
(Total Population = 5,737,915)**



Minnesota does not currently, nor has it previously had the problem of optometrists leaving the state. Data from the biennial report for the Health Licensing Boards shows that since 2012, the number of newly licensed optometrists has increased every year with 44 percent more new optometry licenses issued in the 2020-2022 report compared to the same figures from 2010-2012.⁵

Beyond the well above average population ratios and the excellent geographic distribution of ophthalmologists, our state is home to two Academic Medical Centers (AMCs) that produce nine highly trained general ophthalmologists as well as 10-12 sub-specialty trained ophthalmologists per year. Most of those trained here remain in Minnesota. Both AMCs have call lines for referral of both urgent and complex eye care cases. In addition, the AMCs emergency rooms always accept patients from community hospitals that require a higher level of care. Ophthalmologists in Greater Minnesota work collaboratively to provide 24/7 on-call coverage for any patient requiring ophthalmological care. Most private ophthalmology practices provide on-call services.

There are no known cases of blindness due to lack of access or triage for ophthalmology care when timely, proper procedures are followed. Often it is the patients who have not been appropriately referred to a physician (i.e., patients never referred to a medical doctor or an osteopathic doctor when advanced care was needed), who have suffered blindness or a “near miss” of blindness.⁶

⁵ MINNESOTA HEALTH RELATED LICENSING BOARDS, *Biennial Report July 1, 2020 to June 30, 2022*, (June 2022), available at: <https://www.lrl.mn.gov/docs/2020/mandated/201208.pdf>.

⁶ See, e.g., Jackson, Zoe, *Doctor’s Quick Thinking Helps Save Some Vision for Man who Woke up Blind in One Eye*, STAR TRIBUNE (April 14, 2023), available at: <https://www.startribune.com/hcmc-vision-loss-stroke-sudden-blindness-minneapolis-minnesota/600267142/>.

Patient Safety is Threatened by Inappropriate Prescribing and Injections

The advanced procedures proposed in SF659, eliminating the current restrictions on injections in and around the eye, pose risks to the health and well-being of the public if they are performed by untrained individuals. These are not simple and straightforward injections and conflating injections for COVID-19 vaccinations with complex injections into the sub regions in and around the eye – as would be allowed under this bill – is both inaccurate and misleading. The additional changes in the bill potentially allowing 14 days of oral steroids, and unlimited prescribing of oral antivirals and oral carbonic anhydrase inhibitor medications are also very concerning.

Optometrists play an important role in the delivery of routine eye care in Minnesota and are currently permitted to prescribe **ALL** topical ophthalmic medications (eyedrops and ointments) as well as selected oral medications with appropriate limitations in place to protect those patients with more serious underlying health conditions. Optometrists can prescribe unlimited topical formulations of all the medications named in SF659 without time limits. Topical drug delivery is not only highly effective, but is safer, more reversible, and more commonly used in standard clinical practice. Topical drugs have far fewer and less severe drug-drug interactions – an important consideration given that people aged 65 to 69 take an average of 15 prescriptions a year, and those aged 80 to 84 take 18 prescriptions a year.⁷

Medical diseases and trauma of the eyes and ocular tissues that require long term use of oral medications or injections are not routine cases. These conditions require careful history, physician examination beyond the eye, lab testing, clinical diagnosis, knowledge of medication interactions, dosing considerations, and proper follow-up. Misdiagnosis and improper treatment or follow-up can have severe ramifications, including death and blindness. Oral steroids, oral carbonic anhydrase inhibitors, and oral antivirals all have potentially severe side effects if prescribed inappropriately and will result in unnecessary complications if prescribed for too long.

- **SF659 proposes UNLIMITED prescribing of Oral Antiviral Medications, e.g., Acyclovir, Famciclovir (Famvir), Valacyclovir (Valtrex).**
Side Effects: anemia, kidney failure, elevated liver function tests, nausea, vomiting, diarrhea, headaches, dizziness.
Dosing changes may be needed with prolonged courses of this medication.
- **SF659 proposes UNLIMITED prescribing of Oral Carbonic Anhydrase Inhibitors, e.g., Acetazolamide (Diamox) and Methazolamide (Neptazane)**
Side Effects: Cardiac arrhythmia, death, low platelet counts resulting in bleeding, metabolic acidosis, kidney stones, sickle cell anemia crisis, rare blood disorders, Stevens-Johnson syndrome, numbness and tingling of toes and fingers, excessive urination, changes in taste, loss of appetite, weight loss, nausea, vomiting, drowsiness, confusion, malaise, depression, dehydration, hypotension, low blood sodium, low blood potassium, unfavorable medication interactions (including ibuprofen (Advil), oral contraceptives, beta-blockers, and diuretics), and fulminant liver failure which occurs days to weeks after medication administration.
These medications should not be used in patients with liver disease and used with extreme caution in patients with hypersensitivity to sulfonamides. Certain genes, especially in Korean and Japanese patients, are strongly associated with Stevens Johnson Syndrome, warranting genetic

⁷ Brody, Jane, *The Hidden Drug Epidemic Among Older People*, NEW YORK TIMES (December 16, 2019), available at: <https://www.nytimes.com/2019/12/16/well/live/the-hidden-drug-epidemic-among-older-people.html>.

screening before initiating these medications. There is no antidote for carbonic anhydrase inhibitors.

- **SF659 proposes prescribing up to 14 days of Oral Steroids, e.g., Prednisone**
Side Effects: Death, blindness, high-risk for masking life-threatening medical conditions or infections, immunosuppression, diabetic coma, hip necrosis (death of the bone tissue and collapse of a hip joint), hypertension, weight gain, fluid retention, depression, mania, psychosis, anxiety, confusion, insomnia, peptic ulcer, osteoporosis, avascular necrosis of bones, adrenal suppression, body fat redistribution, muscle weakness, impaired wound healing, growth retardation in children, easy bruising, skin thinning, cataracts, glaucoma.
Oral steroids, even limited to 14 days, can have catastrophic adverse effects to a patient's vision and even life. Steroids can worsen some infections and can mask and prevent the proper diagnosis of serious diseases including syphilis (which is on the rise!) and malignancies, such as lymphoma.

Optometrists' current limited prescribing time periods are adequate to be used in emergency situations but should not be used for longer periods without confirmation of the disease process by a physician who may recommend alternative treatments and/or surgeries.

Healthcare Costs may Increase due to the Misapplication of Prescription Drugs

Modifying scope of practice for optometrists will not provide any fiscal savings for public health care programs because reimbursement rates for evaluations/procedures performed by optometrists and ophthalmologists are the same for Medicaid and Medicare, as well as most commercial health insurers. The Minnesota Legislature should give no credence to unsupported cost savings described in an Avalon study provided by the Minnesota Optometric Association. Avalon provides no explanation for their so-called "cost-benefit analysis" and their alleged \$4.6 billion in savings. There is no evidence that Avalon's report underwent peer review and relies on vague "transaction costs" and "access related improvements in health outcomes" for their purported cost savings.

However, misdiagnosis, overuse, and the greater risk of inappropriate use of medications or injections by poorly trained personnel will result in increased healthcare costs for conditions that could have been diagnosed and treated more efficiently and effectively by an ophthalmologist. Moreover, efforts to treat complications and side effects of unnecessary treatments will add unneeded costs. Minnesota should not enact legislation that will increase waste in health care.

Conclusion

The questions presented to the Legislature by this legislation are:

- What quality of health care services do you wish to uphold in Minnesota?
- Do we want to continue our "best-in-class" health services?
- Do we want the quality of health care in Minnesota to be degraded?

Both of our state's world class academic medical centers, along with the Minnesota Medical Association (MMA) have opposed SF659 in writing (attached).

We ask you, as legislators, to protect patients in Minnesota, by maintaining our current law's high standards for medical care that are working well. **We strongly urge you to oppose this significant, unsafe, and unnecessary expansion of optometric scope of practice.**

Sincerely,

A handwritten signature in black ink, appearing to read 'T. W. Olsen', with a long horizontal flourish extending to the right.

Professor Timothy W. Olsen, MD
President, Minnesota Academy of Ophthalmology

ATTACHMENT 1

References used for calculation of estimates for pie chart in January 2024 letter to the Minnesota State Legislature opposing Optometric Scope Expansion:

Gupta P, Zhao D, Guallar E, Ko F, Boland MV, Friedman DS. Prevalence of glaucoma in the United States: the 2005–2008 National Health and Nutrition Examination Survey. *Invest Ophthalmol Vis Sci*. 2016;57:2577–2585.

Kong CL, Thompson RR, Porco TC, Kim E, Acharya NR. Incidence Rate of Herpes Zoster Ophthalmicus: A Retrospective Cohort Study from 1994 through 2018. *Ophthalmology*. 2020;127(3):324-330.

Priluck AZ, Dietze J. Ophthalmologist and Optometrist Glaucoma Prescribing Patterns Based on 2015 Medicare Part D Data. *Ophthalmology Glaucoma*. 2019;2(1):63-66.

Varma R, Vajaranant TS, Burkemper B, Wu S, Torres M, Hsu C, Choudhury F, McKean-Cowdin R. Visual Impairment and Blindness in Adults in the United States: Demographic and Geographic Variations From 2015 to 2050. *JAMA Ophthalmol*. 2016;134(7):802-809.

Vitale S, Ellwein L, Cotch MF, Ferris FL, Sperduto R. Prevalence of Refractive Error in the United States, 1999-2004. *Arch Ophthalmol*. 2008;126(8):1111–1119.

Wallace BI, Tsai HJ, Lin P, Aasbjerg K, Wu AC, Tsai YF, Torp-Pedersen C, Waljee AK, Yao TC. Prevalence and prescribing patterns of oral corticosteroids in the United States, Taiwan, and Denmark, 2009-2018. *Clin Transl Sci*. 2023;16:2565-2576.

Young RC, Hodge DO, Liesegang TJ, Baratz KH. [Incidence, recurrence, and outcomes of herpes simplex virus eye disease in Olmsted County, Minnesota, 1976-2007: the effect of oral antiviral prophylaxis.](#) *Arch Ophthalmol*. 2010;128(9):1178-83.

Unpublished data from the Rochester Epidemiology Project in Olmsted County through direct email communication on 18Jan2024 with Professor John Chen, MD, PhD, Mayo Clinic.