# MOA-MAO Communications Timeline
# on Scope of Practice Legislation

(2014 – 2024)

## 2024

**March 11th-** In person meeting led by Senator Erin Maye Quade, in attendance were representatives from Minnesota Academy of Ophthalmology (MAO) and Minnesota Optometric Association (MOA). MAO voiced concerns over all aspects of optometry scope bill. Senator Maye Quade offered compromised language to MAO leadership, which **MAO did not agree to**.

**February 6th-** In person meeting with similar attendees as 1/22/24 meeting. No common ground was found between MOA and MAO about advancing optometry scope.

**January 22nd-** In person meeting between representatives of MAO and MOA, also in attendance were lobbyists for both groups and Senate Health Finance and Policy committee administrator, Anna Burke. MOA members discussed why scope advances were past due, MAO leaders voiced strong concerns with all aspects of the bill. It was agreed that the groups would try another meeting to find common ground.

## 2021

**December 7th –** Zoom meeting held between the two groups. Minnesota Academy of Ophthalmology (MAO) representatives had many questions of why Minnesota Optometric Association (MOA) felt their scope needed to be changed. Additionally, **MAO wouldn't give any input on issues or agree to any discussion items**. Like past meetings with MOA, MAO leaders stated they would have a board meeting in January and would discuss this issue.

**November 5th** – Letter received from Dr. Chen agreeing to a zoom meeting with representatives from both sides.

**October 5th** – MOA President Dr. Kempfer sends letter to MAO President Dr. Chen once again requesting to have a meeting with meaningful discussion. They had indicated in a May letter they would meet after July, but **no dates or options were ever sent**.

**May 12th** – Letter from Dr. Parke (MAO) stating that MAO could possibly meet after July when they change leadership. They would do a Zoom meeting so it could be recorded and they would listen to what MOA has to say.

**April 21st** – Dr. Parke responds saying they'd be happy to listen if we had something different to offer and they would send meeting dates. **Meeting dates were never received from MAO**.

**April 7th** – Dr. Kempfer (MOA) sends letter to Dr. Parke (MOA) again requesting a meeting.

**March** 3 – MOA revised scope of practice legislation introduced (HF2022/SF1873) - https://www.revisor.mn.gov/bills/text.php?number=SF1873&version=0&session=ls92&session_year=2021&session_number=0.

## 2020

**December 9th –** MAO President Dr. Parke responds to Dr. Axelson that **MAO is too busy** with Pandemic to meet or discuss this legislation.

**November 23rd** – MOA President Dr. Axelson sends email requesting another meeting to discuss a revised bill to be introduced in the 2021 legislative session.

**March 12th** – Hearing in the Senate Health and Human Services Finance and Policy Committee on bill. MOA agrees to a proposed amendment which prohibits ODs from intravitreal injections. Committee decides to table the bill.

**January 15th** – MOA and MAO meeting called by Sen. Benson. **MAO leaders stated they wouldn't negotiate** on the proposed legislation.

## 2019

**December 13th** – Letter from Academy received stating they had discussed the bill and **had significant opposition**. Given that they felt that they wouldn't be able to come to any agreement with us on the bill.

**September 12th** – Meeting held in person with representatives of both sides and a stenographer that was required by the Academy. Representatives from the Academy said they could only listen and had no ability to speak on behalf of the academy. Attended by President of both boards and 2 other board members.

**August 20th –** MOA received MAO letter with who would attend from the Academy and a date that worked for them.

**July 26th** – MAO sent letter back stating they would look at dates and get back to us.

**July 22nd** – MOA President Dr. Doffin sent an email requesting a date for both sides to meet and talk.

**June 7th** – MOA received a letter from MAO stating they would meet only if leadership from both sides were in attendance, a stenographer is hired to take notes, and it must be a neutral meeting space (i.e.: hotel conference room), not a restaurant.

**May** - Letter from MAO President Dr. Lawrence stating she received the meeting request that was sent to their executive director and that the MOA President must contact Dr. Lawrence directly and **begin all over to find a date to meet.**

**Feb. 20th** – MOA executive director received email from MAO executive director stating that they had met and discussed the bill and that any meeting between the two groups wouldn't result in a beneficial discussion. **MAO was not comfortable proceeding with a negotiation meeting at the present time**.

**Feb. 14th –** MOA executive director contacted MAO executive director indicating that MOA doctors had heard from legislators during their Capitol Day that legislators had received feedback from the Academy. Asked again given that if we could get the two sides together to meet**.**

**February 5th** – Call happened between the two Presidents – Dr. Melicher indicated meeting would probably not happen until next President took over.

**February 4th** – MAO executive director requested that the MOA President Dr. Bauer call MAO President Dr. Melicher.

**February 3** – MOA scope of practice legislation introduced (HF891/SF545) - https://www.revisor.mn.gov/bills/text.php?number=HF891&version=0&session=ls91&session_year=2019&session_number=0.

**January 24th – February 4th** – Emails between the MOA and MAO executive directors attempting to pull together a meeting of the groups.

**January 7th** – Email from MAO executive indicating they were still trying to pull a group together and hadn't been able to yet due to the fact that it is a sensitive subject.

**January 3rd** – MOA executive director sent another email to the MAO executive following up on December emails to see if they had organized a group of MDs to meet yet.

## 2018

**Dec. 19th –** Several emails between the two executive directors. MOA pushing for names and dates for the group to get together and meet. Several emails back from the MAO ED stating they were working on it but never responded with any meeting specifics or dates.

**December 17th –** MOA Executive Director Beth Coleman emailed the MAO executive director, following up on a voice mail that had been left asking to get the group of OD's and MD's together to discuss scope.

**December 12th** -- MOA Lobbyist emailed the Academy lobbyist with the details and language that the MOA was going to introduce.

**November 19th** – MOA and MAO met for dinner and MOA Drs. Colatrella and Bauer explained our plan to introduce a bill for scope expansion and what we were looking to do. Requested again to put a working group together of both sides to discuss this issue.

In attendance from MAO was President Dr Jill Melicher, executive director Tyler Verry and Lobbyist Nate Mussell. President-Elect Dr Lawrence was invited but unable to attend.

## 2016

Dr. Colatrella (MOA) and Dr. Ackerman (MOA) met with Dr. Janice Sinclair (MAO) and asked if we could get a work group together to discuss scope, as we were looking in the future to introduce something on scope expansion.

Result: No response.

## 2014

Dr. Colatrella (MOA) met with Dr. Kevin Treacy (MAO) and discussed the possibility of simply removing the antiviral piece of our bill and asked if we could get a group together to discuss scope.

Result: No response.

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# Ophthalmology Workforce Projections in the United States, 2020 to 2035

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***Purpose:*** To analyze ophthalmology workforce supply and demand projections from 2020 to 2035.

***Design:*** Observational cohort study using data from the National Center for Health Workforce Analysis (NCHWA).

***Methods:*** Data accessed from the Department of Health and Human Services, Health Resources and Services Administration (HRSA) website were compiled to analyze the workforce supply and demand projections for ophthalmologists from 2020 to 2035.

***Main Outcome Measures:*** Projected workforce adequacy over time.

***Results:*** From 2020 to 2035, the total ophthalmology supply is projected to decrease by 2650 full-time equivalent (FTE) ophthalmologists (12% decline) and total demand is projected to increase by 5150 FTE ophthalmologists (24% increase), representing a supply and demand mismatch of 30% workforce inadequacy. The level of projected adequacy was markedly different based on rurality by year 2035 with 77% workforce adequacy versus 29% workforce adequacy in metro and nonmetro geographies, respectively. By year 2035, ophthalmology is projected to have the second worst rate of workforce adequacy (70%) of 38 medical and surgical specialties studied.

***Conclusions:*** The HRSA's Health Workforce Simulation Model forecasts a sizeable shortage of ophthalmology supply relative to demand by the year 2035, with substantial geographic disparities. Ophthalmology is one of the medical specialties with the lowest rate of projected workforce adequacy by 2035. Further dedicated workforce supply and demand research for ophthalmology and allied professionals is needed to validate these projections, which may have significant future implications for patients and providers.

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Health care workforce supply and demand is methodologically complex and often requires assumptions from large databases, surveys, epidemiological studies, and projections based on current trends. Existing simulation methods are limited with regard to assessing the interconnectedness of health care providers and improvements from new technologies.[1] This is particularly meaningful for eye care, which is provided by a network of ophthalmologists, optometrists, technicians, photographers, opticians, and various other allied health professionals.

Since the 1980s, there have been varied findings regarding forecasts for supply and demand for the ophthalmology workforce.[2] At the time, there was concern for physician surplus. As a result, in the 1990s the American Academy of Ophthalmology (AAO) commissioned the RAND Corporation to evaluate the eye care workforce supply requirements, which found a significant excess of eye care providers relative to public health need and demand; however, the findings were dependent on model assumptions in work-time ratio of ophthalmologists and optometrists.[3] In 2003, the aging US population was expected to result in significant growth in demand for surgical services, with ophthalmology having the largest forecasted increase in work due to the increased projected demand for cataract surgery.[4] Between 1995 and 2017, there was a decrease in the national ophthalmologist density from 6.30 to 5.68 ophthalmologists per 100 000, and there was an increased ratio of older to younger ophthalmologists. Despite a modest 2.26% increase in rural ophthalmologist density in the same timeframe, there was persistent disparity with lower mean ophthalmologist density in rural counties compared with nonmetropolitan and metropolitan counties.[5] As a result, there has been growing attention on the study of the adequacy of the ophthalmology workforce. In the past decade, the annual turnover of the ophthalmology workforce ranged from 3.7% to 19.4%, with approximately one-third separating from at least 1 practice[6] and a statistically significant increase in the rate of ophthalmology practice consolidation.[7]

The size and distribution of the current and future workforce have implications for national eye care provision. The density of ophthalmology providers is an important aspect of


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access to eye care, prevalence of visual impairment, and visual health outcomes,[8-12] although ultimately use and outcomes are influenced by complex individual and contextual factors.[13-15] Consequently, there are broad public health and policy implications for interventions that influence the supply of ophthalmologists. There is both a high direct and indirect opportunity cost for training a surplus of ophthalmologists,[16-19] which is balanced by a high direct and indirect societal cost of untreated visual impairment.[20-22] The Association of American Medical Colleges anticipates a shortage of between 15 800 and 30 200 for surgical specialties by 2034, which includes ophthalmology.[23,24]

Given the importance of this issue, the authors sought to explore projected eye care supply and demand through the Health Workforce Simulation Model (HWSM), a microsimulation model from the National Center for Health Workforce Analysis (NCHWA), which is part of the Health Resources and Service Administration (HRSA) of the US Department of Health and Human services. The NCHWA informs public and private sector decision makers on health workforce issues by expanding and improving health workforce data, disseminating workforce data to the public, and improving and updating projections of the supply and demand for health workers. Importantly, reduction in barriers to care increase demand and could exacerbate existing supply and demand mismatch. Potential reduction in barriers is incorporated into HWSM scenario analysis. The HWSM has been used to explore shortages in primary care physicians relative to primary physician assistant and nurse practitioners,[25] and the pharmacist labor supply;[26] however, to our knowledge, there are no specific studies using this simulation to study eye care or ophthalmology. We sought to explore the HWSM implications for ophthalmology, optometry, and other eyecare professionals across geographic categories and barrier reduction scenarios.

## Methods

This study did not qualify as human subjects research and thus did not require Institutional Review Board approval. Study conduction complied with the Declaration of Helsinki. Informed consent was not required.

### Data Sources

Department of Health and Human Services, Health Resources and Services Administration, Health Workforce Projections websites[27] provided the data used for this analysis. Specifically, the authors used the NCHWA Workforce Projections Dashboard.

Projection data from the NCHWA come from the HWSM. The HWSM is an integrated microsimulation model that estimates the current and future supply of and demand for health care workers by occupation, geographic location, and year. Technical documentation for the HRSA's HWSM can be found online.[28]

Workforce supply is defined as the number of workers active in the workforce, which consists of people working and people actively seeking employment. These are calculated on the basis of full-time equivalents (FTEs), which are defined as 40 hours per week; thus, the FTE supply is higher than the count of active physicians. The supply component of HWSM is calculated by using a combination of national surveys, association database, and state licensure files to create a starting year supply. The HWSM simulates the current workforce and labor force participation decisions to project how supply will evolve over time. The addition of new entrants and the subtraction from attrition (those exiting due to mortality, retirement, and career change) lead to the end-of-year supply. For ophthalmology, in 2023, there were 516 entering ophthalmology residency positions.[29] For optometry, there were 1728 graduates from regular and special programs in 2022.[30] The synthetic cohort of new entrants to the ophthalmology workforce is based on the number, characteristics, and geographic distribution of recent entrants and is intended to include the planned expansion of the training pipeline based on base year forecasts.

Demand is defined as the number of workers required to provide a level of services that will be used given patient health-seeking behavior and ability/willingness to pay for services. The main inputs for determining demand projections are (1) US county-level population data used to generate a representative population sample; (2) annual expected health care service use patterns; and (3) physician staffing ratios.

The HWSM models demand for physicians under 2 scenarios: the status quo scenario and reduced barriers scenario. The status quo (base case) scenario models a continuation of recent (2015−2019) national patterns of care use extrapolated to the future population and assesses where the projected future workforce will be sufficient to provide at least the current level of care. The status quo scenario assumes national demand equals national supply in 2020.

The reduced barriers scenario estimates the number of physician FTEs required if populations who historically faced barriers to accessing health care services demonstrated care use patterns comparable to populations perceived to have fewer barriers to accessing care. This scenario assumes populations who have faced barriers to accessing health care services are able to use ophthalmology resources similarly to peers living in metropolitan counties, who are non-Hispanic White, and who have health insurance. This hypothetical reduced barriers scenario describes the implications on physician demand if policies and programs were implemented to reduce access-based disparities to health care services.

Percent adequacy is the relationship between the projected future supply and the projected future demand. Adequacy is calculated by taking projected supply each year divided by projected demand in that year.

### Statistical Analysis

Descriptive statistics, workforce ratios, and figures were calculated for each analyzed procedure using Microsoft Excel.

## Results

For 2020, there were an estimated 21 250 FTE workers in the ophthalmology workforce. Projected total supply decreased by 2650 FTE workers, representing a 12% decline, by year 2035. For the status quo (base case scenario), total demand in FTEs was matched to total supply for 2020. Projected total demand increased by 5150 FTEs, representing a 24% increase, by year 2035.

### Reduced Barriers Scenario

Under the reduced barriers scenario, total projected supply was not adequate to meet total projected demand in any year from 2020 to 2035. In the base year 2020, there is already a supply demand mismatch of 1920 FTEs nationally, which is composed of a surplus of 330 FTE in metro areas and a deficit of 2250 FTEs in nonmetro areas. This is forecast to worsen over time.

As before, projected total supply decreased by 2650 FTEs, representing a 12% decline, by year 2035. Projected total demand

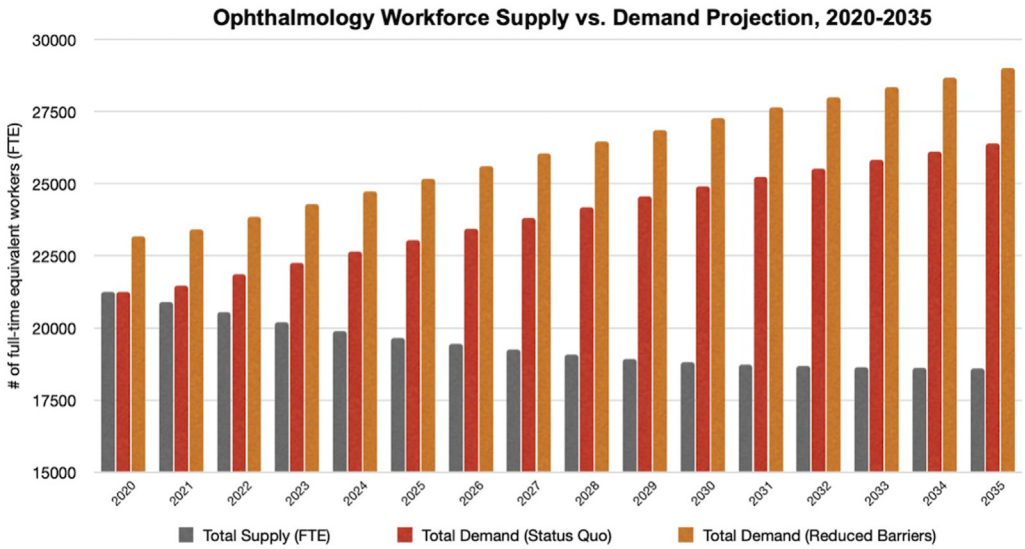


**Figure 1.** Ophthalmology workforce supply versus demand projection, 2020–2035. Ophthalmologist total demand (status quo) and total demand (reduced barriers) from 2020 to 2035 compared with ophthalmologist total supply. FTE = full-time equivalent.

in this scenario increased by 5840 FTEs, representing a 25% increase, by year 2035 (Table S1, available at www.aaojournal.org).

## Adequacy

Adequacy, defined as projected supply over projected demand, steadily decreased year-over-year in both scenarios. For the status quo scenario, where it is assumed that starting supply is adequate to meet total demand, there is 100% adequacy in 2020. Adequacy decreases each year as total projected demand outpaces projected supply. By 2035, the projected ophthalmology workforce adequacy is 70%. Under scenarios where there are reduced barriers to ophthalmology care access, the projected ophthalmology workforce is only 64% adequate to meet the projected demand for ophthalmologic services in 2035 (Fig 1).

The level of inadequacy was markedly different based on rurality, with base year 2020 showing 110% and 41% adequacy for metro compared with nonmetro geographies, respectively. Workforce supply adequacy projects to decrease by year 2035 in both metro (77%) and nonmetro (29%) geographies. Similar decreases in adequacy were noted in metro (70%) and nonmetro (26%) geographies in a scenario where barriers to care were reduced (Fig 2).

## Nonphysician Component

There are important nonphysician components to eye care provision including optometrists, opticians, and ophthalmic medical technicians. The current optometry total supply is adequate for demand (100%); however, under the reduced barriers demand scenario there is current inadequacy in base year 2020 (82%), which will persist despite expected growth in the optometry workforce by year 2035 (89%).

In a similar vein, the optician service workforce is adequate for demand in the status quo scenario in 2020 (100%), but there is projected inadequacy (76%) by the year 2035. In the reduced barriers demand scenario, there is current inadequacy (81%) that is projected to worsen by year 2035 (60%). Although there is a lack of workforce supply data on the complex category of ophthalmic medical technicians, the status quo demand is expected to increase by at least 1% to 2% each year, with an additional 17% to 18% increased demand each year under reduced barriers demand scenarios.

## Specialty Specific Adequacy

Of the 38 specialty categories in the HRSA dataset, for 2020 ophthalmology ranks 18$^{th}$ of 38 for current projected adequacy (92%) in 2020. Fifteen of the 38 specialties are projected to have adequate (100% or greater) workforce in the status quo and 9 specialties are projected to have adequate (100% or greater) workforce even in the reduced barriers demand scenario by 2035.

By the year 2035 in the status quo scenario, ophthalmology is projected to have the second lowest rate of adequacy (70%) or 37$^{th}$ of 38 specialties, with thoracic surgery having slightly worse adequacy (69%). In the reduced barriers scenario, by 2035, ophthalmology is projected to have the fifth lowest adequacy (64%), or 34$^{th}$ of 38 specialties with other specialist category (63%), neurological surgery (62%), thoracic surgery (62%), and plastic surgery (56%) having slightly lower adequacy (Tables S2-S5, available at www.aaojournal.org).

# Discussion

The present analysis of the HRSA HWSM shows that the ophthalmology physician workforce is inadequate to meet the demand for ophthalmologic services, and this inadequacy is expected to increase by the year 2035. There is a projected 30% shortage in ophthalmologist FTEs by the year 2035 relative to demand. This projected shortage expands to 36% if initiatives to reduce barriers to eye care are successful. Ophthalmology is expected to have one of the lowest rates of adequacy relative to other specialties in medicine. The optician workforce is similarly inadequate relative to demand, and optometry is projected to be inadequate as well if there is a reduction in barriers to accessing care.

The findings here corroborate recent work based on American Medical Association Masterfile data and

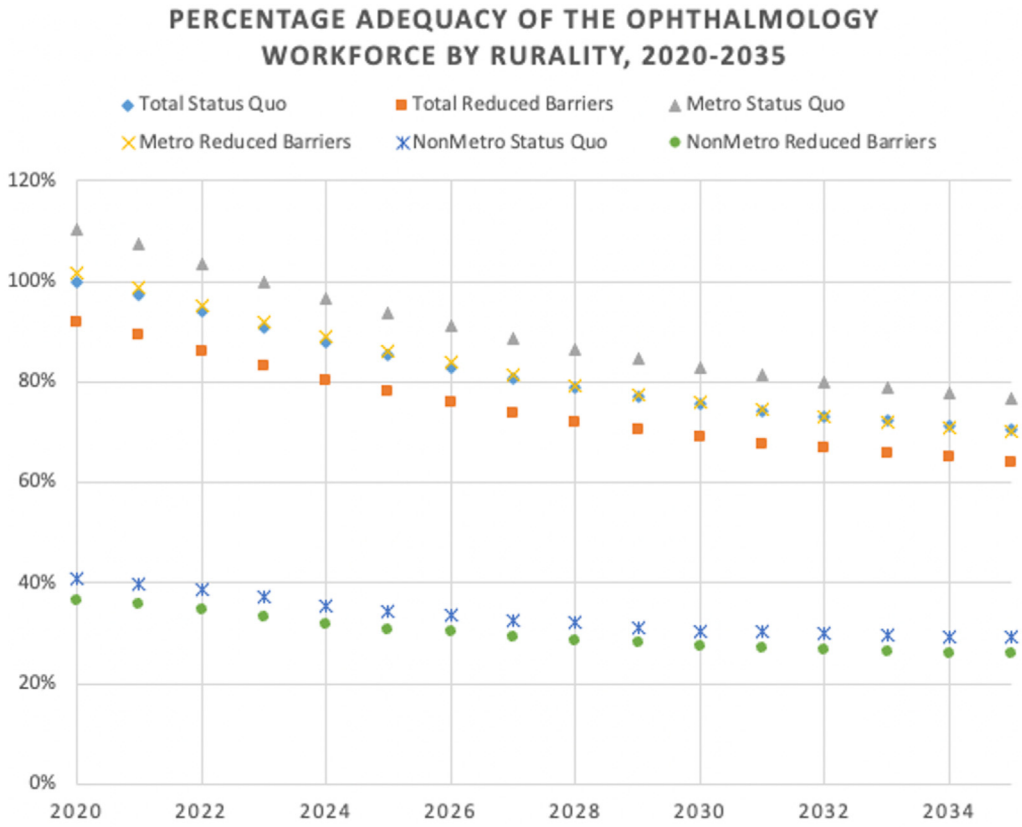


**Figure 2.** Percentage adequacy of the ophthalmology workforce by rurality, 2020–2035.

population data showing a projected shortage of ophthalmologists from 2030 to 2050 of approximately 1945 to 2928 surgeons, with a median projected demand of 169 million work relative value units by 2050 relative to a capacity of only 146 million work relative value units.[31] The HRSA model here incorporates American Medical Association and other data with similar implications for workforce shortages.

In the status quo scenario, supply adequacy varies greatly across specialties, ranging from 69% (a shortage of 31%) for thoracic surgeons to 174% (a surplus of 74%) for pulmonology physicians or 205% (a surplus of 105%) for nurse practitioners. The specialties with the lowest supply adequacy in 2035 are thoracic surgery (69%), ophthalmology (70%), other specialists (71%), plastic surgery (75%), and nephrology (79%). Given the high cost of workforce surplus as well as demand surplus, it is important to investigate whether the degree of inadequacy in the eye care workforce is due to measurement methodology or a true shortcoming of intervenable trends.

Similar to prior studies,[5] there is projected growth in the supply of rural or nonmetro ophthalmologists; however, the projected growth according to the HWSM remains insufficient for projected demand. There are known associations between ophthalmologist supply and eye health, which have been better demonstrated in specific geographies or for specific eye diseases. For example, access and use of diabetic eye care have been correlated with ophthalmologist supply.[8,10-12] The prevalence of visual impairment was found to be inversely correlated with density of eye care clinicians in California.[9] However, the national correlation between county-level availability of ophthalmologists and optometrists with vision health or eye care use is nuanced and imperfect,[10,15] likely due to dataset limitations, noise, and confounding geography-specific variables, and the known complex individual and contextual factors of health care access and use.[13,14] The HWSM is beneficial in this regard because the microsimulation scenario analysis accounts for a reduced barriers scenario. If certain contextual and individual barriers to care are able to be reduced,[13] in 2035 there is a forecasted adequacy of 70% in metro geographies compared with 26% in nonmetro geographies, which deserves additional research and possible intervention. The current dataset does not provide granular regional data for ophthalmology provider density.

Given the increased anecdotal demand for ophthalmic technicians, eye care staff may represent one factor exacerbating the inadequate supply of the ophthalmology physician workforce. Similar to the ratio in HWSM forecasts, prior work found a median of 2.7 clinical assistants per ophthalmologist; however, the impact on FTE requirements was minimal and found unlikely to result in significantly greater efficiencies in workforce policy.[3] This finding from the 1990s is worth reevaluation given increased nonmedical clinical demands, including documentation, insurance

processing, ancillary testing, and care coordination. Given HRSA and other projections for surplus of nurse practitioner and physician assistant workforces, dedicated fellowships to train ophthalmic nurse practitioners have been proposed.[32] The presence of ophthalmic technicians has been statistically significantly correlated with increased ophthalmologist productivity in the Veterans Affairs Health Care System.[33] To our knowledge, there is a scarcity of data or studies on specific allied ophthalmic personnel such as photographers, who are likewise critical members of the eye care team. Prior work evaluating HWSM noted that unforeseen changes in demand and the generalized framework may limit the applicability of HWSM to the pharmacist labor supply forecasts.[26] Future studies should focus on the degree to which allied health professionals, such as ophthalmic technicians, expand the individual physician's ability to meet patient volume demand within workforce forecast models.

The micro-summation methods of HWSM use multiple data sources and are not powered to study the effects of scope of practice for physicians or nonphysicians relative to demand. The present analysis is not intended to comment on scope of practice, but rather suggests a need for integrated eye care workforce modeling across the spectrum of eye care to inform policy. Specifically, the work of ophthalmologists is not fungible with other allied health professionals, and ophthalmology requires specialized medical and surgical training. Expansion of undergraduate medical education, Graduate Medical Education (GME), loan repayment programs, specialty training, and other efforts may be needed to counteract the steady decrease in ophthalmologist supply compared with demand. Given the consistent trend for inadequacy of the workforce in rural areas, efforts to encourage physician service in underserved geographies could help increase supply while reducing barriers, and this may be captured with reduced barrier scenarios.

In 2023, 69% of total applicants matched into ophthalmology residency with 516 offered positions.[29] There is evidence that GME is a key bottleneck in workforce sufficiency and that capitation of Medicare and other funding sources may limit the expansion of GME programs, although funding alone is not necessarily sufficient to ensure that any expansion of GME aligns with societal need.[34] The Government Accountability Office reported the expansion of GME between 2005 and 2015 was geographically constrained with a relatively unchanged distribution of residents per capita.[35] The HRSA's Council on Graduate Medical Education 2022 report advocated for expanded assessment of rural training programs and linkage of GME funding to population health needs as well as assessment of return on public investment.[36] These efforts must account for the nuances of specialty and subspecialty shortages such as the anticipated shortage of pediatric ophthalmology.[37] Of note, after a 65% increase in available emergency medicine postgraduate year 1 positions since 2015, there was an unprecedented number of unfilled positions in 2022 and 2023, which offers a cautionary tale of the cost of oversupply of GME.[38]

The last commissioned eye care workforce study by the AAO was approximately 3 decades ago,[3] which was subsequently revisted[39] demonstrating the limitations of forecasting eye care demand and supply given evolving technology and interdisciplinary workforce.[40] A recent methodological review found room for improvement across all reviewed studies on needs-based supply of physicians.[41] We believe multiple stakeholders are needed to assess and intervene on potential workforce shortage issues. The AAO and other organizations may benefit from revisiting the eye care workforce study to validate current HWSM predictions and potentially intervene to address long-term societal and local eye care needs.

## Study Limitations

The findings here are subject to several limitations, and all workforce forecasting approaches must be interpreted in the context of their methodologic assumptions.[42] First, the HWSM is subject to limitations of the microsimulation approach to supply modeling, with data sourced from professional clinical associations (e.g., the American Medical Association Masterfile), National Surveys (including the American Community Survey and US Bureau of Labor Statistics Survey), as well as association of state-sponsored surveys and state licensure files. It is important to note that inadequacy of the eye care workforce found here under a reduced barriers scenario would imply improved access to care for vulnerable patient populations and could still net positively impact population eye health. Future forecast and microsimulation approaches must account for interconnectedness of allied professionals, scope of practice, geographic trends, telehealth expansion, and a dynamic and aging population and workforce. Furthermore, recent insightful perspective on the ophthalmology workforce found concerning assumptions in HRSA projections from 2005 and 2020 and other prior forecast models.[19] The Association of American Medical Colleges' recent projections of a shortage between 15 800 and 30 200 FTEs for all surgical specialties[24] must be reconciled with the more sizeable shortage forecast by HRSA. Ophthalmic care would benefit from dedicated forecast investment from the AAO, the Association of University Professors of Ophthalmology, and other organizations that are perhaps more capable of anticipating the future of eye care.

Last, the influence of technological advancement on workforce adequacy cannot be overstated. Innovation can rapidly change the standard of care and consequent eye care demand. Telehealth and improved durability of ophthalmologic interventions could greatly reduce demand for ophthalmology FTEs relative to disease prevalence. Although the current HWSM accounts for population-wide implications of Coronavirus Pandemic through population projections, there is a lack of established data on post-pandemic changes in workforce burnout, remote work transitions, and changes in health care use. Therefore, the microsimulation may be limited by prepandemic inputs based on the latest available literature.

## Conclusions

The HRSA's HWSM forecasts a sizeable shortage of ophthalmology supply relative to demand by year 2035, with persistent geographic disparities. These forecasts should be interpreted in the context of a complex meshwork of allied health professionals, a dynamic and aging ophthalmology workforce, and diverse and changing patient population who hopefully will have reduced barriers to accessing eye care. Further dedicated workforce supply and demand research for ophthalmology and other professionals is needed to help inform policy decisions and strategy to overcome projected workforce inadequacy.

## Footnotes and Disclosures

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A.P.F.: Data safety or advisory board − Allergan, Alimera, Eyepoint, Iveric Bio, Apellis, Genentech; Consultant − Genentech; Receipt of materials −Genentech.

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HUMAN SUBJECTS: Human subjects were not included in this study. The institutional review board at Vanderbilt University Medical Center provided a waiver as this study did not qualify as human subjects research. Study conduction complied with the Declaration of Helsinki. Informed consent was not required.

No animal subjects were included in this study.

Author Contributions:

Conception and design: Berkowitz, Finn, Parikh, Kuriyan, Patel

Data collection: Berkowitz, Finn, Parikh, Kuriyan, Patel

Analysis and interpretation: Berkowitz, Finn, Parikh, Kuriyan, Patel

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Overall responsibility: Berkowitz, Finn, Parikh, Kuriyan, Patel

Abbreviations and Acronyms:
**AAO** = American Academy of Ophthalmology; **FTE** = full-time equivalent; **GME** = Graduate Medical Education; **HRSA** = Health Resources and Service Administration; **HWSM** = Health Workforce Simulation Model; **NCHWA** = National Center for Health Workforce Analysis.

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March 25, 2025

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Procedures by any means, methods, devices or instruments that can alter or cause biologic change or damage the skin and subcutaneous tissue constitute the practice of medicine and surgery. This includes the use of foreign or natural substances by injection or insertion. [i,ii] ASDSA believes that the medical procedures using Food and Drug Administration (FDA)-regulated devices, such as those that can alter or cause biologic change or damage, should only be performed by a physician or appropriately trained non-physician personnel under the direct, onsite supervision of an appropriately trained physician.[iii] This legislation jeopardizes patient safety and disregards what is considered adequate and appropriate medical education and training.

Quality patient care includes evaluating a patient's needs and current condition, selecting an appropriate course of treatment and providing adequate information and follow-up care. Any physician performing a cosmetic medical procedure should be qualified by residency training and a fellowship or other post-graduate training that includes an extensive understanding of cutaneous medicine and surgery, the indications for each procedure, and the pre- and post-operative care involved in treatment. When non-physician practitioners are given legal authority to perform the same procedures physicians spend years in medical and surgical training to perform, patient safety is seriously compromised. ***Short term, basic training is in no way equivalent to a physician's training and understanding of a medical procedure and its implications for each patient.***

Our utmost concern is to ensure that these products are safely administered by licensed and qualified physicians or under the direct, on-site supervision of a licensed and qualified physician. As with other cutaneous procedures, it is necessary to receive adequate training before using soft-tissue augmentation agents. Physician injectors should first be made to demonstrate a detailed knowledge of anatomy and possible adverse events (such as

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To best protect the citizens of Minnesota from adverse events and ensure quality patient care, we urge you to oppose HF 1011. Thank you for your strong consideration on this matter. Should you have any questions regarding this critical patient safety issue, please do not hesitate to contact Kristin Hellquist, Chief Advocacy Officer, at khellquist@asds.net.

Sincerely,

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[ii] AADA *Position Statement on Medical Spa Standards of Practice*. https://www.aad.org/Forms/Policies/Uploads/PS/PS-Medical%20Spa%20Standards%20of%20Practice.pdf
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[iv] Gladstone H, Cohen J. Adverse Effects When Injecting Facial Fillers. Semin Cutan Med Surg. 2007 Mar;26(1):34-9.
[v] Addressing Safety and Regulation in Medical Spas. Retrieved Aug. 6, 2024. https://policysearch.ama-assn.org/policyfinder/detail/dermal%20fillers?uri=%2FAMADoc%2Fdirectives.xml-0-1174.xml
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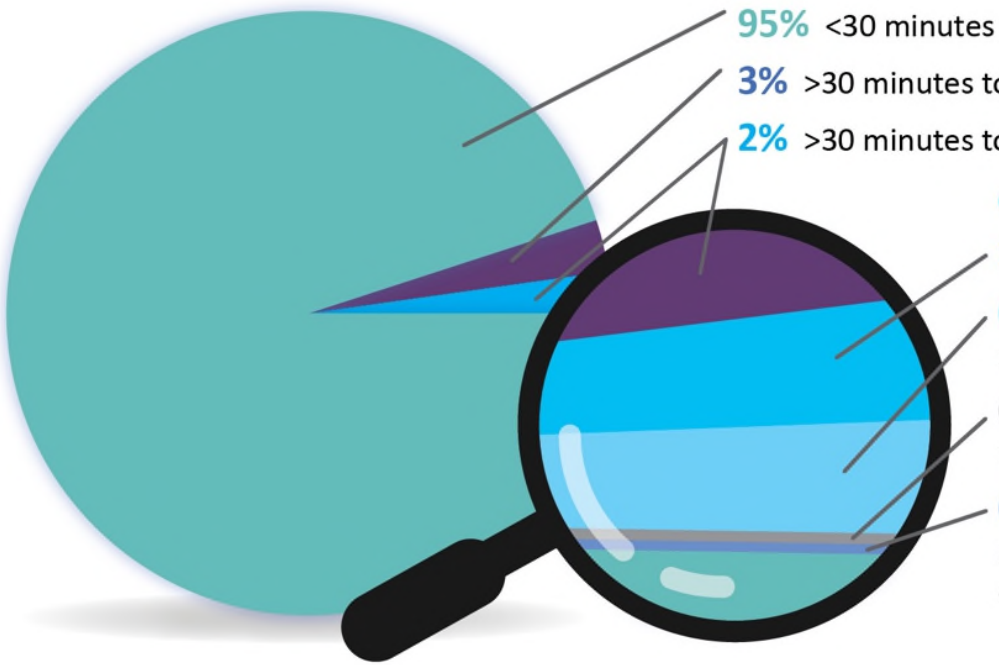

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MINNESOTA ACADEMY of EYE PHYSICIANS and SURGEONS

**FOR IMMEDIATE RELEASE**
March 14, 2025
Contact: MnEyeInfo@gmail.com

# Super-Majority of Minnesotans Oppose Weakening Medical and Surgical Safety Standards In Eye Care

**St. Paul, MN** – A new poll reveals 85% of Minnesotans prefer having their eye surgery performed by a trained eye surgeon, an ophthalmologist, who is a medical doctor, rather than by an optometrist at a more convenient location. Rural voters in the state showed even stronger preference (88%).

Optometrists are valued members of the eye care team providing basic vision care services, but they are not medical doctors or trained surgeons. The poll indicates that nearly three-quarters of Minnesota voters (73%) oppose SF 1144 and HF 1011 that would allow optometrists to perform surgery, expressing serious concerns about patient safety and practitioner qualifications. Opposition to the legislation increased by 9 percentage points after voters learned about training differences between ophthalmologists and optometrists.

The survey, conducted by Cygnal (February 10-12, 2025), shows opposition to the proposed legislation transcends party lines, geographic regions, and diverse demographics groups.

“Minnesotans want their eye surgery to be performed by surgeons -- surgeons with medical degrees and multiple years of clinical experience and surgical training,” said Dr. Amanda Maltry, M.D., President of the Minnesota Academy of Eye Physicians and Surgeons (MAEPS). “This isn’t about convenience or access. It’s about maintaining the high standards of care currently protecting patients from serious complications. The language in the proposed legislation creates concerning and vague loopholes that would put public health and safety and risk.”

**Key findings:**

- 85% of Minnesotans prefer having eye surgery performed by a trained eye surgeon (ophthalmologist/medical doctor) rather than by an optometrist at a more convenient location. Rural voters showed an even stronger preference (88%)

- 74% prefer ophthalmologists or medical doctors to prescribe oral medications for eye diseases
- 64% oppose government attempts to allow optometrists to perform delicate eye surgery
- Republicans and Democrats show identical opposition (67%)

Healthcare experts warn that the proposed legislation contains vague and ambiguous language leaving loopholes in the law that could permit insufficiently trained practitioners to perform delicate surgical procedures on sensitive tissues around the eye.

“The current legislation being considered by Minnesota lawmakers lacks specificity about what procedures would be permitted and what protocols would be required,” said Dr. Maltry. “Currently, optometrists cannot perform eyelid surgeries. If this legislation passes, it could enable them to perform any eyelid surgery by simply re-classifying the surgery as non-invasive – including removal of eyelid lesions that may be cancerous, without the specialized training required to identify malignancies.

“There is no such thing as a non-invasive surgery,” she continued. “By definition, every surgery is invasive. When it involves needles and scalpels into delicate human tissue like your eyes and eyelids, its essential to be trained as a surgeon.”

"As ophthalmologists, we've completed over a decade of medical school, residency, and surgical training to ensure patient safety," Dr. Maltry added. "Optometrists play an important role in eye care, however allowing them to perform eye surgeries puts Minnesotans’ vision at risk. This is why we implore the legislature to oppose SF 1144 and HF 1011 in their current form.”

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*###*

AMA PolicyFinder

surgery Search

# Surgery

## Definition of Surgery H-475.983

**Topic:** Surgery
**Meeting Type:** Annual
**Action:** Reaffirmed
**Council & Committees:** Council on Constitution and Bylaws,Council on Long Range Planning and Development

**Policy Subtopic:** NA
**Year Last Modified:** 2023
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Patient safety and quality of care are paramount and, therefore, patients should be assured that individuals who perform these types of **surgery** are licensed physicians (defined as doctors of medicine or osteopathy) who meet appropriate professional standards.

## Policy Timeline

Res. 212 A-07 Reaffirmed: BOT Rep. 16, A-13 Reaffirmed: CCB/CLRPD Rep. 01, A-23

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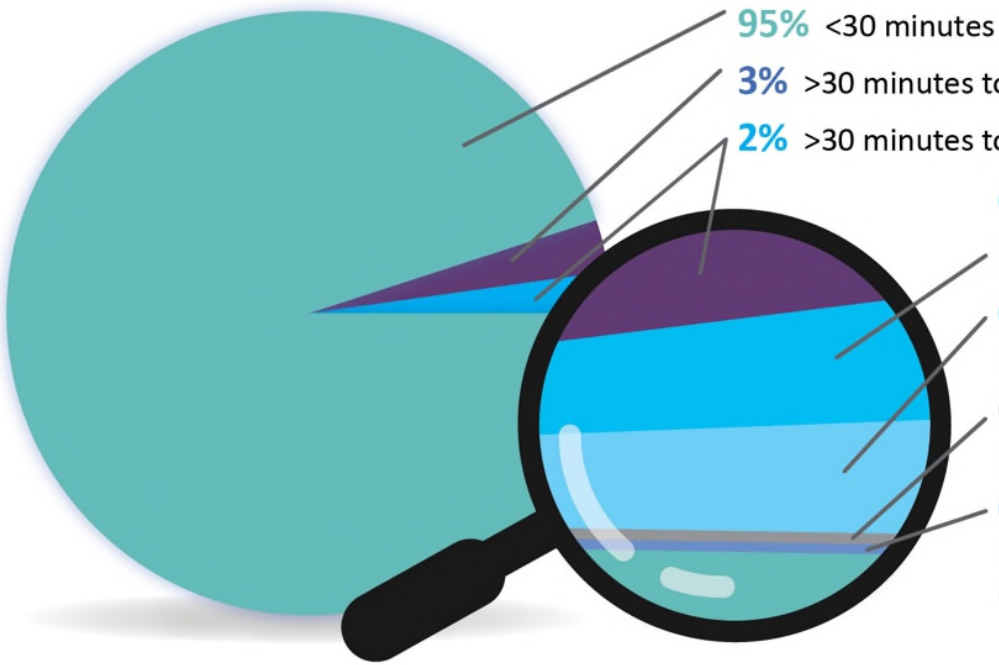

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AMA PolicyFinder

surgery Search

# Surgery

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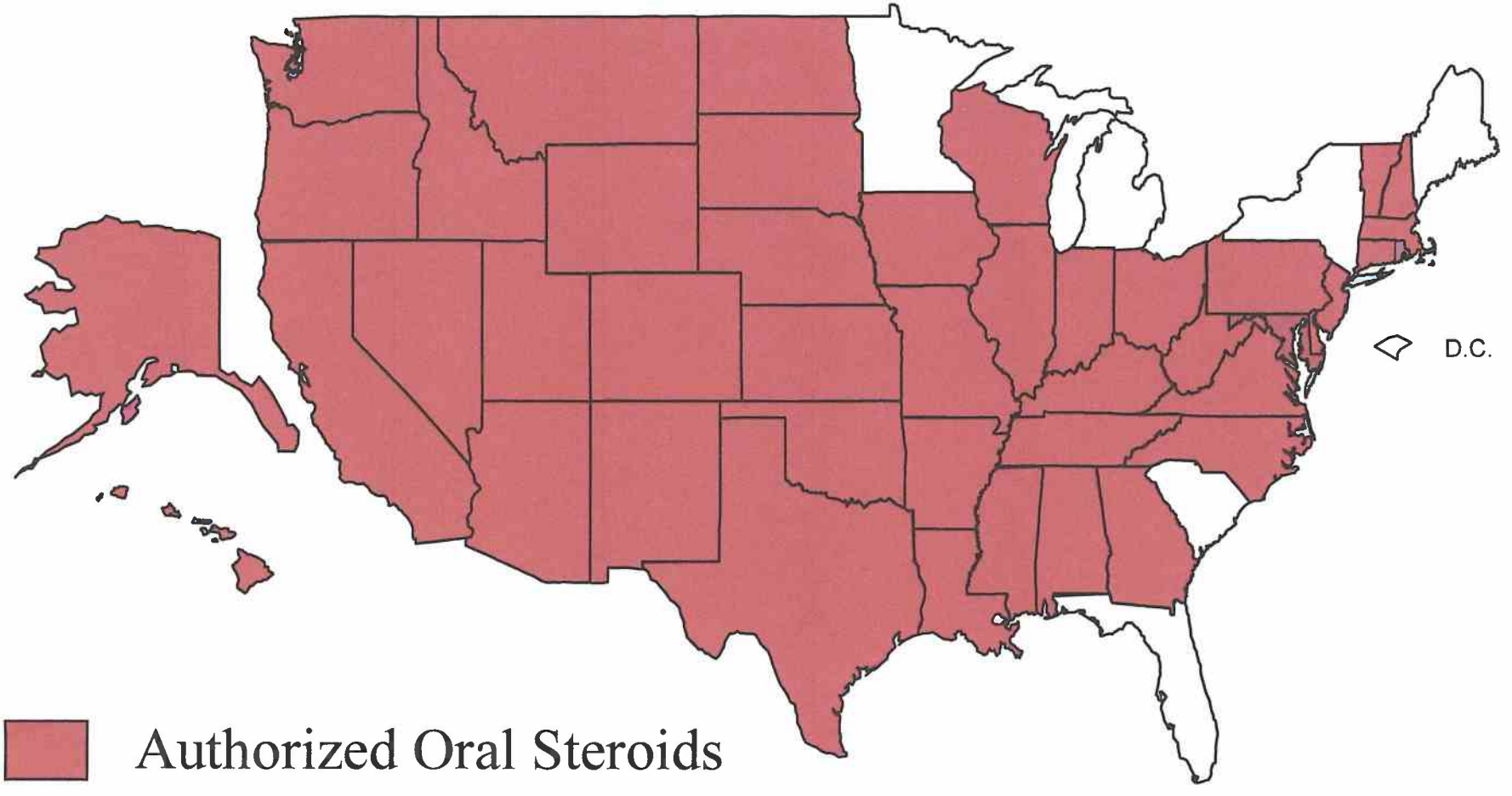
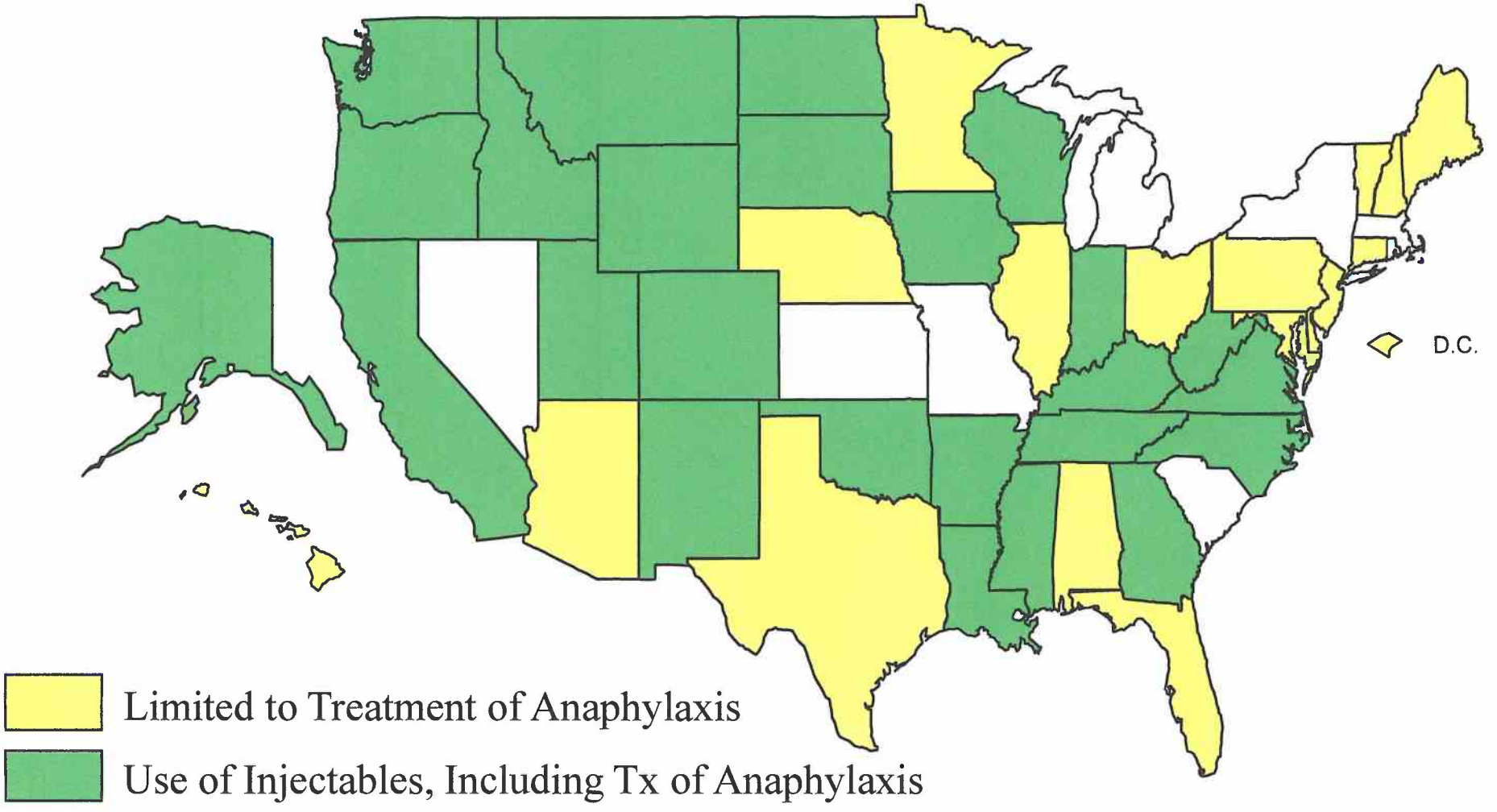
Res. 212 A-07 Reaffirmed: BOT Rep. 16, A-13 Reaffirmed: CCB/CLRPD Rep. 01, A-23

# Oral Steroids



# Injectable Authority



Dear Legislators:

I am writing to you with my personal story of the importance of scope expansion for optometrists in Minnesota.

I live outside Searles, MN and work in Madelia. My optometrist, Viktoria Davis, is also in Madelia. In late October, when I was helping with harvest, I discovered a lump in my lower right lid. After harvest was over, I visited Dr. Davis and she diagnosed me with an “internal hordeolum” - the technical term for a stye. She recommended warm compresses and daily lid scrubs as well as limiting my contact lens wear. By mid-December, the lump was not getting better. I saw Dr. Davis again, and she prescribed oral antibiotics as well as letting me know that if it did not resolve it would require excision. She also explained that she was trained to do the excision, and if I lived in any state surrounding Minnesota she would be able to remove it. However, due to scope of practice laws in Minnesota she would have to refer me to an ophthalmologist.

The bump still had not resolved after Christmas, and so I talked to her staff and they set me up with an appointment with the nearest ophthalmologist, in Mankato. They explained that unfortunately the ophthalmologist was extremely busy, and also required a visit to evaluate the bump before taking it out. They would get this appointment as soon as possible. The first available wound up being almost a month out - a month when I was still in pain and my eyelid was still swollen.

I went to the evaluation appointment - taking time off work and driving the 60 mile round trip. I was irritated that I learned absolutely nothing from that appointment that Dr. Davis had not told me before. It was confirmed that I had an internal hordeolum, first line treatment was warm compresses and lid scrubs, second line was oral antibiotics, and third line was excision. At first the earliest available appointment for excision was another three weeks out, but thankfully they were able to “squeeze me in” only a few days out.

This, of course, required another 60 mile round trip and more time off work. They also recommended a driver, so my mom had to come along too.

I have health insurance. However, since these visits were in January they were applied to my deductible - a total of almost $500. Interestingly, the “evaluation” appointment was more expensive than the excision!

If Dr. Davis had just been able to remove the lump originally, it would have saved me almost two months of pain, 120 miles of driving, $500, and time off work.

I strongly encourage you to support the scope expansion of optometrists in Minnesota so that they can continue to treat their patients thoroughly, promptly, efficiently, and without wasting money.

Sincerely,

Jackie Goblirsch


# Office of the Revisor of Statutes

Please send us feedback on our new search page, your help is greatly appreciated!

## Search Legal Material

Help Clear All

exact | invasive surgery

+ Add search term(s)

Filter your search

## Results

Found 1 result after searching for **invasive surgery**(exact) in 2024 Statutes.

get search link | Sort by: Citation | 10 per page

2024 Minnesota Statutes > HEALTH > Chapter 148 - PUBLIC HEALTH OCCUPATIONS

### Section 148.56 OPTOMETRISTS.

Found 1 occurrence.

...intramuscularly, or by injection, except for treatment of anaphylaxis; (2) **invasive surgery** including, but not limited to, surgery using lasers; (3...

Also available

State Register Search

Old search page

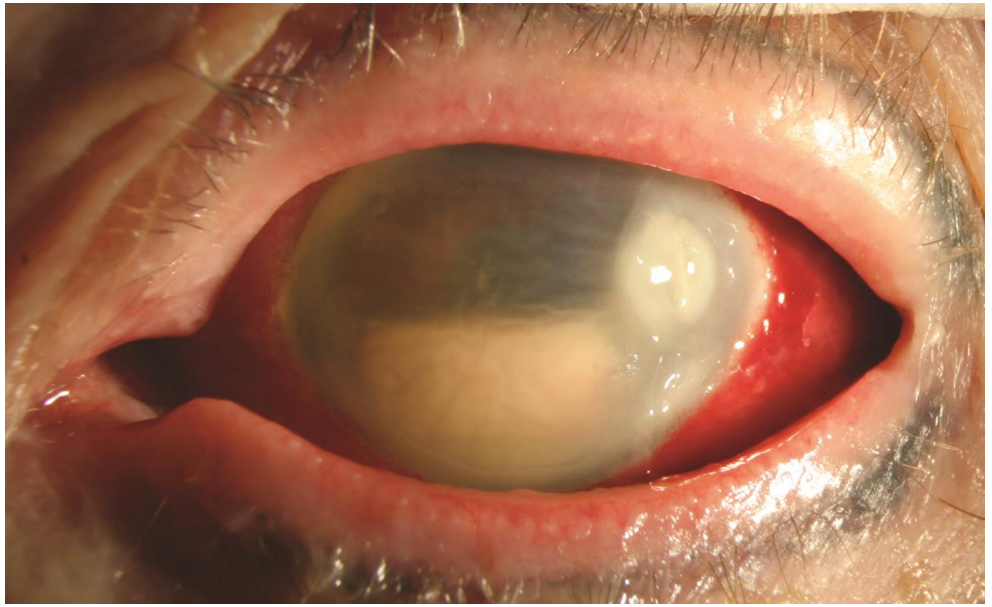
MINNESOTA ACADEMY
of EYE PHYSICIANS and
SURGEONS

# Oppose House File 1011

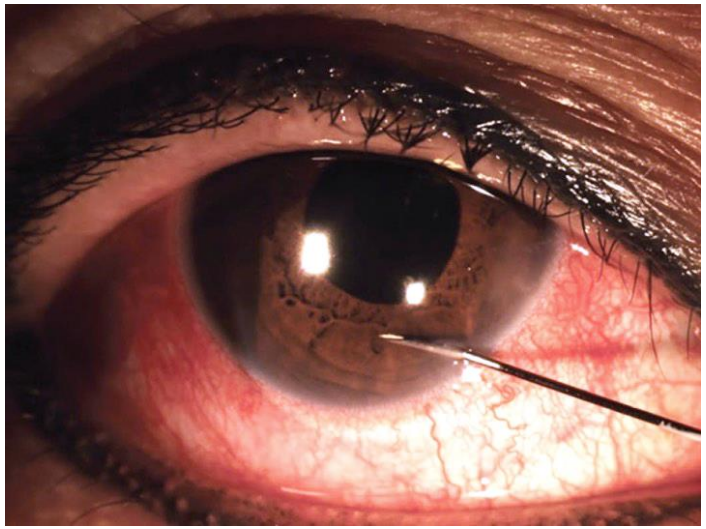
House File 1011 would dangerously expand optometry scope of practice to allow for injections of medications into the eyelids and the front of the eyeball itself

# Injection into the front of the eye

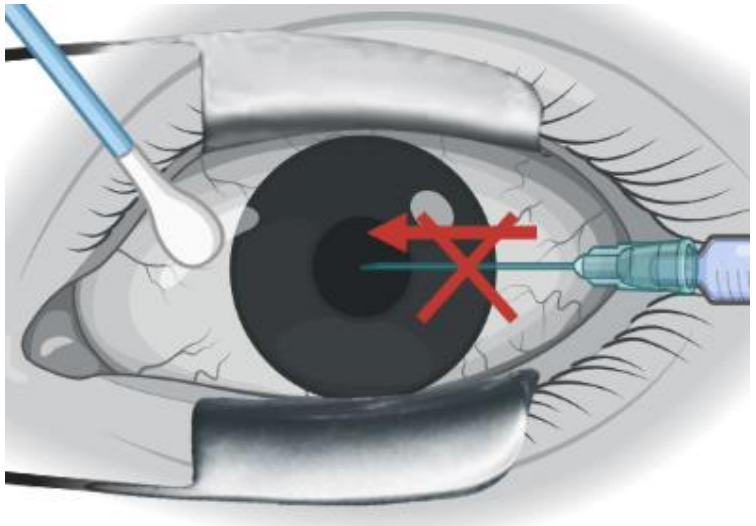
Infection introduced by poor injection technique can be **blinding**



An example of infection inside the eye, called endophthalmitis



A needle placed *less than a millimeter* in the wrong direction can cause **permanent damage**



# Injections around the eye are NOT minor

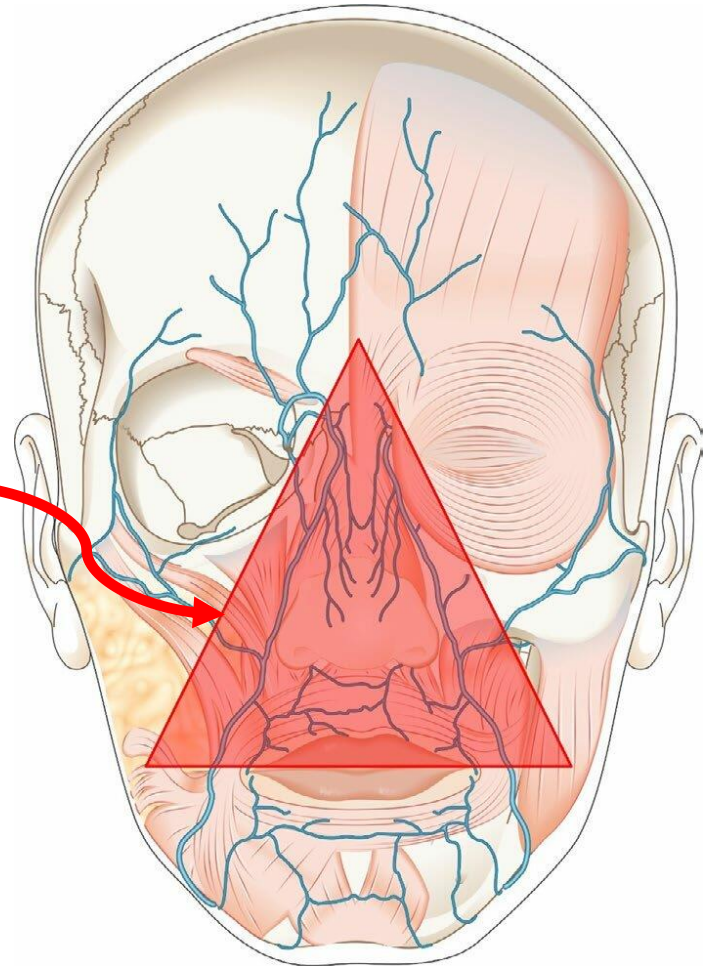
- Incorrect injection technique
- Incorrect material used
- Injection in the wrong location
- Injection into a blood vessel

**Can result in major problems**

- Death of facial tissue
- Blinding blood vessel blockage in the eye
- Life-threatening blood clot in the brain

**Blood vessels in this area connect *directly* to the brain**

Injections here can lead to **infections** and **blood clots** in the brain

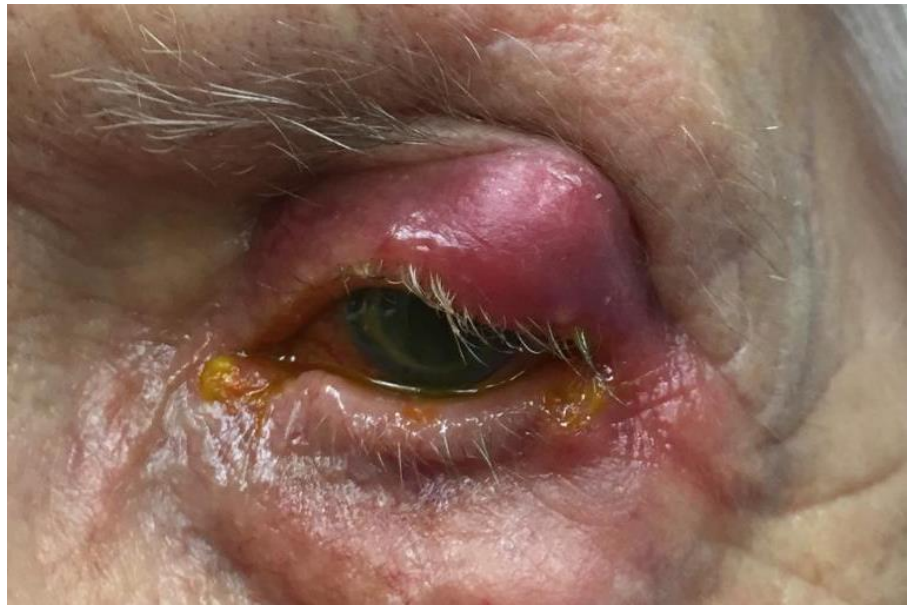


https://www.researchgate.net/publication/370631428
Salval A, Ciancio F, Margara A, Bonomi S. Impending Facial Skin Necrosis and Ocular Involvement After Dermal Filler Injection: A Case Report. Aesthetic Plast Surg. 2017 Oct;41(5):1198-1201.

# “Lumps and Bumps” can be **SKIN CANCER**

Not as easy as they sound

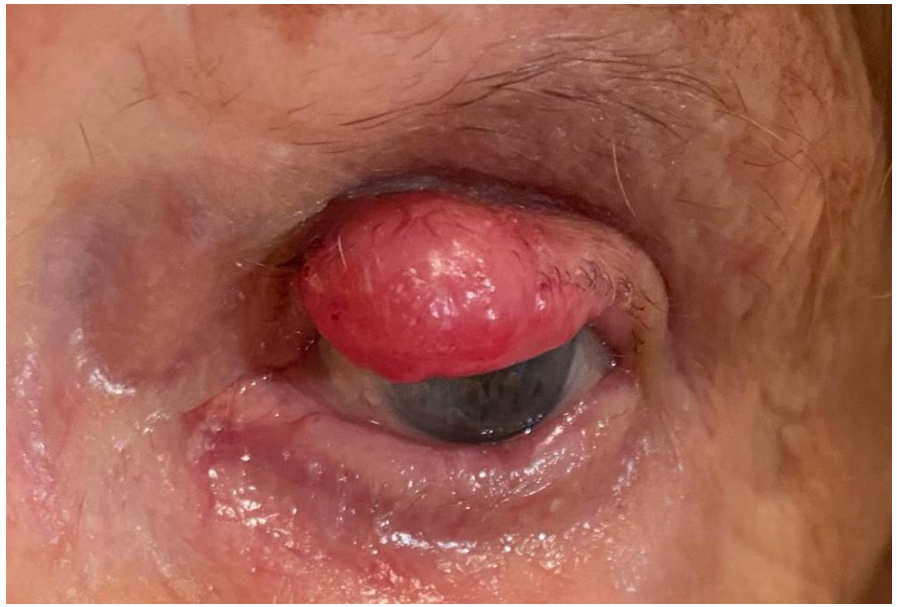
## BENIGN INFLAMMATION



**Chalazion (Stye)**

- A clogged and inflamed oil gland
- Can be treated with drainage
- ***Several types of aggressive cancers look almost identical***

## MALIGNANT CANCER



**Merkel cell carcinoma**

- An aggressive and deadly skin cancer
- MUST be treated appropriately (never with drainage)
- If it spreads, only **50%** of people survive 5 years
- If it metastasizes, **less than 25%** of people survive 5 years

https://merkelcell.org/prognosis/mcc-survival-rates/

MINNESOTA

**BOARD OF OPTOMETRY**

335 Randolph Avenue Suite 210
Telephone (651) 201-2762 Fax (651) 201-2763
mn.gov/boards/optometry/
optometry.board@state.mn.us

March 25, 2025

Rep. Jeff Backer, Chair
Rep. Robert Bierman, Chair
House Health Finance & Policy Committee

RE: Upcoming legislation to expand optometry scope of practice - HF 1011

Dear Chairs Backer and Bierman:

As the oldest Optometry Board ("Board") in the nation, our mission statement is "*to protect the public through effective licensure and enforcement of the statutes and rules governing optometry practice to reasonably ensure a standard of competent and ethical practice.*" We have a 123-year history of serving and providing the citizens of the State of Minnesota with safe and effective eye care.

**Public service is our priority**.

We wrote to you last session explaining that it has become increasingly apparent that Minnesota's Optometric Practice Act is antiquated and needs revision. Minnesota continues to lag behind other states and needs to catch up in its ability to deliver timely, quality care to Minnesotans. Expanding our scope of practice—to fall more closely in line with neighboring states—will help attract new graduates to our state, ensuring better access to care throughout the state.

We write today in support of upcoming bills to expand optometry scope of practice. We support these bills to modernize the optometric statutes for the following reasons:

- Increase timely access to quality care;
- Attract optometrists to practice in our state;
  - Balance supply and demand of practicing optometrists;
  - Meet increasing patient demand;
  - Control costs;
- Benefit patients from the latest medications and technology; and
- More fully utilize optometrist education training.

It is troublesome that the opposition to these bills comes from a small delegation of individuals who do not accurately represent the professions at large or consider the patients a priority. It is further troubling when reviewing donation logs and cooresponding votes or simply certain legislators being unwilling to hear a bill due to support thaty they have received from a very small delegation of individuals.

The Board is concerned about the impasse at the State Capitol and wants to see professional dialogue and movement for the benefit of the patients we serve. These changes are long overdue. We need to catch up with the current and rapidly changing eye care landscape, modernize the scope of optometry practice, and keep pace with the rest of the country.

Respectfully Submitted,

Dr. Eric Bailey, Chair
Dr. Sam Villella, Vice Chair
Dr. Tina McCarty, Secretary
Dr. Leah Colby
Dr. Georgiann Jensen-Bohn
Fernando Alvarado, Public Member
George Bruehl, Public Member

Minnesota Medical Association

The voice of medicine in Minnesota since 1853

612-378-1875 | 800-342-5662 | mnmed.org

March 25, 2025

Dear Members of the Health Finance and Policy Committee,

On behalf of the Minnesota Medical Association (MMA), representing more than 10,000 physicians and physicians-in-training across the state, I am writing to share the MMA's opposition to HF 1011, related to optometry scope of practice.

The limits on optometrists conducting sensitive procedures and optometric prescribing currently included in state statute serve a very important purpose in protecting the public. These are very meticulous procedures and very powerful drugs that can have significant long-term negative side effects when administered improperly or for extended periods. Renal function, the body's immune response, respiratory function, and liver function can all be impacted when these drugs are incorrectly prescribed, and long-term consequences related to eyesight are put at severe risk if injections outlined in the legislation are inappropriately administered.

Optometrists are a critical part of the health care team and are well trained to provide many health services related to eyes and eyesight. However, they do not have the same training as physicians, and specifically of ophthalmologists. An ophthalmologist receives significantly more rigorous training through medical school and residency that includes extensive procedural training and training regarding pharmacologic impacts of prescription drugs on the entire body, not just the eye. This extensive training gives ophthalmologists the experience necessary to safely prescribe drugs that can have significant side effects if used improperly. In addition, an optometrist does not have comparable training to conduct procedures outlined in the legislation, and the language **authorizing all forms of drug injections, with the exception of** sub-Tenon, retrobulbar, and intravitreal injections, makes our members particularly uncomfortable and concerned for patient health.

The current statute related to optometric scope of practice is critical for patient safety. I ask that you carefully evaluate the effect this language will have and consider the language in HF 2765 to clarify the definition of surgery in order to better protect Minnesota patients.

Thank you for your consideration.

Sincerely,

Edwin Bogonko, MD
President, Minnesota Medical Association

# HF 1011 is a SURGERY BILL

## Your constituents do NOT want this

# ANESTHESIA injections numb before SURGERY

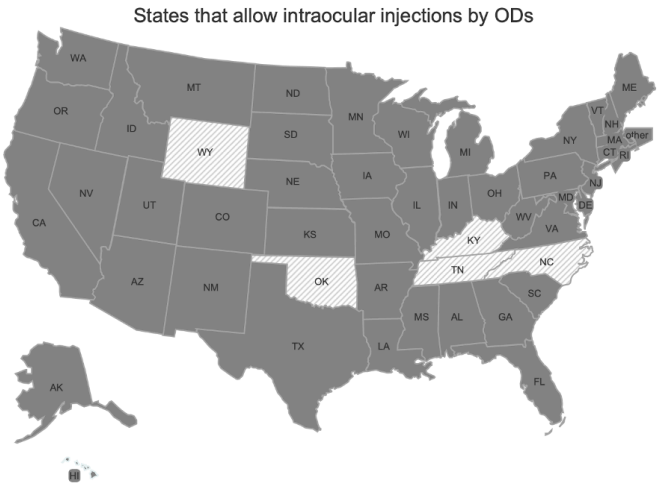
## Minnesotans <u>overwhelmingly</u> want

# SURGERY by SURGEONS

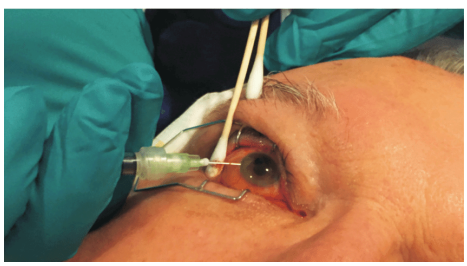
## Over 85% prefer surgeon expertise to convenience

# ONLY 5 STATES ALLOW

# ANTERIOR INTRAOCULAR INJECTIONS




*Source: State Statues and Regulations, March 2025*



*https://www.researchgate.net/figure/anterior-chamber-paracentesis-of-the-right-eye-following-an-intravitreal-injection_fig1_321974704*

## Proposal Summary/ Overview

**To be completed by proposal sponsor. (500 Word Count Limit for this page) Please read the entire questionnaire before completing this page.**

**Name: Bridget Axelson OD and Randy Kempfer OD**

**Organization: Minnesota Optometric Association**

**Phone: 952-921-5881**

**Email Address: beth@mneyedocs.org**

*Is this proposal regarding:*

- *New or increased regulation of an existing profession/occupation? If so, complete Questionnaire A.*
- *Increased scope of practice or decreased regulation of an existing profession? If so, complete this form, Questionnaire B.*
- *Any other change to regulation or scope of practice? If so, please contact the Committee Administrator to discuss how to proceed.*

1) State the profession/occupation that is the subject of the proposal.
**This scope proposal would be for the profession of optometry.**

2) Briefly describe the proposed change.

**By removing the current restrictions, the proposed change would update scope for Doctors of Optometry in an attempt to get closer to national optometry standards of education. HFXXXX/SF850 removes the 10-day prescribing limit on oral anti-viral medications, 7-day prescribing limit on oral carbonic anhydrase inhibitor (CAI's) medications, a restriction on oral steroid medications and adds a 14-day prescribing restriction on oral steroid prescription authority. The bill also allows for injection authority in and around the eye while maintaining restrictions on intravitreal, intravenous, retrobulbar and sub-tenon injections.**

3) If the scope of practice of the profession/occupation has previously been changed, when was the most recent change? Describe the change and provide the bill number if available.
**The last time the scope of practice for optometry was updated by the MN legislature was in 2003, over 20 years ago. This update provided Doctors of Optometry with the authority to prescribe oral therapeutic agents, with some restrictions.**

4) If the proposal has been introduced, provide the bill number and names of House and Senate sponsors. If the proposal has not been introduced, indicate whether legislative sponsors have been identified. If the bill has been proposed in previous sessions, please list previous bill numbers and years of introduction.

**2025/26 Session HF 1011 chief author Rep Robert Bierman, SF 850 chief author Senator Erin Maye Quade, clone bills SF 1144 and SF 1499**

**2023/24 Session HF 1031 chief author Rep Robert Bierman, SF 659 chief author Senator Erin Maye Quade**
**2021/22 Session HF 2022 chief author Rep Ruth Richardson and SF 1873 chief author Senator Mark Koran**
**2019/20 Session HF891 chief author Rep Richardson, SF545 chief author Senator Matthews**

## Questionnaire B: Change in scope of practice or reduced regulation of a health-related profession (adapted from Mn Stat 214.002 subd 2 and MDH Scope of Practice Tools)

This questionnaire is intended to help legislative committees decide which proposals for change in scope of practice or reduced regulation of health professions should receive a hearing and advance through the legislative process. It is also intended to alert the public to these proposals and to narrow the issues for hearing.

This form must be completed by the sponsor of the legislative proposal. The completed form will be posted on the committee's public web page. At any time before the bill is heard in committee, opponents may respond in writing with concerns, questions, or opposition to the information stated and these documents will also be posted. The Chair may request that the sponsor respond in writing to any concerns raised before a hearing will be scheduled.

A response is not required for questions that do not pertain to the profession/occupation (indicate "not applicable"). Please be concise. Refer to supporting evidence and provide citation to the source of the information where appropriate.

While it is often impossible to reach complete agreement with all interested parties, sponsors are advised to try to understand and to address the concerns of any opponents before submitting the form.

**1) <u>Who does the proposal impact?</u>**

a. Define the occupations, practices, or practitioners who are the subject of this proposal.

**Doctors of optometry provide primary eye care services across Minnesota. Optometrists provide full assessments of our patients visual and ocular health including treatment and management of eye diseases. As many eye conditions are part of systemic health conditions, we coordinate care with many other medical specialties as part of the overall health care model.**

b. List any associations or other groups representing the occupation seeking regulation and the approximate number of members of each in Minnesota

**The Minnesota Optometric Association is the entity representing the optometry profession in Minnesota. There are approximately 1000 licensed optometrists in Minnesota.**

c. Describe the work settings, and conditions for practitioners of the occupation, including any special geographic areas or populations frequently served.

**Doctors of optometry practice in a diverse set of clinical settings. We practice in optometry private practices, group practices that include ophthalmologists, large multi-specialty clinics, community health centers, Indian Health Services, Veterans Affairs Medical Centers, corporate chains, and in university settings. Optometrists also are involved with education and research studies of developing technologies and treatments. Optometrists practice in 77 of the 87 counties in MN, providing access to 97% of MN residents.**

d. Describe the work duties or functions typically performed by members of this occupational group and whether they are the same or similar to those performed by any other occupational groups.

**Doctors of optometry provide a comprehensive range of eye services for our patients of all age demographics. Optometrists prescribe glasses and contact lenses, including medically necessary specialty contact lenses and low vision aids for our patients. Doctors of optometry diagnose, treat, and manage eye health conditions routinely including infections involving the eye and adnexa. Doctors of optometry treat acute and chronic eye health conditions, assess ocular health affected by systemic disease and coordinate care with other health care specialties. Ophthalmologists also have the training to provide similar care. Prescriptive authority of legend drugs to treat eye health conditions are allowed to physicians, nurse practitioners, and physician assistants including injections.**

e. Discuss the fiscal impact.

**None**

**2) <u>Specialized training, education, or experience ("preparation") required to engage in the occupation</u>**

a. What preparation is required to engage in the occupation? How have current practitioners acquired that preparation?

**Doctors of optometry training includes graduating from a 4-year undergraduate program, then from a 4-year accredited school of optometry. Nearly 10,000 hours of training occurs prior receiving a license. Prior to licensure, all optometrists pass the National Board of Examiners in Optometry exams.**

b. Would the proposed scope change or reduction in regulation change the way practitioners become prepared? If so, why and how? Include any change in the cost of entry to the occupation. Who would bear the increase or benefit from reduction in cost of entry? Are current practitioners required to provide evidence of preparation or pass an examination? How, if at all, would this change under the proposal?

**The proposed scope change would not change how Doctors of Optometry enter the profession. All areas of current legislation have been part of the curriculum in optometry schools for decades. The National Board of Examiners in Optometry (NBEO) has been testing all areas of the legislation for years as well. The regulatory board for optometry already requires proof of graduation from an accredited school of optometry and successful passage of NBEO tests prior to granting a license to practice optometry.**

c. Is there an existing model of this change being implemented in another state? Please list state, originating bill and year of passage?

**48 states currently allow for prescribing oral antiviral medications without a limit for Doctors of Optometry. 48 states allow for prescribing oral carbonic anhydrase inhibitors (CAI), 44 states have no limit on length of prescription. 44 states allow optometrists to prescribe oral steroids. 25 states allow for the use of injections in optometric care.**
**Most recently Colorado, South Dakota, Iowa and Wyoming updated the scope of practice for**

**optometry to include treatment of eye diseases with injections. No state that has updated the scope of practice has repealed or rolled back authorities for Doctors of Optometry.**

**3) <u>Supervision of practitioners</u>**

a. How are practitioners of the occupation currently supervised, including any supervision within a regulated institution or by a regulated health professional? How would the proposal change the provision of supervision?

**The practice of optometry is regulated by the Minnesota Board of Optometry, appointed by the Governor of Minnesota. The State Board of Optometry is the regulatory board and has full authority to discipline practitioners and enforce scope of practice law. The proposed legislation would not change how the practice of optometry is regulated.**

b. If regulatory entity currently has authority over the occupation, what is the scope of authority of the entity? (For example, does it have authority to develop rules, determine standards for education and training, assess practitioners' competence levels?) How does the proposal change the duties or scope of authority of the regulatory entity? Has the proposal been discussed with the current regulatory authority? If so, please list participants and date.

**The Minnesota Board of Optometry has full authority to discipline practitioners. Its mission is to regulate the profession and to protect the public. It develops rules to achieve this mission and could make changes if necessary for training on a specific aspect of optometric care. We have provided updates to the Board of Optometry on the status and language of this legislation. Most recently was February 2025 during their board meeting, the update was provided by Beth Coleman-Jensen- Executive Director of the Minnesota Optometric Association.**

c. Do provisions exist to ensure that practitioners maintain competency? Under the proposal, how would competency be ensured?

**Doctors of Optometry must complete at least 40 hours of continuing education every two years to maintain licensure. It is the duty of the Minnesota Board of Optometry to regulate the profession of Optometry and protect the public. The Minnesota Board of Optometry could add other requirements if determined they were needed.**

**4) <u>Level of regulation</u> (See Mn Stat 214.001, subd. 2, declaring that "no regulations shall be imposed upon any occupation unless required for the safety and wellbeing of the citizens of the state." The harm must be "recognizable, and not remote." Ibid.)**

a. Describe how the safety and wellbeing of Minnesotans can be protected under the expanded scope or reduction in regulation.

**The Minnesota Board of Optometry is in place to protect the public and discipline practitioners that may violate statutes. All optometrists take the Optometric Oath upon graduating, which requires Doctors of Optometry to always put the health of our patients first. As health care**

**providers, optometrists are always making decisions with this in mind first. The majority of states are already allowing optometrists to practice at this level of scope and there has been no noted increase in malpractice claims in those states, which is a strong indication of how safe this level of scope is for the public. MN Doctors of Optometry have already been prescribing oral antiviral and CAI medications for decades safely and manage the ocular and systemic side effects of oral steroid medications. Doctors of Optometry currently manage complications that arise from injections in and around the eye in primary eyecare.**

b. Can existing civil or criminal laws or procedures be used to prevent or remedy any harm to the public?
**The Minnesota Board of Optometry is in place to protect the public and discipline practitioners that may violate statutes.**

**5) <u>Implications for Health Care Access, Cost, Quality, and Transformation</u>**

a. Describe how the proposal will affect the availability, accessibility, cost, delivery, and quality of health care, including the impact on unmet health care needs and underserved populations. How does the proposal contribute to meeting these needs?

**The proposed scope legislation will increase access to eye care across Minnesota. Doctors of Optometry practice in 77 of the 87 counties, in addition, Doctors of Optometry are the only eye care providers in 57 of our 87 counties. This will allow patients access to timely care from their local eye doctor rather than traveling an extended distance to see a new provider with extended wait times, further delaying care. In the metro, this will also be critically important for access of care issues especially in underserved populations. Patients with limited financial resources or transportation challenges may not have the means to travel to another part of the metro area to see another provider.**

**A National study published in the "Ophthalmology" journal in 2024- Ophthalmology Workforce Projections 2020-2035 indicates that "The present analysis of Health Resources and Services Administration (HRSA) Health Workforce Stimulation Model (HWSM) shows that ophthalmology physician workforce is inadequate to meet the demand for ophthalmological services, and this inadequacy is expected to increase by the year of 2035". [1]**
**The JAMA Ophthalmology study titled Geographic Distribution of US Ophthalmic Surgical Specialists explores the disparity between rural ophthalmic surgeons available to serve rural patients.[2] Accessibility to Doctors of Optometry is significantly greater in rural areas. Optometrists have the training and knowledge required to help reduce this gap in critical eye care.**
**A 2023 report in the Contemporary Economic Policy, "Seeing is Believing, the Effects of Optometric Practice Scope Expansion"[3] examines the staggered adoption of optometric prescription authority across states, and finds suggestive evidence that optometrist scope of practice expansion reduced vision impairment and mitigated racial and ethnic disparities in eye health.**

b. Describe the expected impact of the proposal on the supply of practitioners and on the cost of services or goods provided by the occupation. If possible, include the geographic availability of proposed providers/services. Cite any sources used.

**No optometry school exists in Minnesota, which means all Doctors of Optometry practicing in Minnesota attended school in another state and relocate back to Minnesota. When new graduates are choosing where to establish their optometric careers, a main factor in that decision is the scope of practice of the state. Our current scope of practice being in the bottoms 20% nationwide places Minnesota in a recruiting disadvantage to attract new providers to our state. Active licensure for optometry in MN has remained flat for the past few years after seeing gains in licenses prior to that.**

c. Does the proposal change how and by whom the services are compensated? What costs and what savings would accrue to patients, insurers, providers, and employers?
**There would be no known change how and by whom the services are compensated. There are potential cost savings to patients and insurers by reducing emergency room visits and redundant and unnecessary office visits seeing multiple providers to treat the same condition when the scope of practice is updated to the full expertise and training of Doctors of Optometry. A study in the Annals of Family Medicine, 2019 [4] through the provision of timely, easily accessed ambulatory care, optometrist can improve the patient experience and reduce ED use, thereby reducing costs. The cost savings opportunities are immense because of the large volume and expense of ED visits for ocular conditions that might otherwise be managed in ambulatory optometry practices.**

d. Describe any impact of the proposal on an evolving health care delivery and payment system (eg collaborative practice, innovations in technology, ensuring cultural competency, value-based payments)?

**Doctors of Optometry already play a critical role in the health care delivery model as the primary eye care provider for most of Minnesota patients. Routine, comprehensive eye exams play a critical role in preventive health care and Doctors of Optometry also treat and manage countless chronic, vision threatening eye health disorders. This legislation allows Doctors of Optometry to practice closer to modern optometric care. Current scope restrictions prevent Doctors of Optometry from utilizing innovations included in optometric instruction for the past 20 years. Optometric education, training and technology continue to evolve, our patients benefit from Doctors of Optometry practicing at the highest level of training. In many areas of the state, Doctors of Optometry are the only option for eyecare, other medical specialties rely on the expertise of optometrists to provide all needed eye care.**

e. What is the expected regulatory cost or savings to state government? How are these amounts accounted for under the proposal? Is there an up-to-date fiscal note for the proposal?
**There should be no extra regulatory cost to state government with this new legislation. New legislation could provide a savings to lowering health care costs by reducing unnecessary office visits.**

**6) <u>Evaluation/Reports</u>**

Describe any plans to evaluate and report on the impact of the proposal if it becomes law, including focus and timeline. List the evaluating agency and frequency of reviews.

**There are no specific plans for evaluation if this proposal becomes law. The Minnesota Board of**

**Optometry, the regulating board for optometry would determine any required evaluation and review if the proposed legislation becomes law.**

**7) <u>Support for and opposition to the proposal</u>**

a. What organizations are sponsoring the proposal? How many members do these organizations represent in Minnesota?
**Support for the proposal comes from the Minnesota Optometric Association. The MOA is the voice for 1000 licensed Doctors of Optometry in Minnesota.**

b. List organizations, including professional, regulatory boards, consumer advocacy groups, and others, who support the proposal.

**Minnesota Board of Optometry**

c. List any organizations, including professional, regulatory boards, consumer advocacy groups, and others, who have indicated concerns/opposition to the proposal or who are likely to have concerns/opposition. Explain the concerns/opposition of each, as the sponsor understands it.

**The Minnesota Academy of Ophthalmology has stated opposition to this proposal. They deny that there is an access issue for eyecare in Minnesota and raise concerns about safety to the public.**
**The Minnesota Medical Association has stated opposition to this proposal. They raise concerns about the training of optometrists to prescribe oral medications and raise concerns about safety to the public, they wish to maintain the status quo for optometry.**

d. What actions has the sponsor taken to minimize or resolve disagreement with those opposing or likely to oppose the proposal?

**The Minnesota Optometric Association has attempted numerous times to have open dialogue with the Minnesota Academy of Ophthalmology beginning in 2014 over this legislation. Each attempt has been met with silence, strategic delays or a statement that the Minnesota Academy of Ophthalmology would not support any part of scope increase for Doctors of Optometry. Attached is a timeline and summary of attempts by the Minnesota Optometric Association to reach out and dialogue with the Minnesota Academy of Ophthalmology.** [5]
**Most recently in 2024– the Doctors of Optometry representing the Minnesota Optometric Association met in person with the Ophthalmologists representing the Minnesota Academy of Ophthalmology on 3 separate occasions with assistance of Sen Wiklund's staff to attempt to find common ground. The Academy of Ophthalmology denied any and all scope of practice modifications in regard to injections and medications.**

**References**

1: Berkowitz ST, Finn AP, Parikh R, Kuriyan AE, Patel S. Ophthalmology Workforce Projections in the United States, 2020 to 2035. Ophthalmology. 2024 Feb;131(2):133-139. doi: 10.1016/j.ophtha.2023.09.018. Epub 2023 Sep 20. PMID: 37739231.

2. Ahmed A, Ali M, Dun C, Cai CX, Makary MA, Woreta FA. Geographic Distribution of US

Ophthalmic Surgical Subspecialists. JAMA Ophthalmol. Published online January 02, 2025. doi:10.1001/jamaophthalmol.2024.5605

3. Bae, K, Timmons, E. & Nandy, P. (2025) Seeing is Believing: The effects of optometrist scope of practice expansion. *Contemporary Economic Policy*, 43(1), 135-160.

4. Alder A, Warren F, Antar H, Steinkrauss M, Bjoern B, Konar V, Flanagan J, Polakoff D. Transformation Support Provided Remotely to a National Cohort of Optometry Practices. The Annals of Family Medicine Aug 2019, 17 (Suppl1); DOI: 10.1370/afm.2423

5. Timeline of meeting between the Minnesota Optometric Association and the Minnesota Academy of Ophthalmology.

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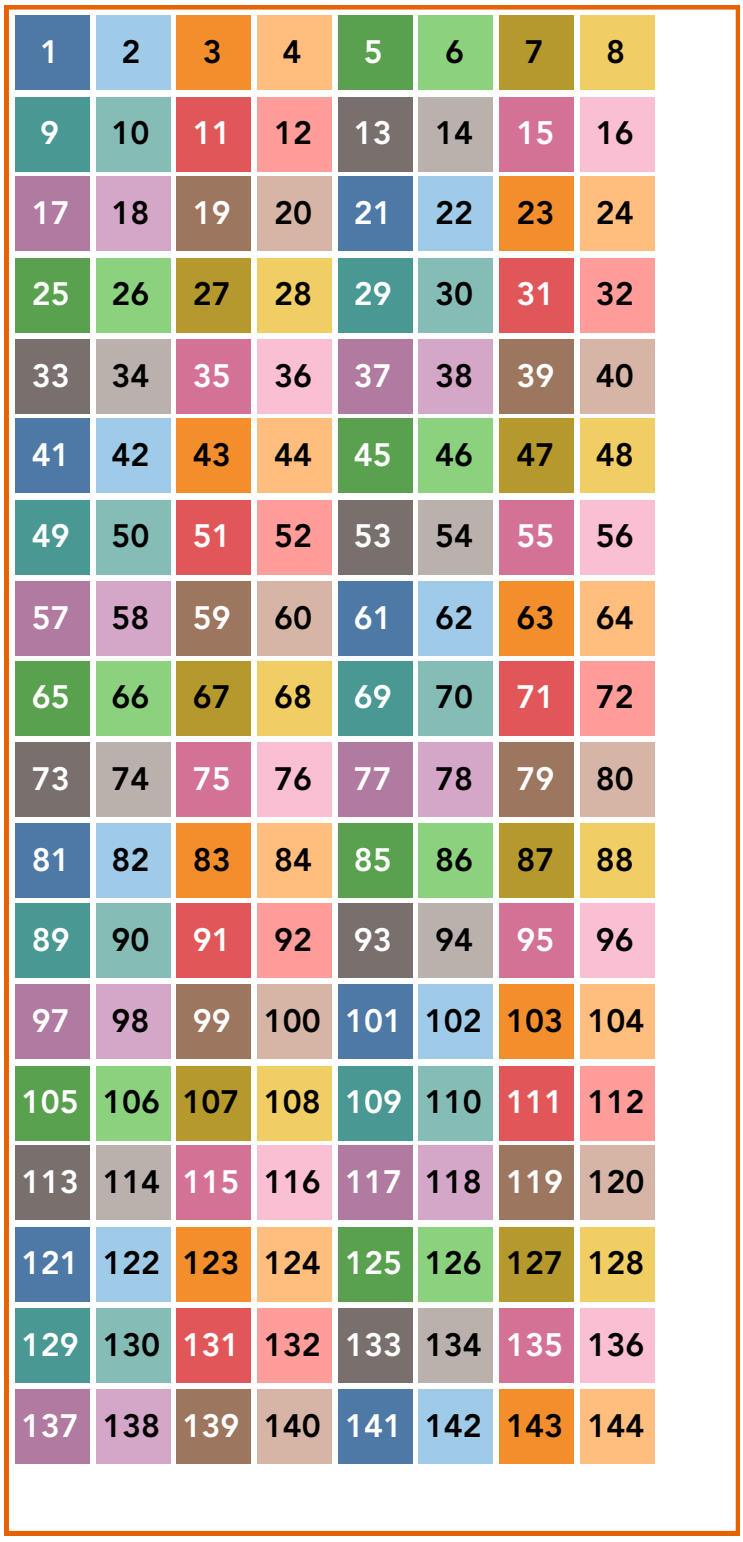
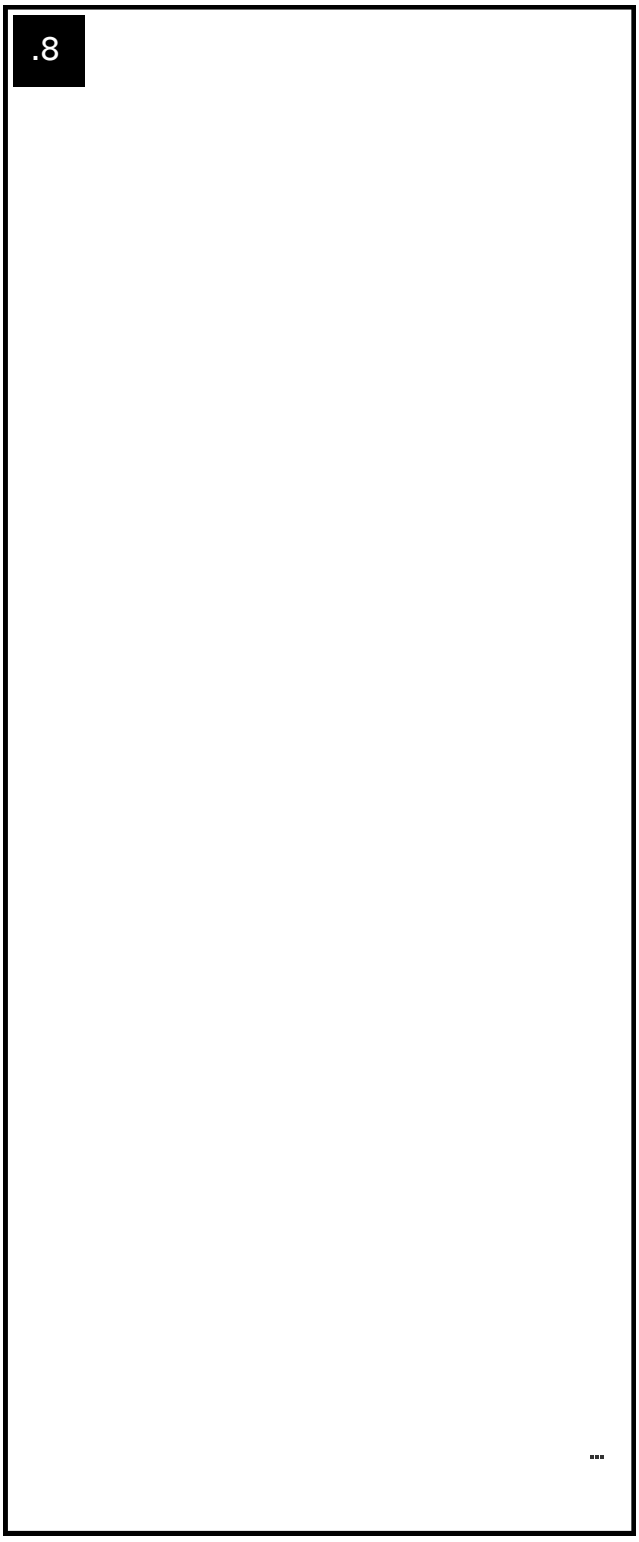
## Ophthalmology: 144 Weeks of Surgical Training




## Optometry: Less than 1 Week of Surgical Training



# Closing the Patient Eye Care Gap:

## SUPPORT HF1011/SF1144

Minnesota ranks in the **bottom 20%** nationwide for optometry scope of practice. HF1011/SF1144 removes outdated restrictions, aligning our state with the majority of the country and **improving patient access to critical eye care.**

## HF1011/SF1144

- All procedures in the bill have been taught and tested in optometry schools for decades.
- No state has ever reversed an optometry scope expansion, proving its safety and effectiveness.
- Malpractice rates remain unchanged in states where these procedures are already allowed.
- Studies show significant decline in visual impairment when scope expands for Doctors of Optometry.
- A growing eye care shortage is projected to worsen by 2035. *(Reported by an ophthalmology journal)*

---

Doctors of optometry have been managing ocular disease for decades. Unfortunately, with no updated scope laws in the last 20 years, **Minnesota optometrists are forced to practice outdated optometry**, leaving Minnesotans in desperate need of eye care with a short list of imperfect options.

Optometrists are expertly trained to deliver an essential component of patients' overall primary health care; the doctoral level degree program in optometry is comprised of four years of extensive didactic and clinical training at an accredited optometry school. During a comprehensive eye exam, doctors of optometry not only determine eye and vision health, but can also identify early signs and manifestations of systemic diseases including diabetes, high blood pressure, cancer and more. Minnesota optometrists prescribe medications for ocular disease, assist in the prevention of disease and provide urgent ocular care for injuries and infections.

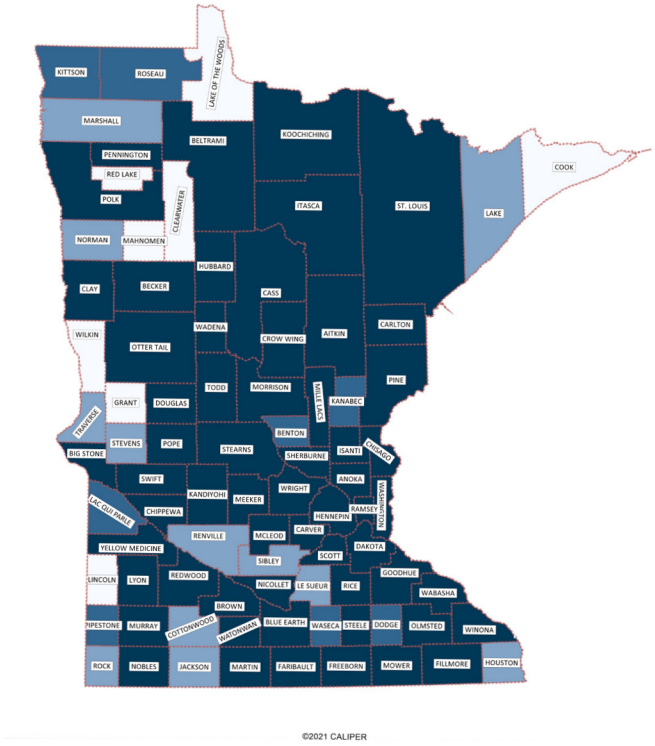
## HF1011/SF1144 would ...

- Remove 10-day restriction on oral antivirals *(48 states allow).*
- Remove 7-day restriction on oral carbonic anhydrase inhibitors *(44 states allow).*
- Allow oral steroids with a 14-day limit *(44 states allow).*
- Permit injections to treat eye conditions *(25 states allow).*

**Minnesotans deserve the right to see their trusted eye doctor for the care they need.** Support **HF1011/ SF1144** to ensure access to modern, high-quality optometric care.

# Access to Essential Eye Care for Minnesotans

Optometry has greater geographic distribution and is more accessible to patients than other eye care professions in Minnesota; 77 out of 87 counties in Minnesota have an Optometrist.

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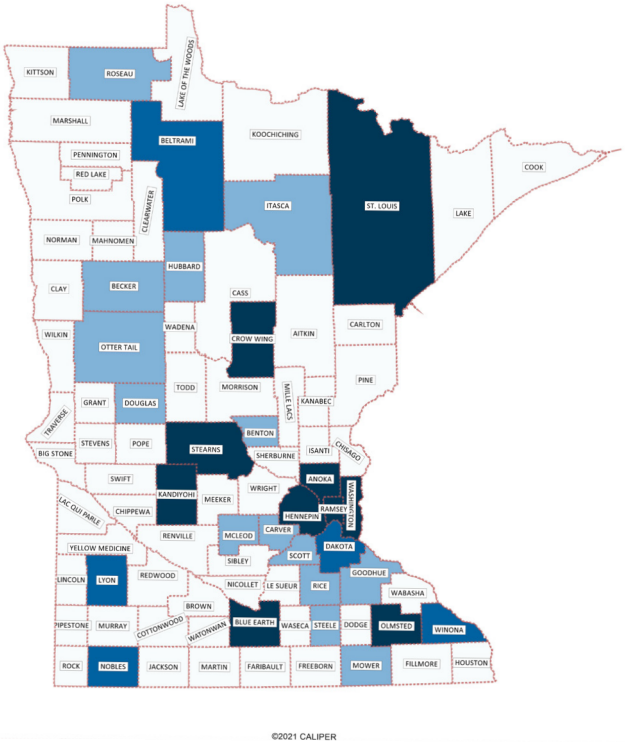
**Minnesota Access to Eye Care – 2022**

Doctor of Optometry Location/Doctor Combinations

NONE | 1 | 2 | 3 or more

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**Minnesota Access to Eye Care – 2022**

Ophthalmology Locations/Doctor Combinations

NONE | 1 | 2 | 3 or more

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Contact Minnesota Optometric Association

Executive Director Beth Coleman-Jensen

at 952.921.5881 or beth@mneyedocs.org.

**OR**

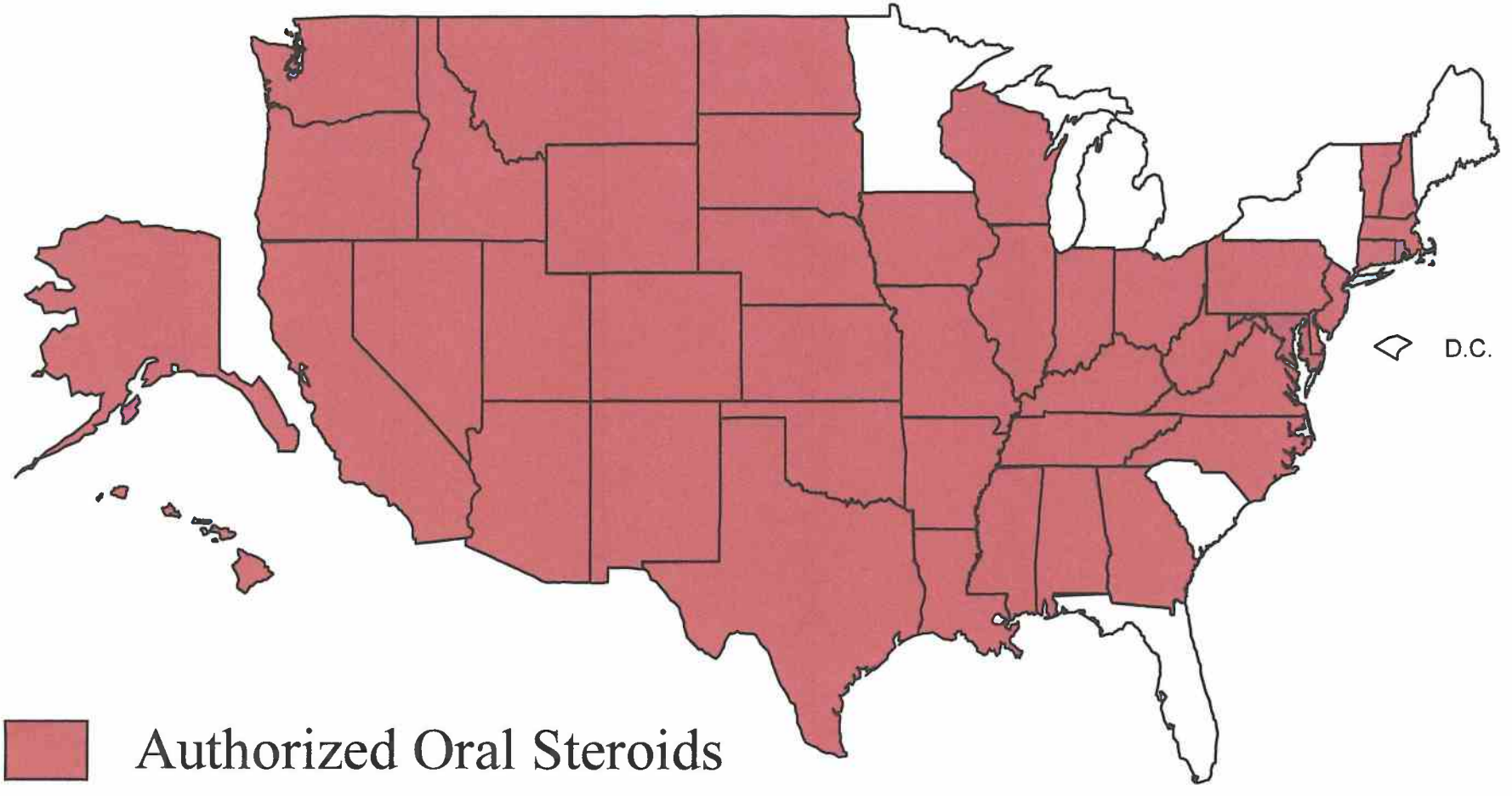
Learn more by scanning

the QR code or by visiting

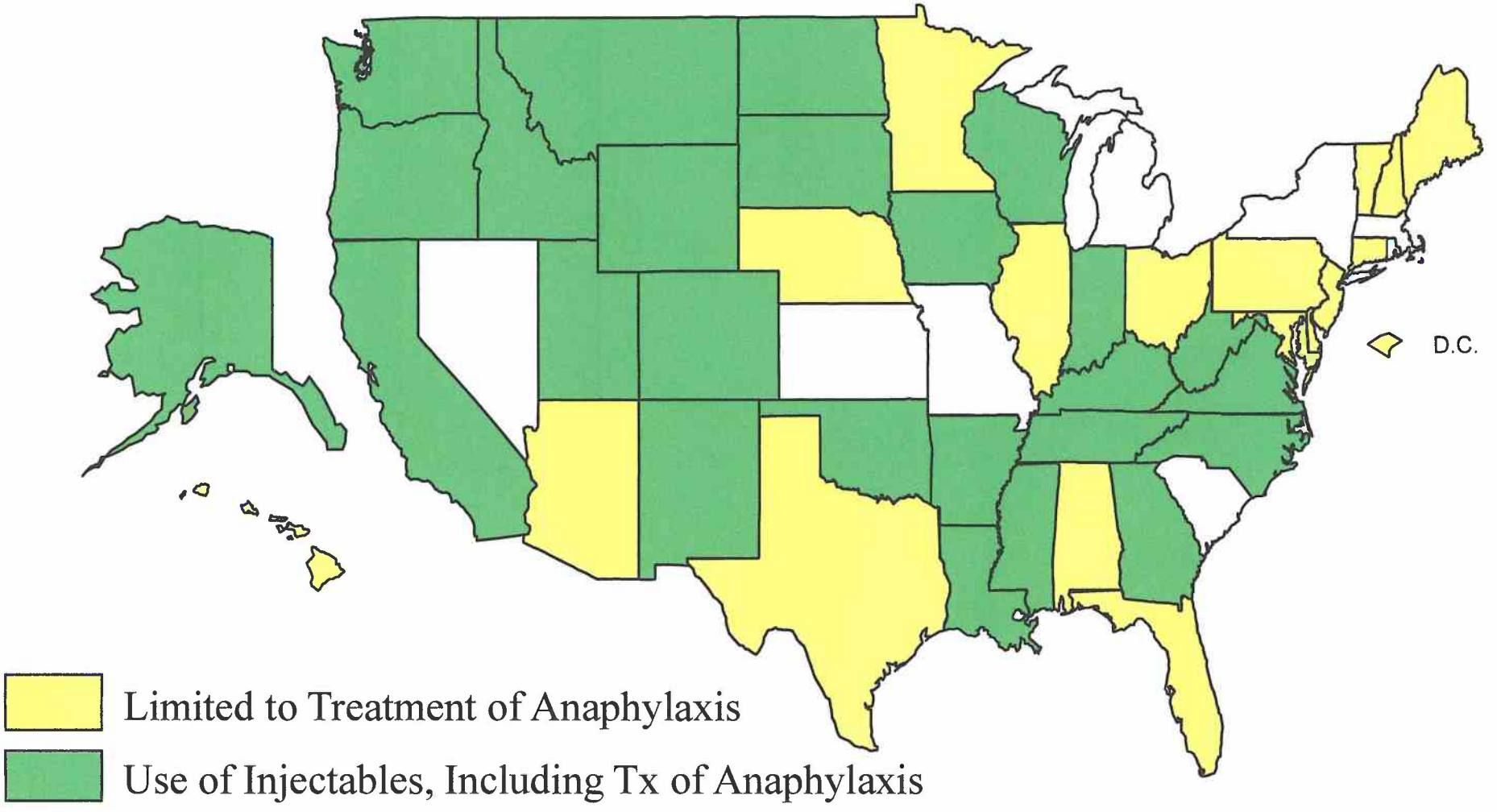
trustedeyecaremn.com

Minnesota's Optometrists

# Oral Steroids



# Injectable Authority



Dear Legislators:

I am writing to you with my personal story of the importance of scope expansion for optometrists in Minnesota.

I live outside Searles, MN and work in Madelia. My optometrist, Viktoria Davis, is also in Madelia. In late October, when I was helping with harvest, I discovered a lump in my lower right lid. After harvest was over, I visited Dr. Davis and she diagnosed me with an “internal hordeolum” - the technical term for a stye. She recommended warm compresses and daily lid scrubs as well as limiting my contact lens wear. By mid-December, the lump was not getting better. I saw Dr. Davis again, and she prescribed oral antibiotics as well as letting me know that if it did not resolve it would require excision. She also explained that she was trained to do the excision, and if I lived in any state surrounding Minnesota she would be able to remove it. However, due to scope of practice laws in Minnesota she would have to refer me to an ophthalmologist.

The bump still had not resolved after Christmas, and so I talked to her staff and they set me up with an appointment with the nearest ophthalmologist, in Mankato. They explained that unfortunately the ophthalmologist was extremely busy, and also required a visit to evaluate the bump before taking it out. They would get this appointment as soon as possible. The first available wound up being almost a month out - a month when I was still in pain and my eyelid was still swollen.

I went to the evaluation appointment - taking time off work and driving the 60 mile round trip. I was irritated that I learned absolutely nothing from that appointment that Dr. Davis had not told me before. It was confirmed that I had an internal hordeolum, first line treatment was warm compresses and lid scrubs, second line was oral antibiotics, and third line was excision. At first the earliest available appointment for excision was another three weeks out, but thankfully they were able to “squeeze me in” only a few days out.

This, of course, required another 60 mile round trip and more time off work. They also recommended a driver, so my mom had to come along too.

I have health insurance. However, since these visits were in January they were applied to my deductible - a total of almost $500. Interestingly, the “evaluation” appointment was more expensive than the excision!

If Dr. Davis had just been able to remove the lump originally, it would have saved me almost two months of pain, 120 miles of driving, $500, and time off work.

I strongly encourage you to support the scope expansion of optometrists in Minnesota so that they can continue to treat their patients thoroughly, promptly, efficiently, and without wasting money.

Sincerely,

Jackie Goblirsch


# Office of the Revisor of Statutes

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## Search Legal Material

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exact | invasive surgery

+ Add search term(s)

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## Results

Found 1 result after searching for **invasive surgery**(exact) in 2024 Statutes.

get search link | Sort by: Citation | 10 per page

2024 Minnesota Statutes > HEALTH > Chapter 148 - PUBLIC HEALTH OCCUPATIONS

### Section 148.56 OPTOMETRISTS.

Found 1 occurrence.

...intramuscularly, or by injection, except for treatment of anaphylaxis; (2) **invasive surgery** including, but not limited to, surgery using lasers; (3...

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JAMA Ophthalmology | Original Investigation

# Geographic Distribution of US Ophthalmic Surgical Subspecialists

Aishah Ahmed, BA; Muhammad Ali, MBBS; Chen Dun, MHS; Cindy X. Cai, MD, MS; Martin A. Makary, MD, MPH; Fasika A. Woreta, MD, MPH

**IMPORTANCE** While urban counties maintain higher densities of ophthalmologists than rural counties, the geographic distribution of ophthalmic surgical subspecialists has not yet been elucidated. A potential workforce discrepancy may impact the burden of care faced by rural surgeons.

**OBJECTIVE** To assess the geographic distribution of the ophthalmic subspecialist surgeon workforce and evaluate factors associated with practicing in rural areas.

**DESIGN, SETTING, AND PARTICIPANTS** This cross-sectional population-based study of Medicare patients and surgeons performing subspecialized procedures took place from 2012 through 2022. Medicare Fee-for-Service claims were analyzed in 2023 for patients 65 years or older who underwent subspecialized ophthalmic procedures between 2012 and 2022 using *Current Procedural Terminology* codes (n = 1 619 043). Surgeons were defined as a subspecialist based on *Current Procedural Terminology* codes, indicating performance of at least 1 subspecialty procedure from the following subspecialties: cornea, glaucoma, oculoplastic, retina, or strabismus (n = 13 526).

**MAIN OUTCOMES AND MEASURES** The primary outcome was the population density of practice for subspecialist surgeons and residence for patients (rural or urban). The secondary outcomes were the characteristics associated with rural practice.

**RESULTS** Among 13 526 ophthalmic surgical subspecialists, 9823 were male (72.6%), 3235 were female (26.8%), and 4484 (33.2%) practiced in the South. There were 2540 cornea subspecialists (18.5%), 3676 glaucoma subspecialists (26.8%), 1951 oculoplastic subspecialists (14.2%), 4123 retina subspecialists (30.0%), and 1236 strabismus subspecialists (9.0%). Across subspecialties, a higher proportion of patients (17.4%; 95% CI, 16.9%-17.9%) resided in rural areas relative to surgeons (5.6%; 95% CI, 5.3%-5.9%) with differences ranging from 6.2% to 14.8% across subspecialities. Female surgeons (adjusted odds ratio [aOR], 0.63; 95% CI, 0.51-0.79; $P < .001$), surgeons in the Northeast (aOR, 0.62; 95% CI, 0.48-0.78; $P < .001$), surgeons in the West (aOR, 0.63; 95% CI, 0.50-0.79; $P < .001$), and recent graduates relative to those who graduated 11 to 20 years ago (aOR, 1.66; 95% CI, 1.25-2.21; $P < .001$), 21 to 30 years ago (aOR, 1.83; 95% CI, 1.38-2.42; $P < .001$), or 31 years ago or longer (aOR, 1.43; 95% CI, 1.08-1.90; $P = .013$), were less likely to practice rurally.

**CONCLUSIONS AND RELEVANCE** This cross-sectional study between 2012 and 2022 identified higher proportions of rural patients compared with rural surgeons. Percentages of rural surgeons declined over time, with female surgeons and recent medical school graduates less likely to practice rurally. This suggests a disparity in the number of rural subspecialist surgeons available to serve rural patients.

Invited Commentary

Supplemental content

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*JAMA Ophthalmol*. doi:10.1001/jamaophthalmol.2024.5605
Published online January 2, 2025.

Over 90 million Americans older than 40 years have vision problems.[1] As the US population continues to expand and age, the demand for ophthalmic care is expected to rise.[2,3] The most commonly performed ophthalmic surgery in the US is cataract removal, typically considered a general ophthalmology procedure.[4] However, a growing aging population demands an increase in the number of subspecialty-specific ophthalmic surgeries performed as well.[5] Yet, access to these interventions hinges on the accessibility of subspecialist ophthalmic surgeons, which may vary with location.

Physician density is higher in metropolitan counties than in rural counties,[6] with a growing urban-rural gap among primary care physicians.[7] Additionally, general surgeons in rural communities have been shown to perform specialized procedures more frequently than their urban counterparts due to shortages of rural surgical specialists.[8] Among ophthalmologists, there is a larger workforce density in metropolitan and nonmetropolitan counties compared with rural counties.[9] Previous research shows that as the proportion of a county's urban residents increases, the density of ophthalmologists increases,[10] highlighting the scarcity of rural ophthalmologists. It has been established that limited access to ophthalmic care generates negative outcomes among rural or patients in underserved communities, including increased prevalence of visual impairment, diabetic retinopathy, and macular degeneration.[11-14] As such, it is crucial that there is a rural ophthalmic subspecialist workforce available to meet rural patients' ophthalmic needs.

While there are known distribution discrepancies in the physician and general ophthalmologist workforce,[15] the geographic distribution of ophthalmic surgical subspecialists has not been elucidated. Furthermore, rurality practice patterns of ophthalmic surgical subspecialists have not been analyzed over time, limiting insight on trends in the rural ophthalmic subspecialist-surgeon workforce.[16] In this study, we aimed to determine the geographic and urban-rural distribution of ophthalmic surgical subspecialists, including cornea, glaucoma, oculoplastic, retina, and strabismus specialists, across the US and assess surgeon characteristics associated with rural practice from 2012 to 2022.

### Key Points

**Question** What is the geographic distribution of ophthalmic surgical subspecialist surgeons in the US and what surgeon demographics are associated with rural practice?

**Findings** This cross-sectional study between 2012 and 2022 identified higher proportions of rural patients compared with rural surgeons. The percentage of rural surgeons declined over time; furthermore, female surgeons and more recent medical school graduates were less likely to practice rurally.

**Meaning** These results suggest that the rural US faces increasing ophthalmic subspecialty surgeon shortages.

## Methods

### Study Population

We conducted a retrospective, cross-sectional analysis using 100% Medicare Fee-For-Service claims data for traditional Medicare obtained from the US Centers for Medicare and Medicaid Services virtual research data center. For this reason, informed consent was not needed. This study received approval from the institutional review board of the Johns Hopkins University School of Medicine and adhered to the principles of the Declaration of Helsinki. This study followed the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) reporting guidelines.

We identified patients 65 years or older who underwent a subspecialized ophthalmic surgery between January 1, 2012, and December 31, 2022, using *Current Procedural Terminology* codes (eTable 1 in the Supplement). Our criteria to define ophthalmic subspecialists, based on Cai et al,[17] incorporated procedural minimums from the Accreditation Council for Graduate Medical Education, fellowship training requirements, credentialing guidelines, and expert consensus to construct a list of subspecialty-specific operations. A surgeon's subspecialty was defined via *Current Procedural Terminology* code if they performed at least 1 of the following subspecialty operations: cornea (corneal transplant), glaucoma (trabeculectomy, aqueous shunt implant), oculoplastic (lacrimal gland procedure, enucleation, exenteration, orbitotomy, ocular implant procedure), retina (repair of retinal detachment, pars plana vitrectomy), or strabismus (strabismus surgery). Surgeons who performed procedures across multiple subspecialties were defined based on the plurality of procedures performed.

For surgeons performing equal numbers of operations across more than 1 subspecialty domain (n = 233), we reviewed practice website information and virtual physician profiles to determine if they held a fellowship[17]; based on this method, 30 surgeons were sorted into cornea (12.9%), 9 into glaucoma (3.9%), 1 into oculoplastic (0.4%), 8 into retina (3.4%), and 7 into strabismus (3.0%). The remaining surgeons were determined to be general ophthalmologists, and thus were excluded from the data. Patients were excluded from the study population if they were younger than 65 years and/or did not have demographic information (eFigure 1 in Supplement 1).

### Outcomes: Surgeon and Patient Characteristics

Each procedural claim was linked to a National Provider Identifier to extract surgeon characteristics from the Medicare Data on Provider Practice and Specialty and Physician Compare National Downloadable file. Characteristics collected were sex (male, female, unknown), census region (Midwest, Northeast, South, West, other, or unknown), rurality (urban, rural, not available), and years since medical school graduation (0 to 10, 11 to 20, 21 to 30, 31 or more, or unknown). We defined an urban area of practice as a metropolitan or micropolitan core-based statistical area (CBSA) and a rural area of practice as a non-CBSA. The CBSA or non-CBSA that contained the most line items for that surgeon was used to identify the census region and rurality of practice for that surgeon. Years since graduation were calculated from graduation until the last operation in the study period.

Table 1. Ophthalmic Surgeon Characteristics By Subspecialty Type Between 2012 and 2022

| Characteristic | No. (%) | | | | | *P* value |
|---|---|---|---|---|---|---|
| | Cornea (n = 2540) | Glaucoma (n = 3676) | Oculoplastic (n = 1951) | Retina (n = 4123) | Strabismus (n = 1236) | |
| Surgeon sex | | | | | | |
| Male | 1791 (70.51) | 2659 (72.33) | 1384 (70.94) | 3276 (79.46) | 713 (57.69) | <.001 |
| Female | 639 (25.16) | 888 (24.16) | 531 (27.22) | 669 (16.23) | 508 (41.10) | |
| Unknown | 110 (4.33) | 129 (3.51) | 36 (1.85) | 178 (4.32) | 5 (1.21) | |
| Difference between male-female, % (95% CI) | 45.35 (41.39-49.31) | 48.17 (44.88-51.46) | 43.72 (39.25-48.19) | 63.23 (60.11-66.35) | 16.59 (10.90-22.19) | |
| Census region of practice location | | | | | | |
| Midwest | 477 (18.78) | 691 (18.80) | 355 (18.20) | 753 (18.26) | 282 (22.82) | <.001 |
| Northeast | 518 (20.39) | 806 (21.93) | 368 (18.86) | 889 (21.56) | 250 (20.23) | |
| South | 857 (33.74) | 1171 (31.86) | 690 (35.37) | 1349 (32.72) | 417 (33.74) | |
| West | 567 (22.32) | 846 (23.01) | 490 (25.12) | 915 (22.19) | 265 (21.44) | |
| Other or unknown | 121 (4.76) | 162 (4.41) | 48 (2.46) | 217 (5.26) | 22 (1.78) | |
| Difference across regions, % (95% CI) | 28.89 (25.50-32.46) | 27.45 (24.16-30.74) | 32.91 (28.95-36.87) | 27.46 (24.17-30.75) | 21.04 (17.63-24.45) | |
| Rurality of practice location | | | | | | |
| Urban | 2319 (91.30) | 3270 (88.96) | 1780 (91.24) | 3745 (90.83) | 1169 (94.58) | <.001 |
| Rural | 110 (4.33) | 277 (7.54) | 135 (6.92) | 200 (4.85) | 52 (4.21) | |
| NA | 111 (4.37) | 129 (3.51) | 36 (1.85) | 178 (4.32) | 15 (1.21) | |
| Difference between urban-rural, % (95% CI) | 86.97 (82.9-90.95) | 81.42 (78.13-84.71) | 84.32 (79.85-88.79) | 85.98 (82.86-89.10) | 90.37 (84.77-95.97) | |
| Years since medical school graduation | | | | | | |
| 0-10 | 545 (21.46) | 588 (16.00) | 278 (14.25) | 679 (16.47) | 132 (10.68) | <.001 |
| 11-20 | 678 (26.69) | 712 (19.37) | 468 (23.99) | 1038 (25.18) | 253 (20.47) | |
| 21-30 | 488 (19.21) | 740 (20.13) | 392 (20.09) | 868 (21.05) | 251 (20.31) | |
| ≥31 | 551 (21.69) | 1037 (28.21) | 476 (24.40) | 1004 (24.35) | 328 (26.54) | |
| Unknown | 278 (10.94) | 599 (16.29) | 337 (17.27) | 534 (12.95) | 272 (22.01) | |
| Difference among years, % (95% CI) | 7.48 (5.62-9.34) | 12.21 (9.43-15.00) | 10.15 (7.93-12.37) | 8.88 (7.01-10.7%) | 15.86 (12.77-18.95) | |

Abbreviation: NA, not available.

The Medicare Master Beneficiary Summary File was used to extract patient characteristics per claim, including age (65 to 74 years, 75 to 84 years, 85 years or older), sex (male, female), race and ethnicity (White, Black, Hispanic, Asian, other or unknown, North American native), census region of zip code (Midwest, Northeast, South, West, other, or unknown), Charlson Comorbidity Index (0, 1 to 6, or 7 or more), zip code rurality (urban, rural), and zip code median income ($0 to 45 999, $46 000 to 60 999, $61 000 to 81 999, $82 000 or more, or unknown). To determine Charlson Comorbidity Index, we reviewed patients' inpatient, outpatient, and carrier claims up to 1 year before their procedure. At least 1 diagnosis from inpatient claims or at least 2 diagnoses recorded more than 30 days apart from outpatient and carrier claims was required for comorbidity.[18]

### Statistical Analysis

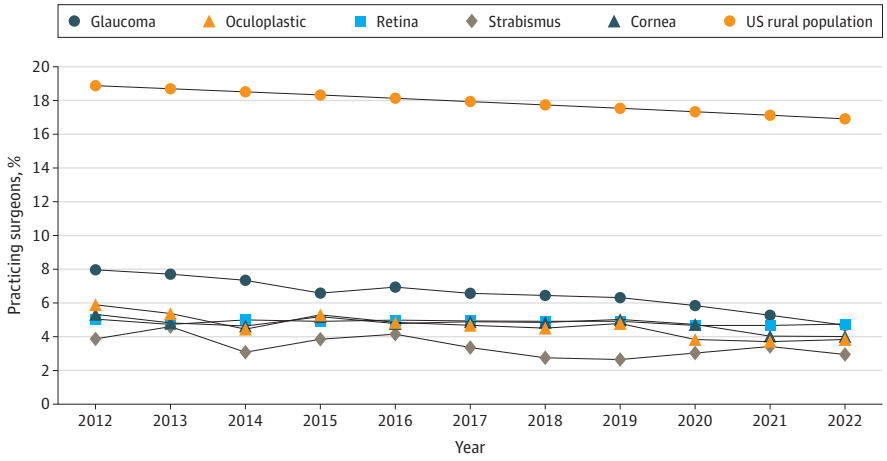
Continuous variables were presented as mean with SD or median with IQR. Categorical data were expressed as numbers and percentages. Two-sample *t* tests were used to compare continuous variables, while Pearson $\chi^2$ tests were used for comparing categorical variables. Cochran-Mantel-Haenszel test was used to evaluate trends in surgeon data over time. Multivariable logistic regression model, adjusted for surgeon sex, census region of practice, years since medical school graduation, and surgical volume by quartile, was used to evaluate surgeon characteristics associated with rural practice. The statistical analyses were executed using SAS Enterprise version 7.1 (SAS Institute). All *P* values were 2-sided but not adjusted for multiple analyses.

## Results

### Surgeon and Patient Demographics With Trends Over Time

**Table 1** summarizes surgeon demographics by subspecialty type. There was a total of 2540 cornea, 3676 glaucoma, 1951 oculoplastic, 4123 retina, and 1236 strabismus surgical subspecialists in the US who performed subspecialty operations between 2012 and 2022 in the Medicare database. There was a difference in the number of operations performed between male and female surgeons, with male surgeons completing

Figure 1. Percentage of Subspecialist Surgeons Who Practice in Rural Areas by Year, 2012 to 2022




| | Total surgeons, No. | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Subspecialty | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Cornea | 1446 | 1494 | 1489 | 1466 | 1527 | 1514 | 1547 | 1573 | 1481 | 1465 | 1389 |
| Glaucoma | 2222 | 2167 | 2111 | 2081 | 2032 | 2024 | 1940 | 1884 | 1762 | 1783 | 1752 |
| Oculoplastic | 984 | 949 | 922 | 963 | 948 | 941 | 976 | 962 | 887 | 890 | 887 |
| Retina | 2491 | 2528 | 2566 | 2607 | 2634 | 2695 | 2728 | 2745 | 2746 | 2762 | 2802 |
| Strabismus | 672 | 696 | 683 | 675 | 699 | 685 | 691 | 718 | 626 | 644 | 631 |

Between 2012 and 2022, the percentage of surgeons practicing in rural settings declined, with cornea surgeons declining by 1.3% (95% CI, 0.9%-1.7%), glaucoma declining by 3.3% (95% CI, 2.6%-4.0%), oculoplastic declining by 2.1% (95% CI, 1.3%-2.9%), retina declining by 0.4% (95% CI, −0.2% to 1%), and strabismus declining by 1.0% (95% CI, 0.4%-1.6%) (Cochran-Mantel-Haenszel test; $P < .001$). This is occurring alongside a 2.0% decline in the US rural population (95% CI, 1.5%-2.4%), values for which were obtained from the World Bank Open DataBank.

more procedures than female surgeons across all subspecialties (cornea difference, 45.4%; 95% CI, 41.4%-49.3%; glaucoma difference, 48.2%; 95% CI, 44.9%-51.5%; oculoplastic difference, 43.7%; 95% CI, 39.3%-48.2%; retina difference, 63.2%; 95% CI, 60.1%-66.4%; and strabismus difference, 16.6%; 95% CI, 11.0%-22.2%) ($P < .001$). A higher proportion of ophthalmic subspecialist surgeons practiced in the South (857 cornea [33.7%], 1171 glaucoma [31.9%], 690 oculoplastic [35.4%], 1349 retina [32.7%], and 417 strabismus [33.7]) relative to other census regions ($P < .001$). The Midwest had the lowest proportion of cornea (477 [18.8%]), glaucoma (691 [18.8%]), oculoplastic (355 [18.2%]), and retina (753 [18.3%]) surgeons and the Northeast had the lowest proportion of strabismus surgeons (250 [20.2%]) ($P < .001$).

Across all surgical subspecialties, there was a difference in the number of surgeons practicing in urban settings compared with rural settings, with most surgeons practicing in urban settings compared with rural settings (cornea difference, 87.0%; 95% CI, 83.0%-91.0%; glaucoma difference, 81.4%; 95% CI, 78.1%-84.7%; oculoplastic difference, 84.3%; 95% CI, 79.9%-88.8%; retina difference, 86.0%; 95% CI, 82.9%-89.1%; and strabismus difference, 90.4%; 95% CI, 84.8%-96.0%) ($P < .001$). Between 2012 and 2022, the percentage of surgeons practicing in rural settings declined with cornea surgeons declining by 1.3% (95% CI, 0.9%-1.7%), glaucoma declining by 3.3% (95% CI, 2.6%-4.0%), oculoplastic declining by 2.1% (95% CI, 1.3%-2.9%), retina declining by 0.4% (95% CI, −0.2% to 1%), and strabismus declining by 1.0% (95% CI, 0.4%-1.6%). This is occurring alongside a 2.0% decline in the US rural population (95% CI, 1.5%-2.4%) (**Figure 1**) (eTable 2 in Supplement 1).

eTable 3 in Supplement 1 summarizes patient demographics by subspecialty surgery received. There was a difference between the number of patients residing in urban areas compared with rural areas across all subspecialties, with most patients who underwent subspecialty surgery residing in urban areas (cornea difference, 63.7%; 95% CI, 63.2%-64.1%; glaucoma difference, 69.2%; 95% CI, 68.8%-69.6%; oculoplastic difference, 73.8%; 95% CI, 73.1%-74.5%; retina difference, 60.6%; 95% CI, 60.5%-60.8%; strabismus difference, 65.1%; 95% CI, 64.3%-66.0%; combined 2 or more subspecialty surgeries difference, 68.0%; 95% CI, 65.2%-70.8%) ($P < .001$). eTable 4 in Supplement 1 shows the number of each subspecialty's rurally residing patients by year from 2012 to 2022.

## Geographic and Rural Distribution of Ophthalmic Subspecialty Surgeons vs Patients

**Figure 2** shows the geographic distribution of subspecialty surgeons per 10 000 patients by census region. The West had the highest number of surgeons per 10 000 patients for cornea (158) and glaucoma (156), while the Midwest and South had the lowest for cornea (102) and glaucoma (110), respectively. The West also led in oculoplastic surgeons per 10 000 patients (300) with the fewest in the South (196). The Northeast had the highest number of retina surgeons per 10 000 patients (54) and the South had the lowest (33). The Northeast also had the most strabismus surgeons per 10 000 patients (332), with the South having the least (208).

Across all subspecialties, a greater proportion of patients resided rurally (cornea, 18.2%; glaucoma, 15.4%; oculoplastic, 13.1%; retina, 19.7%; strabismus, 16.0%) compared with the proportion of rurally practicing surgeons (cornea, 4.3%; glaucoma, 7.5%; oculoplastic, 6.9%; retina, 4.9%; strabismus, 4.2%) ($P < .001$). The cornea patient-surgeon difference was 13.8% (95% CI, 13.2%-14.5%). The glaucoma patient-surgeon difference was 7.9% (95% CI, 7.3%-8.4%). The oculoplastic patient-

Figure 2. Number of Surgeons Per 10 000 Patients Per Subspecialty by US Census Region (Northeast, South, Midwest, West) Between 2012 and 2022

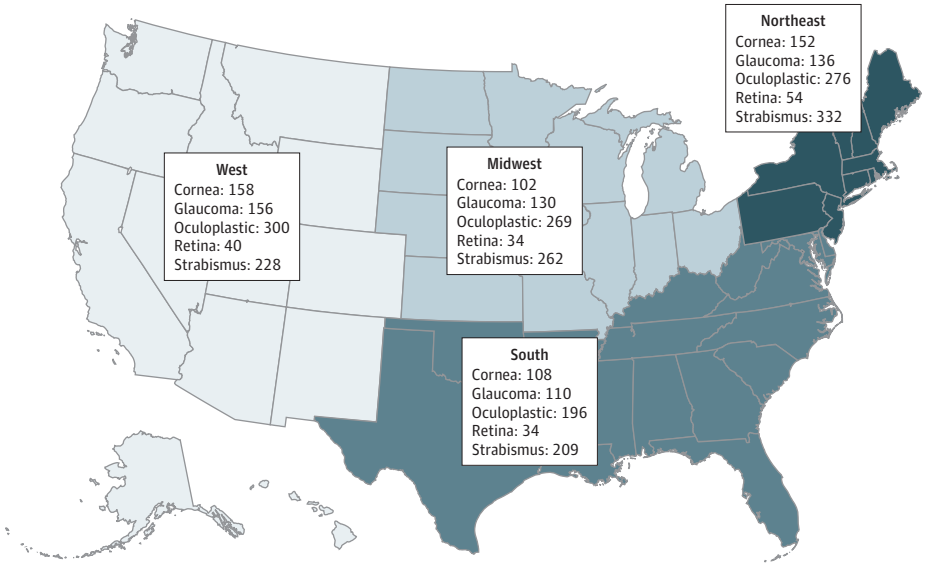
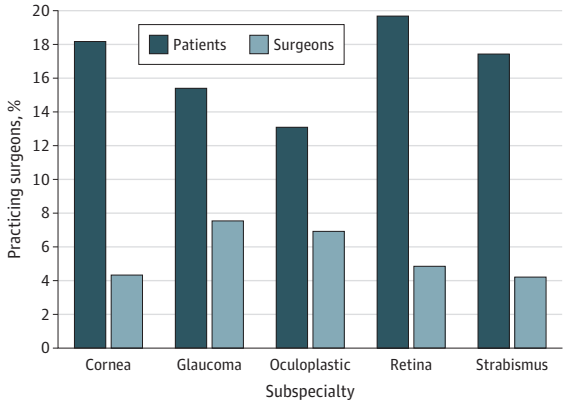



Figure 3. Percentage of Patients Undergoing Cornea, Glaucoma, Oculoplastic, Retina, and Strabismus Procedures and Surgeons Residing in Rural Areas




| | Subspecialty | | | | |
|---|---|---|---|---|---|
| | Cornea | Glaucoma | Oculoplastic | Retina | Strabismus |
| Patients | 196 496 | 274 691 | 78 117 | 1 015 231 | 49 940 |
| Surgeons | 2540 | 3676 | 1951 | 4123 | 1236 |

The cornea patient-surgeon difference was 13.8% (95% CI, 13.2%-14.5%). The glaucoma patient-surgeon difference was 7.9% (95% CI, 7.3%-8.4%). The oculoplastic patient-surgeon difference was 6.2% (95% CI, 5.6%-6.8%). The retina patient-surgeon difference was 14.8% (95% CI, 14.2%-15.5%). The strabismus patient-surgeon difference was 13.2% (95% CI, 12.6%-13.9%).

surgeon difference was 6.2% (95% CI, 5.6%-6.8%). The retina patient-surgeon difference was 14.8% (95% CI, 14.2%-15.5%). The strabismus patient-surgeon difference was 13.2% (95% CI, 12.6%-13.9%) (**Figure 3**).

### Characteristics of Surgeons Associated With Rural Practice

On multivariable analysis (**Table 2**), female surgeons were less likely to practice rurally (adjusted odds ratio [aOR], 0.634; 95% CI, 0.511-0.787; $P < .001$) than male surgeons. Surgeons practicing in the Midwest were more likely to practice rurally (aOR, 1.459; 95% CI, 1.195-1.780; $P < .001$) compared with the South, while surgeons practicing in the Northeast (aOR, 0.615; 95% CI, 0.482-0.783; $P < .001$) and the West (aOR, 0.627; 95% CI, 0.497-0.792; $P < .001$) were less likely to practice rurally relative to the South. Cornea surgeons (aOR, 0.737; 95% CI, 0.545-0.988; $P < .05$), retina surgeons (aOR, 0.911; 95% CI, 0.692-1.200; $P = .51$), and strabismus surgeons (aOR, 0.665; 95% CI, 0.456-0.970; $P = .03$) were less likely to practice rurally, while glaucoma surgeons (aOR, 1.182; 95% CI, 0.923-1.513; $P = .18$) were more likely to practice rurally relative to oculoplastic surgeons. Compared with surgeons who recently graduated medical school (0 to 10 years ago), more experienced surgeons who graduated 11 to 20 years ago (aOR, 1.662; 95% CI, 1.253-2.205; $P < .001$), 21 to 30 years ago (aOR, 1.828; 95% CI, 1.380-2.421; $P < .001$), and 31 years ago or longer (aOR, 1.432; 95% CI, 1.079-1.902; $P < .05$) were more likely to practice rurally. Surgeons with higher surgical volume (2nd quartile: aOR, 0.633; 95% CI, 0.504-0.794; $P < .001$; 3rd quartile: aOR, 0.534; 95% CI, 0.425-0.671; $P < .001$; 4th quartile: aOR, 0.465; 95% CI, 0.364-0.593; $P < .001$) were less likely to practice rurally than surgeons with the lowest quartile surgical volume.

## Discussion

While the broad geographic practice patterns of ophthalmologists are well researched, the rural distribution of subspecialists, like cornea, glaucoma, oculoplastic, retina, and strabismus surgeons, to our knowledge, has not been studied previously. Existing literature focuses on individual practices[19] or compares general ophthalmologists to subspecialists.[17,20]

Table 2. Multivariable Analysis Assessing Ophthalmologist Characteristics Associated With Practicing in a Rural Area From 2012 to 2022 in the US Centers for Medicare and Medicaid Database

| Characteristic | Unadjusted odds | | Adjusted odds | |
|---|---|---|---|---|
| | Odds ratio (95% CI) | *P* value | Odds ratio (95% CI) | *P* value |
| Surgeon sex | | | | |
| Male | Reference | NA | Reference | NA |
| Female | 0.616 (0.501-0.758) | <.001 | 0.634 (0.511-0.787) | <.001 |
| Census region of practice location | | | | |
| Midwest | 1.435 (1.178-1.748) | <.001 | 1.459 (1.195-1.780) | <.001 |
| Northeast | 0.623 (0.490-0.792) | <.001 | 0.615 (0.482-0.783) | <.001 |
| South | Reference | NA | Reference | NA |
| West | 0.644 (0.511-0.812) | <.001 | 0.627 (0.497-0.792) | <.001 |
| Subspecialty | | | | |
| Cornea | 0.622 (0.467-0.828) | .001 | 0.737 (0.549-0.988) | .04 |
| Glaucoma | 1.063 (0.834-1.354) | .62 | 1.182 (0.923-1.513) | .18 |
| Oculoplastic | Reference | NA | Reference | NA |
| Retina | 0.744 (0.580-0.955) | .02 | 0.911 (0.692-1.200) | .51 |
| Strabismus | 0.610 (0.420-0.886) | .01 | 0.665 (0.456-0.970) | .03 |
| Other/none | 1.900 (1.118-3.230) | .02 | 1.397 (0.812-2.402) | .23 |
| Years since medical school graduation | | | | |
| 0-10 | Reference | NA | Reference | NA |
| 11-20 | 1.478 (1.120-1.950) | .01 | 1.662 (1.253-2.205) | <.001 |
| 21-30 | 1.827 (1.388-2.405) | <.001 | 1.828 (1.380-2.421) | <.001 |
| ≥31 | 1.474 (1.121-1.938) | .01 | 1.432 (1.079-1.902) | .01 |
| Surgeon's volume (surgeries), quartile | | | | |
| 1st | Reference | NA | Reference | NA |
| 2nd | 0.594 (0.476-0.740) | <.001 | 0.633 (0.504-0.794) | <.001 |
| 3rd | 0.515 (0.413-0.643) | <.001 | 0.534 (0.425-0.671) | <.001 |
| 4th | 0.515 (0.415-0.640) | <.001 | 0.465 (0.364-0.593) | <.001 |

Abbreviation: NA, not applicable.

Given that fewer eye care professionals have been linked to an increase in visual impairment prevalence,[12,13] our study provides evidence to suggest that there are fewer rural ophthalmic surgical subspecialists available. Furthermore, these data suggest that there has been a decline in the percentage of rural subspecialists over time. Our study reveals regional variations in subspecialty distribution, with characteristics like being female, practicing in the Northeast or West, being a recent graduate, and having a higher patient volume being less associated with practicing in rural settings. Notably, these findings do not determine if clinically relevant outcomes of care within these subspecialties have declined.

Data on the number of ophthalmic surgical subspecialists within the US per year vary: between 338 and 840 cornea surgeons,[17,20] 378 and 457 glaucoma surgeons,[17,20] 329 and 1238 oculoplastic surgeons,[17,20-22] 1084 and 2591 retina surgeons,[17,20,23] and 382 and 1056 strabismus surgeons.[20,24,25] More ophthalmology residents are matching into a subspecialty fellowship program, with 73.7% of applicants accepted into fellowship programs between 2010 and 2017.[26] Moreover, general ophthalmologists may gain experience in various subspecialist-specific procedures, via Accreditation Council for Graduate Medical Education residency graduation requirements. This enables general ophthalmologists to perform subspecialized operations, potentially increasing rural care availability. Our methodology for defining subspecialists based on procedures performed accounts for potentially broader availability of care than indicated by solely examining fellowship.

Patients were more likely than surgeons to be located rurally. Furthermore, we observed that between 2012 and 2022, there was a decline in the percentage of ophthalmic subspecialist surgeons practicing in rural areas. Previous work showed that between 1995 and 2017, the density of ophthalmologists decreased from 6.3 to 5.68 ophthalmologists per 100 000 individuals, with rural counties exhibited the lower mean density (0.58 ophthalmologists per 100 000 individuals).[9] These findings collectively underscore a potential concern regarding an increasing burden for rural subspecialists.

Our results suggest that 18.2% of patients undergoing cornea transplants are rurally located. Previous research indicated that only 3.5% of transplants occur in a rural area,[27] suggesting that many rural patients do not receive care locally. As of 2016, 90% of contiguous US Medicare beneficiaries resided within a 30-minute drive of an ophthalmologist.[28] However, this includes both general and subspecialized ophthalmologists. Our findings suggest that there is a disparity in ophthalmic subspecialist surgeon availability between rural and urban areas; this may be concerning for older rural patients, who may face impairments hindering their ability to drive to a subspecialist surgeon. Alternative transportation

modes, such as buses or shuttles, also may not be readily available in rural settings.

Our results also suggested that the census region—Northeast, South, Midwest, or West—exhibiting the most surgeons per 10 000 patients was subspecialty dependent. Retina specialists preferentially practice in the Mid-Atlantic and Pacific subregions[23]; our analysis corroborated this, revealing the most retina surgeons per 10 000 patients in the Northeast and the West. Regarding oculoplastic surgeons, we observed more surgeons per 10 000 patients in the West and Northeast. This aligns with findings showing Los Angeles county and New York county having the most oculoplastic surgeons.[22] Trabeculectomies, performed by glaucoma specialists, are preferentially performed in the Northeast[29]; our results indicated that the West and the Northeast possess the most surgeons per 10 000 patients. In 2021, 89% of US counties lacked an oculoplastic surgeon[22]; in 2023, 90% of counties did not have a pediatric/strabismus ophthalmologist.[25] This underscores geographic disparities in the distribution of subspecialist surgeons, even within census regions.

We found that female ophthalmic surgeons were less likely to practice in rural areas, a trend also noted by Webb et al[27] for female cornea surgeons. The preference for urban settings may stem from lifestyle factors or a lack of female mentors in rural areas, discouraging recent female graduates from practicing there.[30] Additionally, we discovered that rural subspecialist surgeons were less likely to practice in the West and Northeast, indicating that rural residents within these regions may face less access. Our findings also revealed that newer medical school graduates (0 to 10 years out) were less likely to practice rurally than more experienced surgeons. This aligns with the decreasing percentage of medical students who are interested in rural practice[31] but may be troubling for the ophthalmic subspecialist workforce considering the projected increase in demand for rural physicians.[15] Understanding the demographics of subspecialist surgeons who choose to practice in rural areas may help develop incentives for rural practice. This could include financial compensation, debt forgiveness, research stipends, predefined service obligations, and enhanced work-life balance.[32]

### Strengths and Limitations

A strength of our study is that it is large and nationally representative, due to Medicare data. In 2023, approximately 65 million Americans were enrolled in Medicare,[33] with 94% of Americans aged 65 years or older enrolled in Medicare.[34] Another strength is that we included multiple ophthalmic surgeries as subspecialized practice markers.

Limitations include that the Medicare Fee-For-Service dataset used in our analysis does not encompass data from Medicare Advantage insurance plans, which accounted for 51% of patients in 2023.[33] We did not include these plans due to lack of associated surgeon data. Therefore, the surgeons analyzed in this study were only those participating in traditional Medicare, and thus, may not be representative of the total subspecialty surgeon workforce. Our findings are also in Medicare patients 65 years or older, and thus, may not be generalizable to younger patients possessing commercial insurance plans; this may be particularly relevant to pediatric strabismus patients. Additionally, our study defined a subspecialist as a surgeon who has performed a subspecialist-specific procedure; this means that a subspecialist may not be fellowship-trained, and therefore, may perform more general ophthalmology procedures than subspecialty-specific procedures. Furthermore, while this work characterized the urban-rural subspecialist workforce discrepancy, we did not directly quantify rural patient access to subspecialist care through specific measurements, such as driving distance. Lastly, these findings do not necessarily determine if clinically relevant outcomes of care within these subspecialities have declined in rural settings, with evidence being mixed as to whether increased medical specialist presence leads to improved care.[12,13,35,36]

## Conclusions

In summary, our work suggests a concerning geographic disparity in rural ophthalmic surgeons available to serve the needs of rural patients across cornea, glaucoma, oculoplastic, retina, and strabismus subspecialties. Despite a decrease in both the rural US population and the proportion of rural subspecialty surgeons over time, we discovered that rural patients still disproportionately outnumber rural surgeons. We also identified factors associated with a lower likelihood of practicing in rural areas, including being female, practicing in the Northeast and the West, being recently graduated, and having a high patient volume. While our findings underscore the potentially pressing issue of a dwindling rural ophthalmic subspecialist workforce, this study may also inform policy interventions aimed at increasing access to ophthalmic subspecialist surgeons and incentivizing rural practice among ophthalmic subspecialist surgeons.

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**Author Contributions:** Dr Woreta had full access to all of the data in the study and takes responsibility for the integrity of the data and the accuracy of the data analysis.
*Concept and design:* Ahmed, Ali, Dun, Makary, Woreta.
*Acquisition, analysis, or interpretation of data:* Ali, Dun, Cai, Woreta.
*Drafting of the manuscript:* Ahmed, Makary.
*Critical review of the manuscript for important intellectual content:* Ahmed, Ali, Dun, Cai, Woreta.
*Statistical analysis:* Ahmed, Dun, Woreta.
*Administrative, technical, or material support:* Ahmed, Makary, Woreta.
*Supervision:* Ahmed, Woreta.

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**Data Sharing Statement:** See Supplement 2.

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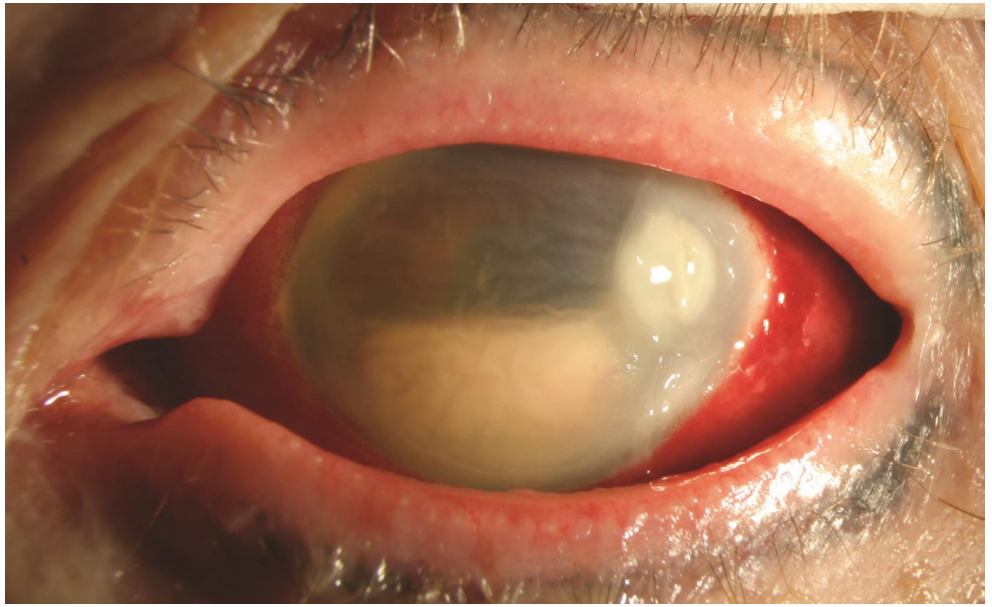
MINNESOTA ACADEMY
of EYE PHYSICIANS and
SURGEONS

# Oppose House File 1011

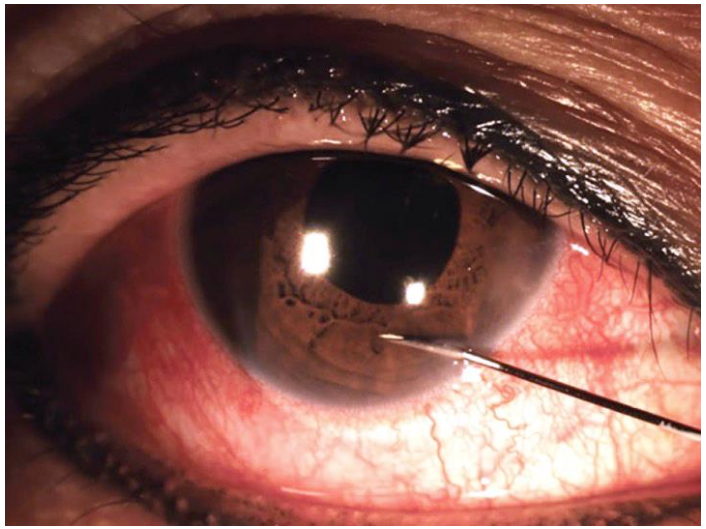
House File 1011 would dangerously expand optometry scope of practice to allow for injections of medications into the eyelids and the front of the eyeball itself

# Injection into the front of the eye

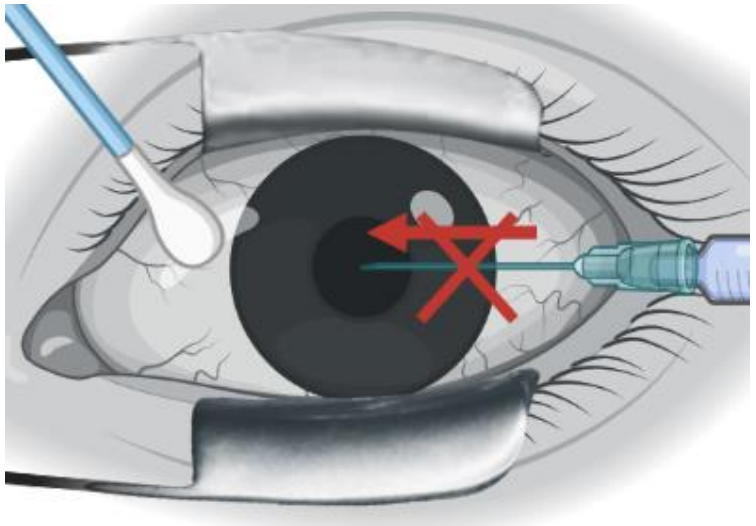
Infection introduced by poor injection technique can be **blinding**



An example of infection inside the eye, called endophthalmitis



A needle placed *less than a millimeter* in the wrong direction can cause **permanent damage**



# Injections around the eye are NOT minor

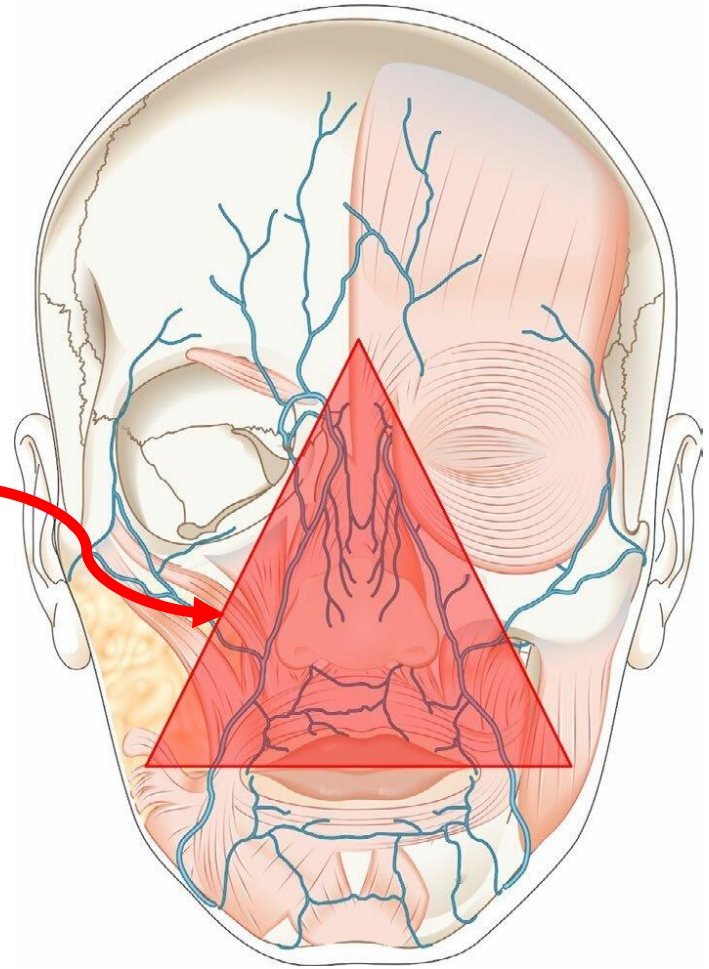
- Incorrect injection technique
- Incorrect material used
- Injection in the wrong location
- Injection into a blood vessel

**Can result in major problems**

- Death of facial tissue
- Blinding blood vessel blockage in the eye
- Life-threatening blood clot in the brain

**Blood vessels in this area connect *directly* to the brain**

Injections here can lead to **infections** and **blood clots** in the brain



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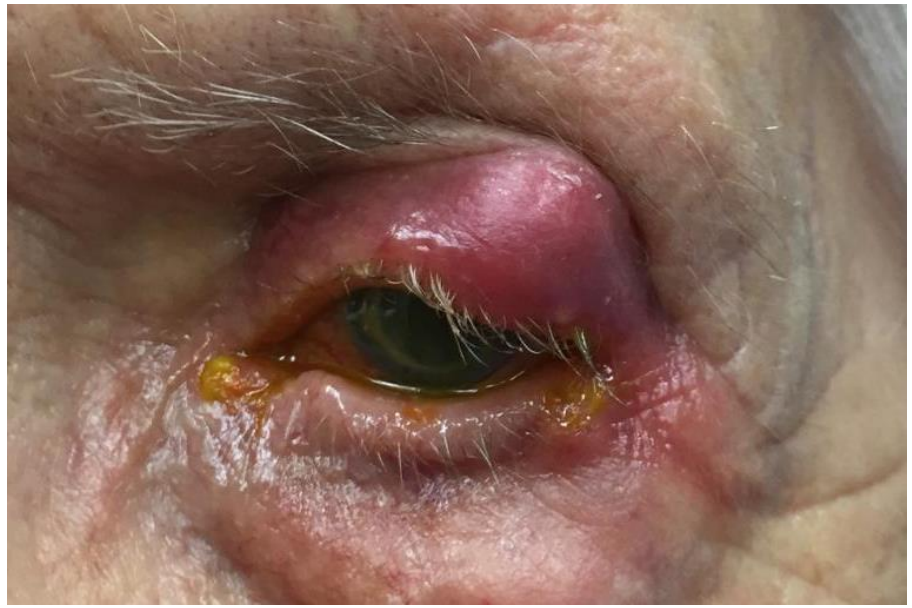
Salval A, Ciancio F, Margara A, Bonomi S. Impending Facial Skin Necrosis and Ocular Involvement After Dermal Filler Injection: A Case Report. Aesthetic Plast Surg. 2017 Oct;41(5):1198-1201.

# “Lumps and Bumps” can be **SKIN CANCER**

Not as easy as they sound

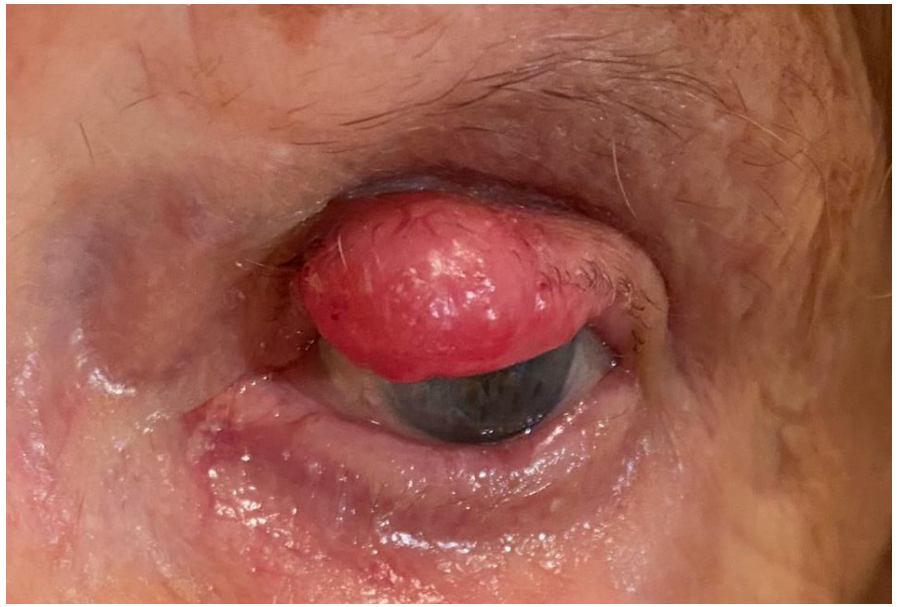
## BENIGN INFLAMMATION



**Chalazion (Stye)**

- A clogged and inflamed oil gland
- Can be treated with drainage
- ***Several types of aggressive cancers look almost identical***

## MALIGNANT CANCER



**Merkel cell carcinoma**

- An aggressive and deadly skin cancer
- MUST be treated appropriately (never with drainage)
- If it spreads, only **50%** of people survive 5 years
- If it metastasizes, **less than 25%** of people survive 5 years

https://merkelcell.org/prognosis/mcc-survival-rates/

MINNESOTA

**BOARD OF OPTOMETRY**

335 Randolph Avenue Suite 210
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mn.gov/boards/optometry/
optometry.board@state.mn.us

March 25, 2025

Rep. Jeff Backer, Chair
Rep. Robert Bierman, Chair
House Health Finance & Policy Committee

RE: Upcoming legislation to expand optometry scope of practice - HF 1011

Dear Chairs Backer and Bierman:

As the oldest Optometry Board ("Board") in the nation, our mission statement is "*to protect the public through effective licensure and enforcement of the statutes and rules governing optometry practice to reasonably ensure a standard of competent and ethical practice.*" We have a 123-year history of serving and providing the citizens of the State of Minnesota with safe and effective eye care.

**Public service is our priority**.

We wrote to you last session explaining that it has become increasingly apparent that Minnesota's Optometric Practice Act is antiquated and needs revision. Minnesota continues to lag behind other states and needs to catch up in its ability to deliver timely, quality care to Minnesotans. Expanding our scope of practice—to fall more closely in line with neighboring states—will help attract new graduates to our state, ensuring better access to care throughout the state.

We write today in support of upcoming bills to expand optometry scope of practice. We support these bills to modernize the optometric statutes for the following reasons:

- Increase timely access to quality care;
- Attract optometrists to practice in our state;
  - Balance supply and demand of practicing optometrists;
  - Meet increasing patient demand;
  - Control costs;
- Benefit patients from the latest medications and technology; and
- More fully utilize optometrist education training.

It is troublesome that the opposition to these bills comes from a small delegation of individuals who do not accurately represent the professions at large or consider the patients a priority. It is further troubling when reviewing donation logs and cooresponding votes or simply certain legislators being unwilling to hear a bill due to support thaty they have received from a very small delegation of individuals.

The Board is concerned about the impasse at the State Capitol and wants to see professional dialogue and movement for the benefit of the patients we serve. These changes are long overdue. We need to catch up with the current and rapidly changing eye care landscape, modernize the scope of optometry practice, and keep pace with the rest of the country.

Respectfully Submitted,

Dr. Eric Bailey, Chair
Dr. Sam Villella, Vice Chair
Dr. Tina McCarty, Secretary
Dr. Leah Colby
Dr. Georgiann Jensen-Bohn
Fernando Alvarado, Public Member
George Bruehl, Public Member

Minnesota Medical Association

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March 25, 2025

Dear Members of the Health Finance and Policy Committee,

On behalf of the Minnesota Medical Association (MMA), representing more than 10,000 physicians and physicians-in-training across the state, I am writing to share the MMA's opposition to HF 1011, related to optometry scope of practice.

The limits on optometrists conducting sensitive procedures and optometric prescribing currently included in state statute serve a very important purpose in protecting the public. These are very meticulous procedures and very powerful drugs that can have significant long-term negative side effects when administered improperly or for extended periods. Renal function, the body's immune response, respiratory function, and liver function can all be impacted when these drugs are incorrectly prescribed, and long-term consequences related to eyesight are put at severe risk if injections outlined in the legislation are inappropriately administered.

Optometrists are a critical part of the health care team and are well trained to provide many health services related to eyes and eyesight. However, they do not have the same training as physicians, and specifically of ophthalmologists. An ophthalmologist receives significantly more rigorous training through medical school and residency that includes extensive procedural training and training regarding pharmacologic impacts of prescription drugs on the entire body, not just the eye. This extensive training gives ophthalmologists the experience necessary to safely prescribe drugs that can have significant side effects if used improperly. In addition, an optometrist does not have comparable training to conduct procedures outlined in the legislation, and the language **authorizing all forms of drug injections, with the exception of** sub-Tenon, retrobulbar, and intravitreal injections, makes our members particularly uncomfortable and concerned for patient health.

The current statute related to optometric scope of practice is critical for patient safety. I ask that you carefully evaluate the effect this language will have and consider the language in HF 2765 to clarify the definition of surgery in order to better protect Minnesota patients.

Thank you for your consideration.

Sincerely,

Edwin Bogonko, MD
President, Minnesota Medical Association

# HF 1011 is a SURGERY BILL

## Your constituents do NOT want this

# ANESTHESIA injections numb before SURGERY

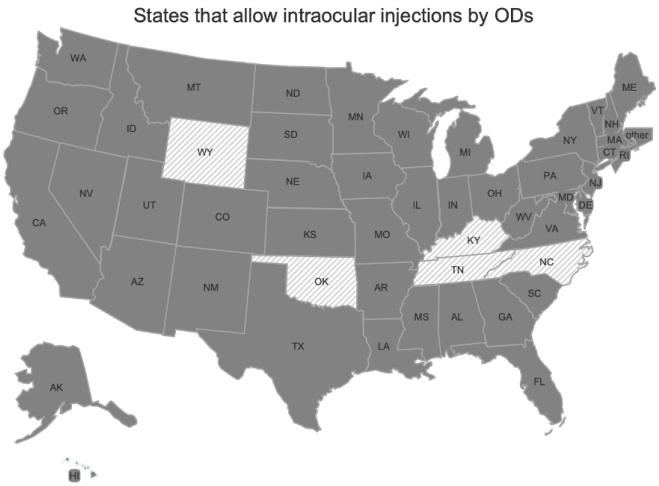
## Minnesotans <u>overwhelmingly</u> want

# SURGERY by SURGEONS

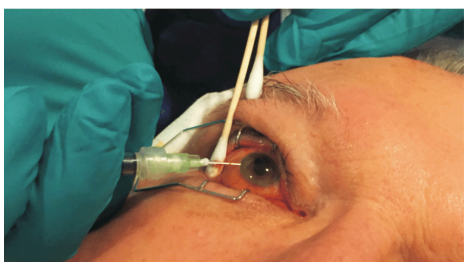
## Over 85% prefer surgeon expertise to convenience

# ONLY 5 STATES ALLOW

# ANTERIOR INTRAOCULAR INJECTIONS




*Source: State Statues and Regulations, March 2025*



*https://www.researchgate.net/figure/anterior-chamber-paracentesis-of-the-right-eye-following-an-intravitreal-injection_fig1_321974704*

## Proposal Summary/ Overview

**To be completed by proposal sponsor. (500 Word Count Limit for this page) Please read the entire questionnaire before completing this page.**

**Name: Bridget Axelson OD and Randy Kempfer OD**

**Organization: Minnesota Optometric Association**

**Phone: 952-921-5881**

**Email Address: beth@mneyedocs.org**

*Is this proposal regarding:*

- *New or increased regulation of an existing profession/occupation? If so, complete Questionnaire A.*
- *Increased scope of practice or decreased regulation of an existing profession? If so, complete this form, Questionnaire B.*
- *Any other change to regulation or scope of practice? If so, please contact the Committee Administrator to discuss how to proceed.*

1) State the profession/occupation that is the subject of the proposal.
**This scope proposal would be for the profession of optometry.**

2) Briefly describe the proposed change.

**By removing the current restrictions, the proposed change would update scope for Doctors of Optometry in an attempt to get closer to national optometry standards of education. HFXXXX/SF850 removes the 10-day prescribing limit on oral anti-viral medications, 7-day prescribing limit on oral carbonic anhydrase inhibitor (CAI's) medications, a restriction on oral steroid medications and adds a 14-day prescribing restriction on oral steroid prescription authority. The bill also allows for injection authority in and around the eye while maintaining restrictions on intravitreal, intravenous, retrobulbar and sub-tenon injections.**

3) If the scope of practice of the profession/occupation has previously been changed, when was the most recent change? Describe the change and provide the bill number if available.
**The last time the scope of practice for optometry was updated by the MN legislature was in 2003, over 20 years ago. This update provided Doctors of Optometry with the authority to prescribe oral therapeutic agents, with some restrictions.**

4) If the proposal has been introduced, provide the bill number and names of House and Senate sponsors. If the proposal has not been introduced, indicate whether legislative sponsors have been identified. If the bill has been proposed in previous sessions, please list previous bill numbers and years of introduction.

**2025/26 Session HF 1011 chief author Rep Robert Bierman, SF 850 chief author Senator Erin Maye Quade, clone bills SF 1144 and SF 1499**

**2023/24 Session HF 1031 chief author Rep Robert Bierman, SF 659 chief author Senator Erin Maye Quade**
**2021/22 Session HF 2022 chief author Rep Ruth Richardson and SF 1873 chief author Senator Mark Koran**
**2019/20 Session HF891 chief author Rep Richardson, SF545 chief author Senator Matthews**

## Questionnaire B: Change in scope of practice or reduced regulation of a health-related profession (adapted from Mn Stat 214.002 subd 2 and MDH Scope of Practice Tools)

This questionnaire is intended to help legislative committees decide which proposals for change in scope of practice or reduced regulation of health professions should receive a hearing and advance through the legislative process. It is also intended to alert the public to these proposals and to narrow the issues for hearing.

This form must be completed by the sponsor of the legislative proposal. The completed form will be posted on the committee's public web page. At any time before the bill is heard in committee, opponents may respond in writing with concerns, questions, or opposition to the information stated and these documents will also be posted. The Chair may request that the sponsor respond in writing to any concerns raised before a hearing will be scheduled.

A response is not required for questions that do not pertain to the profession/occupation (indicate "not applicable"). Please be concise. Refer to supporting evidence and provide citation to the source of the information where appropriate.

While it is often impossible to reach complete agreement with all interested parties, sponsors are advised to try to understand and to address the concerns of any opponents before submitting the form.

**1) <u>Who does the proposal impact?</u>**

a. Define the occupations, practices, or practitioners who are the subject of this proposal.

**Doctors of optometry provide primary eye care services across Minnesota. Optometrists provide full assessments of our patients visual and ocular health including treatment and management of eye diseases. As many eye conditions are part of systemic health conditions, we coordinate care with many other medical specialties as part of the overall health care model.**

b. List any associations or other groups representing the occupation seeking regulation and the approximate number of members of each in Minnesota

**The Minnesota Optometric Association is the entity representing the optometry profession in Minnesota. There are approximately 1000 licensed optometrists in Minnesota.**

c. Describe the work settings, and conditions for practitioners of the occupation, including any special geographic areas or populations frequently served.

**Doctors of optometry practice in a diverse set of clinical settings. We practice in optometry private practices, group practices that include ophthalmologists, large multi-specialty clinics, community health centers, Indian Health Services, Veterans Affairs Medical Centers, corporate chains, and in university settings. Optometrists also are involved with education and research studies of developing technologies and treatments. Optometrists practice in 77 of the 87 counties in MN, providing access to 97% of MN residents.**

d. Describe the work duties or functions typically performed by members of this occupational group and whether they are the same or similar to those performed by any other occupational groups.

**Doctors of optometry provide a comprehensive range of eye services for our patients of all age demographics. Optometrists prescribe glasses and contact lenses, including medically necessary specialty contact lenses and low vision aids for our patients. Doctors of optometry diagnose, treat, and manage eye health conditions routinely including infections involving the eye and adnexa. Doctors of optometry treat acute and chronic eye health conditions, assess ocular health affected by systemic disease and coordinate care with other health care specialties. Ophthalmologists also have the training to provide similar care. Prescriptive authority of legend drugs to treat eye health conditions are allowed to physicians, nurse practitioners, and physician assistants including injections.**

e. Discuss the fiscal impact.

**None**

**2) <u>Specialized training, education, or experience ("preparation") required to engage in the occupation</u>**

a. What preparation is required to engage in the occupation? How have current practitioners acquired that preparation?

**Doctors of optometry training includes graduating from a 4-year undergraduate program, then from a 4-year accredited school of optometry. Nearly 10,000 hours of training occurs prior receiving a license. Prior to licensure, all optometrists pass the National Board of Examiners in Optometry exams.**

b. Would the proposed scope change or reduction in regulation change the way practitioners become prepared? If so, why and how? Include any change in the cost of entry to the occupation. Who would bear the increase or benefit from reduction in cost of entry? Are current practitioners required to provide evidence of preparation or pass an examination? How, if at all, would this change under the proposal?

**The proposed scope change would not change how Doctors of Optometry enter the profession. All areas of current legislation have been part of the curriculum in optometry schools for decades. The National Board of Examiners in Optometry (NBEO) has been testing all areas of the legislation for years as well. The regulatory board for optometry already requires proof of graduation from an accredited school of optometry and successful passage of NBEO tests prior to granting a license to practice optometry.**

c. Is there an existing model of this change being implemented in another state? Please list state, originating bill and year of passage?

**48 states currently allow for prescribing oral antiviral medications without a limit for Doctors of Optometry. 48 states allow for prescribing oral carbonic anhydrase inhibitors (CAI), 44 states have no limit on length of prescription. 44 states allow optometrists to prescribe oral steroids. 25 states allow for the use of injections in optometric care.**
**Most recently Colorado, South Dakota, Iowa and Wyoming updated the scope of practice for**

**optometry to include treatment of eye diseases with injections. No state that has updated the scope of practice has repealed or rolled back authorities for Doctors of Optometry.**

**3) <u>Supervision of practitioners</u>**

a. How are practitioners of the occupation currently supervised, including any supervision within a regulated institution or by a regulated health professional? How would the proposal change the provision of supervision?

**The practice of optometry is regulated by the Minnesota Board of Optometry, appointed by the Governor of Minnesota. The State Board of Optometry is the regulatory board and has full authority to discipline practitioners and enforce scope of practice law. The proposed legislation would not change how the practice of optometry is regulated.**

b. If regulatory entity currently has authority over the occupation, what is the scope of authority of the entity? (For example, does it have authority to develop rules, determine standards for education and training, assess practitioners' competence levels?) How does the proposal change the duties or scope of authority of the regulatory entity? Has the proposal been discussed with the current regulatory authority? If so, please list participants and date.

**The Minnesota Board of Optometry has full authority to discipline practitioners. Its mission is to regulate the profession and to protect the public. It develops rules to achieve this mission and could make changes if necessary for training on a specific aspect of optometric care. We have provided updates to the Board of Optometry on the status and language of this legislation. Most recently was February 2025 during their board meeting, the update was provided by Beth Coleman-Jensen- Executive Director of the Minnesota Optometric Association.**

c. Do provisions exist to ensure that practitioners maintain competency? Under the proposal, how would competency be ensured?

**Doctors of Optometry must complete at least 40 hours of continuing education every two years to maintain licensure. It is the duty of the Minnesota Board of Optometry to regulate the profession of Optometry and protect the public. The Minnesota Board of Optometry could add other requirements if determined they were needed.**

**4) <u>Level of regulation</u> (See Mn Stat 214.001, subd. 2, declaring that "no regulations shall be imposed upon any occupation unless required for the safety and wellbeing of the citizens of the state." The harm must be "recognizable, and not remote." Ibid.)**

a. Describe how the safety and wellbeing of Minnesotans can be protected under the expanded scope or reduction in regulation.

**The Minnesota Board of Optometry is in place to protect the public and discipline practitioners that may violate statutes. All optometrists take the Optometric Oath upon graduating, which requires Doctors of Optometry to always put the health of our patients first. As health care**

**providers, optometrists are always making decisions with this in mind first. The majority of states are already allowing optometrists to practice at this level of scope and there has been no noted increase in malpractice claims in those states, which is a strong indication of how safe this level of scope is for the public. MN Doctors of Optometry have already been prescribing oral antiviral and CAI medications for decades safely and manage the ocular and systemic side effects of oral steroid medications. Doctors of Optometry currently manage complications that arise from injections in and around the eye in primary eyecare.**

b. Can existing civil or criminal laws or procedures be used to prevent or remedy any harm to the public?
**The Minnesota Board of Optometry is in place to protect the public and discipline practitioners that may violate statutes.**

**5) <u>Implications for Health Care Access, Cost, Quality, and Transformation</u>**

a. Describe how the proposal will affect the availability, accessibility, cost, delivery, and quality of health care, including the impact on unmet health care needs and underserved populations. How does the proposal contribute to meeting these needs?

**The proposed scope legislation will increase access to eye care across Minnesota. Doctors of Optometry practice in 77 of the 87 counties, in addition, Doctors of Optometry are the only eye care providers in 57 of our 87 counties. This will allow patients access to timely care from their local eye doctor rather than traveling an extended distance to see a new provider with extended wait times, further delaying care. In the metro, this will also be critically important for access of care issues especially in underserved populations. Patients with limited financial resources or transportation challenges may not have the means to travel to another part of the metro area to see another provider.**

**A National study published in the "Ophthalmology" journal in 2024- Ophthalmology Workforce Projections 2020-2035 indicates that "The present analysis of Health Resources and Services Administration (HRSA) Health Workforce Stimulation Model (HWSM) shows that ophthalmology physician workforce is inadequate to meet the demand for ophthalmological services, and this inadequacy is expected to increase by the year of 2035". [1]**
**The JAMA Ophthalmology study titled Geographic Distribution of US Ophthalmic Surgical Specialists explores the disparity between rural ophthalmic surgeons available to serve rural patients.[2] Accessibility to Doctors of Optometry is significantly greater in rural areas. Optometrists have the training and knowledge required to help reduce this gap in critical eye care.**
**A 2023 report in the Contemporary Economic Policy, "Seeing is Believing, the Effects of Optometric Practice Scope Expansion"[3] examines the staggered adoption of optometric prescription authority across states, and finds suggestive evidence that optometrist scope of practice expansion reduced vision impairment and mitigated racial and ethnic disparities in eye health.**

b. Describe the expected impact of the proposal on the supply of practitioners and on the cost of services or goods provided by the occupation. If possible, include the geographic availability of proposed providers/services. Cite any sources used.

**No optometry school exists in Minnesota, which means all Doctors of Optometry practicing in Minnesota attended school in another state and relocate back to Minnesota. When new graduates are choosing where to establish their optometric careers, a main factor in that decision is the scope of practice of the state. Our current scope of practice being in the bottoms 20% nationwide places Minnesota in a recruiting disadvantage to attract new providers to our state. Active licensure for optometry in MN has remained flat for the past few years after seeing gains in licenses prior to that.**

c. Does the proposal change how and by whom the services are compensated? What costs and what savings would accrue to patients, insurers, providers, and employers?
**There would be no known change how and by whom the services are compensated. There are potential cost savings to patients and insurers by reducing emergency room visits and redundant and unnecessary office visits seeing multiple providers to treat the same condition when the scope of practice is updated to the full expertise and training of Doctors of Optometry. A study in the Annals of Family Medicine, 2019 [4] through the provision of timely, easily accessed ambulatory care, optometrist can improve the patient experience and reduce ED use, thereby reducing costs. The cost savings opportunities are immense because of the large volume and expense of ED visits for ocular conditions that might otherwise be managed in ambulatory optometry practices.**

d. Describe any impact of the proposal on an evolving health care delivery and payment system (eg collaborative practice, innovations in technology, ensuring cultural competency, value-based payments)?

**Doctors of Optometry already play a critical role in the health care delivery model as the primary eye care provider for most of Minnesota patients. Routine, comprehensive eye exams play a critical role in preventive health care and Doctors of Optometry also treat and manage countless chronic, vision threatening eye health disorders. This legislation allows Doctors of Optometry to practice closer to modern optometric care. Current scope restrictions prevent Doctors of Optometry from utilizing innovations included in optometric instruction for the past 20 years. Optometric education, training and technology continue to evolve, our patients benefit from Doctors of Optometry practicing at the highest level of training. In many areas of the state, Doctors of Optometry are the only option for eyecare, other medical specialties rely on the expertise of optometrists to provide all needed eye care.**

e. What is the expected regulatory cost or savings to state government? How are these amounts accounted for under the proposal? Is there an up-to-date fiscal note for the proposal?
**There should be no extra regulatory cost to state government with this new legislation. New legislation could provide a savings to lowering health care costs by reducing unnecessary office visits.**

**6) <u>Evaluation/Reports</u>**

Describe any plans to evaluate and report on the impact of the proposal if it becomes law, including focus and timeline. List the evaluating agency and frequency of reviews.

**There are no specific plans for evaluation if this proposal becomes law. The Minnesota Board of**

**Optometry, the regulating board for optometry would determine any required evaluation and review if the proposed legislation becomes law.**

**7) <u>Support for and opposition to the proposal</u>**

a. What organizations are sponsoring the proposal? How many members do these organizations represent in Minnesota?
**Support for the proposal comes from the Minnesota Optometric Association. The MOA is the voice for 1000 licensed Doctors of Optometry in Minnesota.**

b. List organizations, including professional, regulatory boards, consumer advocacy groups, and others, who support the proposal.

**Minnesota Board of Optometry**

c. List any organizations, including professional, regulatory boards, consumer advocacy groups, and others, who have indicated concerns/opposition to the proposal or who are likely to have concerns/opposition. Explain the concerns/opposition of each, as the sponsor understands it.

**The Minnesota Academy of Ophthalmology has stated opposition to this proposal. They deny that there is an access issue for eyecare in Minnesota and raise concerns about safety to the public.**
**The Minnesota Medical Association has stated opposition to this proposal. They raise concerns about the training of optometrists to prescribe oral medications and raise concerns about safety to the public, they wish to maintain the status quo for optometry.**

d. What actions has the sponsor taken to minimize or resolve disagreement with those opposing or likely to oppose the proposal?

**The Minnesota Optometric Association has attempted numerous times to have open dialogue with the Minnesota Academy of Ophthalmology beginning in 2014 over this legislation. Each attempt has been met with silence, strategic delays or a statement that the Minnesota Academy of Ophthalmology would not support any part of scope increase for Doctors of Optometry. Attached is a timeline and summary of attempts by the Minnesota Optometric Association to reach out and dialogue with the Minnesota Academy of Ophthalmology.** [5]
**Most recently in 2024– the Doctors of Optometry representing the Minnesota Optometric Association met in person with the Ophthalmologists representing the Minnesota Academy of Ophthalmology on 3 separate occasions with assistance of Sen Wiklund's staff to attempt to find common ground. The Academy of Ophthalmology denied any and all scope of practice modifications in regard to injections and medications.**

**References**

1: Berkowitz ST, Finn AP, Parikh R, Kuriyan AE, Patel S. Ophthalmology Workforce Projections in the United States, 2020 to 2035. Ophthalmology. 2024 Feb;131(2):133-139. doi: 10.1016/j.ophtha.2023.09.018. Epub 2023 Sep 20. PMID: 37739231.

2. Ahmed A, Ali M, Dun C, Cai CX, Makary MA, Woreta FA. Geographic Distribution of US

Ophthalmic Surgical Subspecialists. JAMA Ophthalmol. Published online January 02, 2025. doi:10.1001/jamaophthalmol.2024.5605

3. Bae, K, Timmons, E. & Nandy, P. (2025) Seeing is Believing: The effects of optometrist scope of practice expansion. *Contemporary Economic Policy*, 43(1), 135-160.

4. Alder A, Warren F, Antar H, Steinkrauss M, Bjoern B, Konar V, Flanagan J, Polakoff D. Transformation Support Provided Remotely to a National Cohort of Optometry Practices. The Annals of Family Medicine Aug 2019, 17 (Suppl1); DOI: 10.1370/afm.2423

5. Timeline of meeting between the Minnesota Optometric Association and the Minnesota Academy of Ophthalmology.

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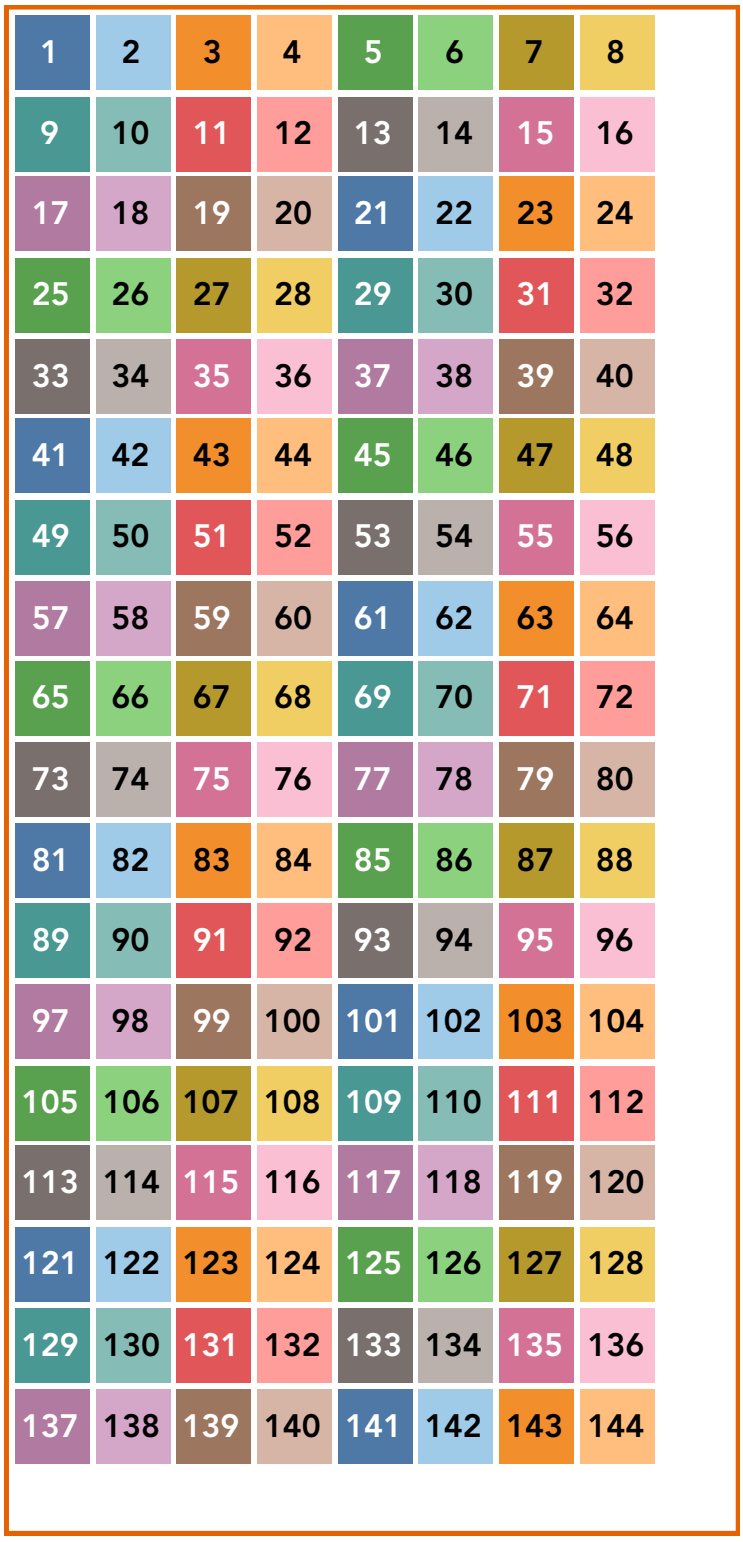
## Ophthalmology: 144 Weeks of Surgical Training




## Optometry: Less than 1 Week of Surgical Training