Michelle Harris, MD
Testimony in Opposition
LD 1803
An Act to Amend the Laws Governing Optometric Practice
May 13, 2025

Senator Bailey, Representative Mathieson, distinguished members of the Joint Standing Committee on Health Coverage, Insurance and Financial Services, my name is Dr. Michelle Harris, and I am a resident of Yarmouth, Maine. I am a practicing ophthalmologist in Brunswick with over 15 years of experience.

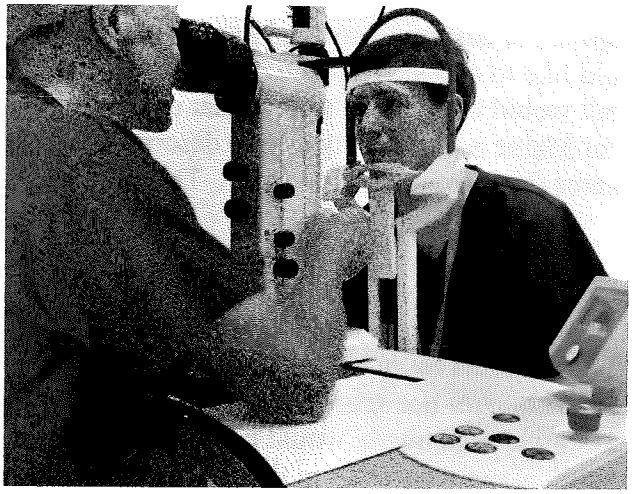
I appear before you today in opposition to LD 1803. That being said, I have the utmost respect for the practice of optometry, and I work closely with many talented and dedicated optometrists. It is crucial for ophthalmologists and optometrists to work closely and cooperatively if we are going to provide the highest quality eye care for Maine patients.

You have heard testimony that details the stark contrast in education and training between ophthalmologists and optometrists and now I would like to explain in practical terms why that information is important. Those supporting this bill would like you to believe that expanding the scope of practice for optometrists is not harmful for Maine patients. They have described this bill as a routine upgrading of the statute that regulates the practice of optometry. This is simply not true.

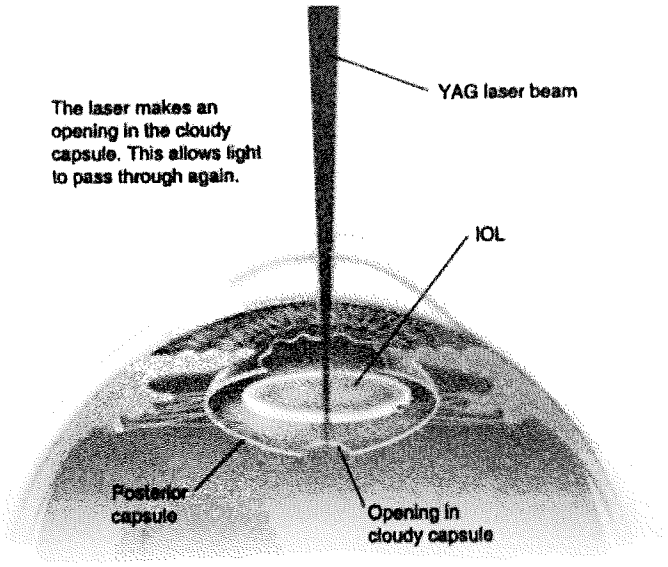
This bill would allow optometrists to prescribe oral medications with the potential for significant side effects and perform surgeries that are complicated, **invasive**, and fraught with danger. Due to the exclusionary nature of the bill's wording, if passed, this bill would allow Maine optometrists to ***perform hundreds of additional eye surgeries not specifically listed in the bill.*** In addition, the Board of Optometry, which has no surgeon members, would be the sole body able to determine qualifications and add/remove surgical procedures from the optometrist's purview. While too extensive to discuss all of the possible surgeries, I will focus on the most concerning from the list of 12 procedures presented to the Maine Society of Eye Physicians and Surgeons by The Maine Optometric Association as a proposed amendment.

Laser eye surgery:
The three laser eye surgeries proposed (YAG Capsulotomy, Selective Laser Trabeculoplasty, and Laser Peripheral Iridotomy) are highly specialized procedures used to target a very precise part of the eye's anatomy **inside the eye**. These laser surgeries are performed in a clinic setting and use a device called a "slit lamp" with a laser attached. Both optometrists and ophthalmologists are skilled at using slit lamps since they are the primary instrument used by eye doctors to examine patients. Because these laser surgeries are performed in the office using a device optometrists use every day, optometrists will tell you laser eye surgery is low risk. In reality, each procedure uses photo disruptive technology (i.e. ***micro explosions***) to affect specific areas of the eye and carry the risk of serious complications. Lasers are surgical instruments that cut as deeply and sharply as any scalpel and these surgeries are considered invasive. Specifics for each procedure are listed below.

Nd:YAG Laser Posterior Capsulotomy ("YAG Capsulotomy"). Often needed after cataract surgery to clear an opacified membrane ("posterior capsule opacification") that forms behind the intraocular implant (IOL) that is placed at the time of cataract surgery. Posterior capsule opacification causes blurry vision. Rate of incidence ranges from 20-50% (depending on the source) after cataract surgery and is dependent on a number of variables such as patient comorbidities, type of IOL implanted, and techniques used during the cataract surgery. Complications include damage to the IOL from the laser, elevated intraocular pressure, retinal swelling, retinal holes, retinal detachment, intraocular infection (endophthalmitis), and corneal edema. If the IOL is damaged or, in the case of a retinal issue, these could require an additional and more complex surgery in an operating room by an ophthalmologist who has completed 2 additional years of training in an ocular subspecialty, such as retina or cornea in this case. If this laser needs to be performed, it is only needed **once** in a patient's lifetime. Depending on patient and surgeon preference, it can be performed in both eyes on the same day, and it is almost never needed on an urgent basis. **Therefore, it is not unreasonable to ask a patient to travel to an ophthalmologist for this procedure in lieu of patient convenience for safety.**



Representative photo of patient receiving laser eye surgery at a slit lamp
[Photo from https://www.lasereyesurgerybirmingham.com/treatments/yag-capsulotomy/]



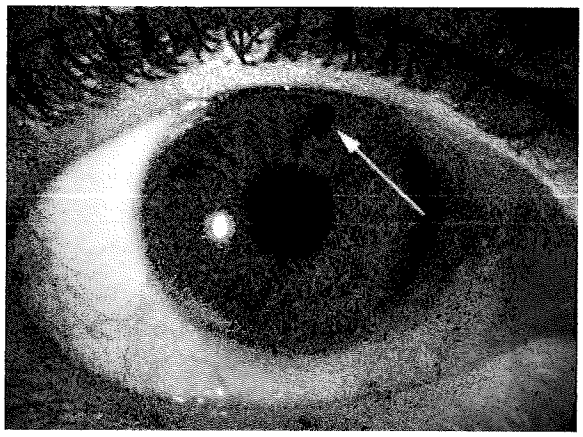
A cross section of an eye where the YAG laser is aimed into the eye behind the new artificial lens implant to destroy the capsule and create an opening.
[Photo from https://www.eyedoctorophthalmologistnyc.com/treatment/yag-capsulotomycomplications/]

References:
https://www.aao.org/education/current-insight/ndyag-laser-posterior-capsulotomy-3

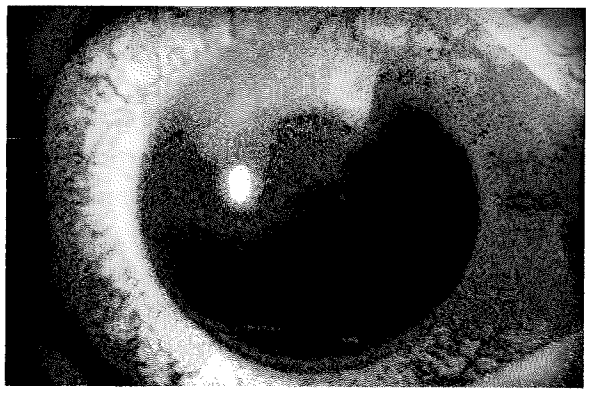
Laser Peripheral Iridotomy ("YAG Peripheral Iridotomy" or "LPI"). This surgery involves the creation of a tiny opening in the iris (the colored part of the eye) to improve the flow of aqueous fluid in the eye. It is most often used to treat specific types of glaucoma, but can also be indicated to treat "narrow" anatomy (also referred to as "anatomic narrow angles") which can sometimes increase a patient's risk for a very rare, but vision threatening type of glaucoma called angle closure glaucoma. Angle closure glaucoma is a true emergency, and this type of laser needs to be performed as soon as possible to reduce risk of vision loss. Performing an iridotomy for this condition can be **extremely challenging** due to patient discomfort and a poor view and it is not uncommon for patients to be referred to a glaucoma sub-specialist by general ophthalmologists for treatment. Laser peripheral iridotomy has been a common treatment for anatomic narrow angles, but recent studies suggest a lower risk of progression to angle closure glaucoma in these patients. Therefore, **observation** is warranted in most cases (reference "ZAP" study, link below). In patients with clear indications for treatment, most ophthalmologists now tend toward performing cataract surgery which offers a cure for this condition. Since optometrists cannot perform cataract surgery, there is a risk of **unnecessary** Laser Peripheral Iridotomy procedures by optometrists instead of referral which increases patient exposure to risk and **increased health care costs**.

Iridotomy surgery is performed at a laser mounted slit lamp in the office. Complications include worsening eye pressure, inflammation, corneal abrasion, bleeding in the eye, permanent visual disturbance (glare/haloes), cataract progression and retinal swelling or holes. Bleeding in the eye from this laser is well known, especially if a patient takes a blood thinner, and can be difficult to

manage leading to dangerously high eye pressure and the need for surgery in an operating room to remove the blood. LPI surgery for anatomic narrow angles only needs to be performed **once** in a patient's life. Depending on patient and surgeon preference, LPI surgery for anatomic narrow angles, can be performed in both eyes on the same day and it is never needed on an emergency basis. **Therefore, it is not unreasonable to ask a patient to travel to an ophthalmologist for this procedure in lieu of patient convenience for safety.**



The arrow shows the location of the peripheral iridotomy – the full thickness permanent hold in the iris. *[Photo from https://www.synergyeye.com/investigation-yag-laser-pi.html]*



Blood in the anterior chamber of the eye, a potential complication from Laser Peripheral Iridotomy *[Photo from https://healthjade.com/hyphema/]*

References:

https://eyewiki.org/Laser_Peripheral_Iridotomy
https://www.aao.org/eyenet/article/zap-light-and-salt

Selective Laser Trabeculoplasty ("SLT"). This surgery is used to treat glaucoma. The laser is applied to the drainage tissue in the eye in order to increase outflow and reduce eye pressure. The laser is performed in the office at a laser mounted slit lamp like the previous laser surgeries described. Glaucoma can be treated by lowering eye pressure with prescription eye drops, SLT laser or intraocular surgery performed by an ophthalmologist. **Optometrists already have the authority to prescribe eye drops to treat glaucoma and have done so quite successfully for many years.** Historically, eye drops were considered first line treatment for glaucoma, but recent studies (reference LiGHT trial below) suggest SLT laser as an effective first line therapy that is repeatable. This makes an effective argument for optometrists to have the ability to perform SLT laser surgery in their office. Despite this consideration, unlike prescription eye drops which need to be renewed on a yearly basis, SLT laser surgery can be effective for up to five years. The anatomical location of SLT laser surgery can be difficult to examine with challenging landmarks. The procedure to view this anatomy is called "gonioscopy" and these challenges were acknowledged in an article published in a recent optometry journal, citing *"Gonioscopy is an important ocular health assessment that takes less than two minutes to perform and provides a tremendous amount of information. Yet, many doctors in workshops we lead seldom perform gonioscopy. Why? Likely because they never really became confident in performing it and have now avoided it for so long that they have lost this clinical skill."* Gonioscopy is mastered during ophthalmology residency as we must apply exam skills toward performance of laser surgery, as well as intraocular surgeries for glaucoma treatment (reference "Microinvasive Glaucoma Surgery (MIGS)".

Complications for SLT laser surgery include elevated eye pressure, inflammation, corneal abrasion, retinal swelling or burns. If performed on certain types of secondary glaucoma (which are diagnosed by performing gonioscopy), SLT laser surgery can actually worsen the condition.

Depending on patient and surgeon preference, SLT can be performed in both eyes on the same day, and it is never needed on an emergency basis. And, as stated previously, effects **can last up to five years. Therefore, it is not unreasonable to ask a patient to travel to an ophthalmologist for this procedure in lieu of patient convenience for safety.**

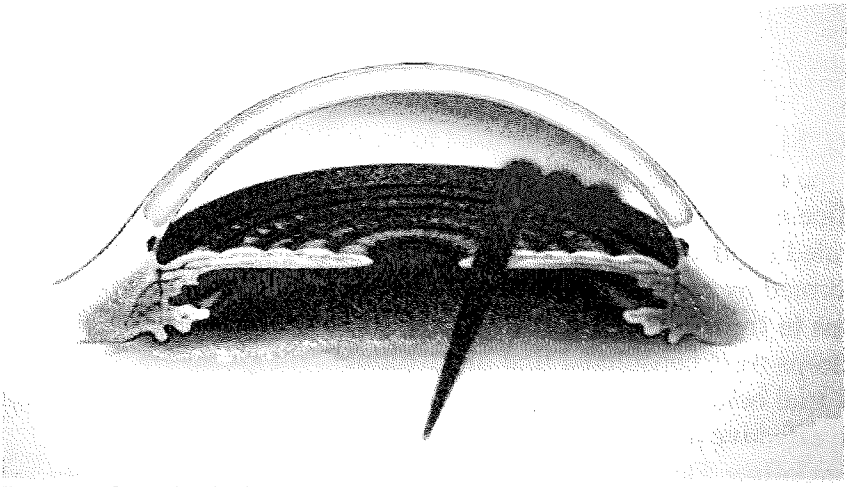
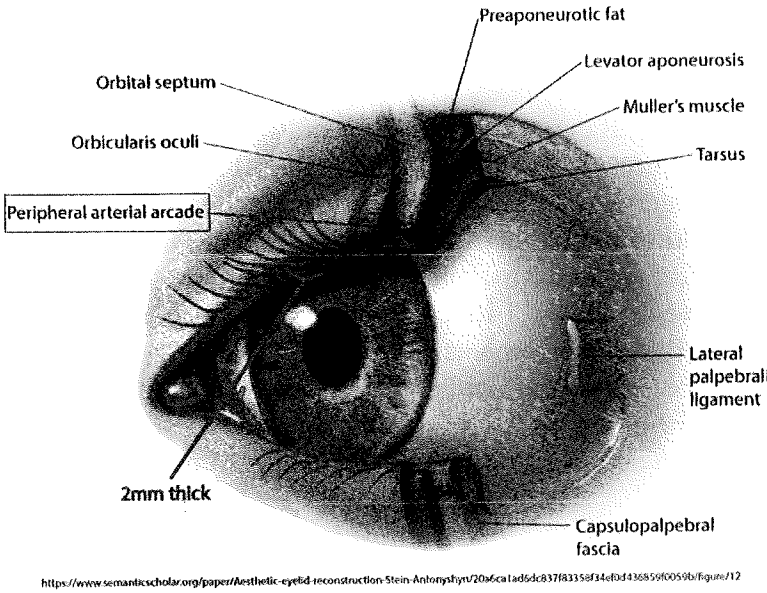


Image of angle drainage location and site of laser application
[Photo from: https://www.wollongongeyedoctor.com.au/slt-gentle-laser-glaucoma-treatment]

References:
https://www.aao.org/eyenet/article/zap-light-and-salt
https://www.reviewofoptometry.com/article/gonioscopy-a-simple-tool-too-often-forgotten
https://eyewiki.org/Microinvasive_Glaucoma_Surgery_(MIGS)

Eyelid surgery:
In office eyelid procedures proposed involve removing skin growths or styes ("chalazion"). The eyelid is a very delicate, thin skinned structure. Just under the skin is a highly vascularized muscle with a rich network of blood vessels that are prone to bleeding. Just below the eyelid lies the eyeball. Eyelid procedures require anesthetic that is injected under the skin surface with a needle. **Most family physicians, general surgeons, and often dermatologists refer their patients to ophthalmologists for eyelid procedures due to the complex anatomical location.**



https://www.semanticscholar.org/paper/Aesthetic-eyelid-reconstruction-Stein-Antonyshyn/20a6ca1ad6dc837f83358f34ef0d4368859f0059b/figure/12

Figure 1: Eyelid anatomy

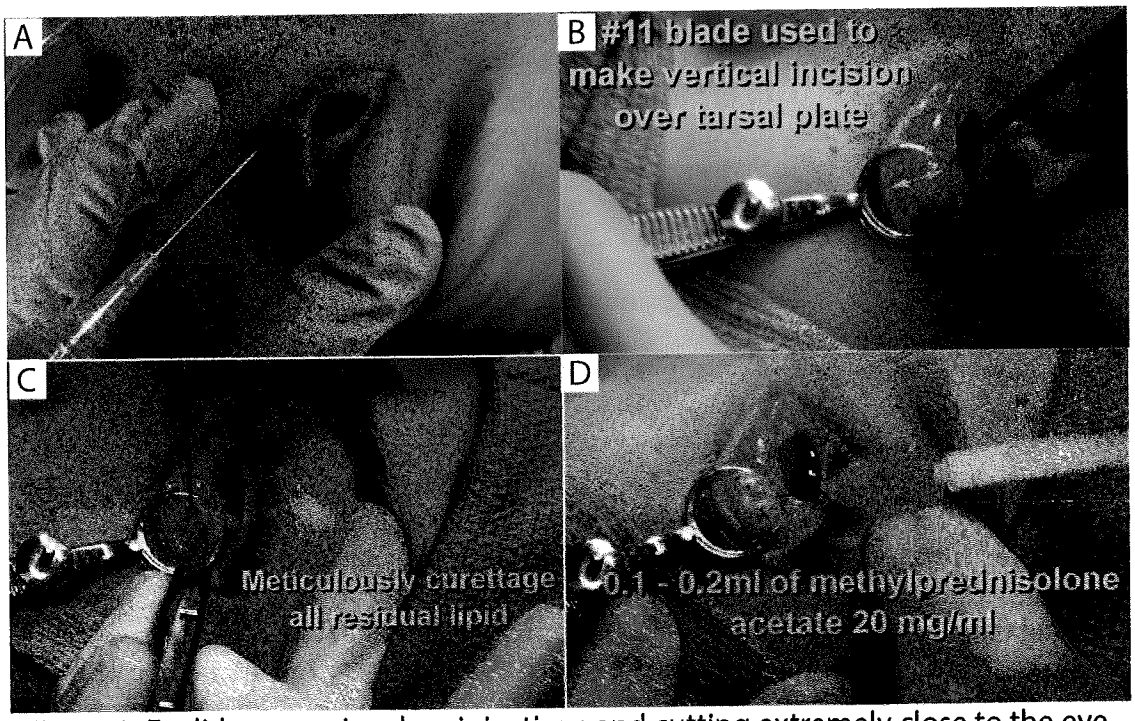


Figure 2: Eyelid surgery involves injections and cutting extremely close to the eye.

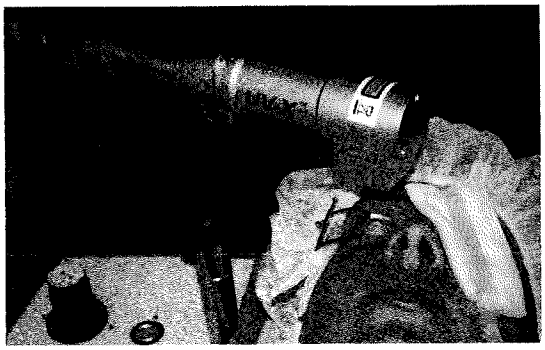
Complications of eyelid procedures can include bleeding, disfiguring scarring, infection and eyeball perforation leading to further surgical interventions or even blindness. Awareness of a patient's medications and allergies and management of blood thinners is needed. Many eyelid lesions cannot be identified as cancerous or noncancerous without pathology which requires a biopsy, special transport of the tissue, and coordination with a pathologist (usually at a hospital). Patients can also experience vasovagal responses from the anesthetic and experience dangerously

low blood pressure, which can result in loss of consciousness, seizures, falls and even heart attack, particularly in at risk patients (elderly).

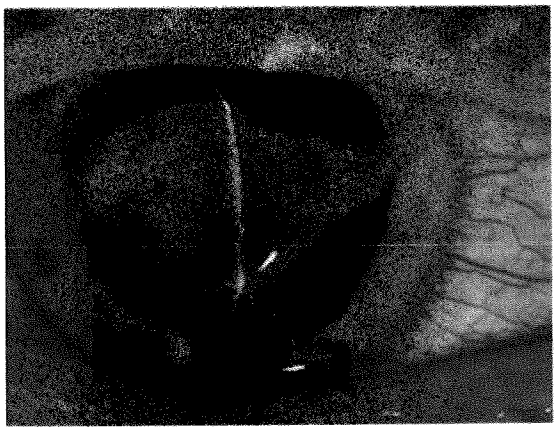
I perform all of these in office surgeries, as well as eye surgery in an operating room and have had to manage various reactions to these surgeries in my 15 years of practice. I still rely on the basic principles and experiences gained during my medical school and residency training. **Textbooks don't adequately describe the human response and model structures do not behave like humans.** It is during these office surgeries that optometrists want to perform, that I have had patients vomit, urinate on themselves and jerk. I have had patients faint, requiring blood pressure monitoring. I maintain both Basic Life Support and Advanced Cardiac Life Support and our clinic has equipment to manage a patient until an emergency response team can respond, if necessary. Unlike the hospital where I operate, I do not have anesthesia or nursing support. These are additional considerations to take seriously when performing in office surgery.

In my practice, consisting of three surgical ophthalmologists, most laser and eyelid lesion consults are accommodated within 1 month and surgeries are often performed on the same day. Patient preference or insurance preauthorization criteria may delay treatment time. In comparison, a routine eye exam appointment may take 6 or more months to accommodate. Laser and eyelid surgeries comprise about 20% of our overall patient volume. To maximize collaborative efforts, we have ensured that local optometry offices have a direct line to the front desk to facilitate booking laser / eyelid surgery consultations. We have also provided our personal cell phone numbers in case of emergent cases needing more time sensitive discussion and/or treatment.

Corneal Collagen Cross-linking:
This in office surgery is used to strengthen the cornea in conditions such as keratoconus or post LASIK ectasia. The incidence of keratoconus is estimated to be 0.05% to 0.08%. Further estimates suggest that only 20% of these patients might require surgical intervention with corneal cross-linking or a corneal transplant at some point in their life. Compare this to a 40% rate of myopia (near sightedness) in the U.S. which is treated with glasses or contact lenses. There are currently no definitive criteria to define indications for corneal cross-linking, but ophthalmologists who perform this procedure take into account a patient's vision and advanced corneal scans tracked over a period of time. There are also many different techniques for performing cross-linking and this procedure is general performed by a corneal sub-specialist who is also performing other advanced corneal surgeries such as LASIK, Intacs, and laser assisted corneal transplants. I do not perform this surgery. **Given the extremely low incidence of this disease and the nuances of diagnosis and treatment, I worry there could be a tendency toward over treatment in the hands of a general eye practitioner.** Complications include infection, inflammation, reactivation of herpetic viral infections, corneal scarring / haze, or progression of the disease process. A very rare, but serious complication also includes corneal melt.



Cross-linking procedure
[Photo: https://www.eyeworld.org/2013/post-operative-management-of-corneal-crosslinking-patients/]



Corneal melt after corneal collagen cross-linking
[Photo: https://www.canadianjournalofophthalmology.ca/article/S0008-4182(16)30520-8/fulltext]

Resources:
https://www.aao.org/eye-health/treatments/corneal-cross-linking-2
https://eyewiki.org/Corneal_Cross-Linking
https://pmc.ncbi.nlm.nih.gov/articles/PMC9672758/

Supporters of this bill would have you believe that optometrists have been safely performing these surgeries in other states without complications. However, as Dr. Atul Gawande aptly notes in *Complications: A Surgeon's Notes on an Imperfect Science*: "No matter what measures are taken, doctors will sometimes falter, and it isn't reasonable to ask that we achieve perfection..." The assertion of a flawless safety record likely stems either from underreporting—since not all states mandate it—or from outright denial. I have personally encountered complications from the so-called "minor" surgeries included in this bill or know colleagues who have. **You also have received written testimony from the ophthalmology societies of Oklahoma and Kentucky, the two states where optometrists have been performing surgery the longest, regarding the complications they have managed from surgery performed by optometrists.**

The fact remains that there is potential for serious complications to include vision loss with all of these surgeries. **The management of most complications listed above are outside of the scope of practice of optometry in every state. For nonsurgical complications that can be managed by an optometrist, what happens if it occurs after hours or the office is closed? It is likely that these situations will require management by an ophthalmologist who takes call and can be reached after hours.**

Optometrists are also asking for the ability to prescribe oral steroids and hydrocodone. Oral steroids can increase risk of infection, worsen blood sugar, increase blood pressure and cause bone thinning. These side effects can be particularly serious in diabetics or elderly. Hydrocodone is a schedule 2 narcotic with a moderate potential for abuse and dependence. **Most ophthalmologists do not need to prescribe any type of opioid for eye surgery.** Both The Maine Medical Association and The Maine Osteopathic Association have significant concerns surrounding this request given the current national opioid crisis.

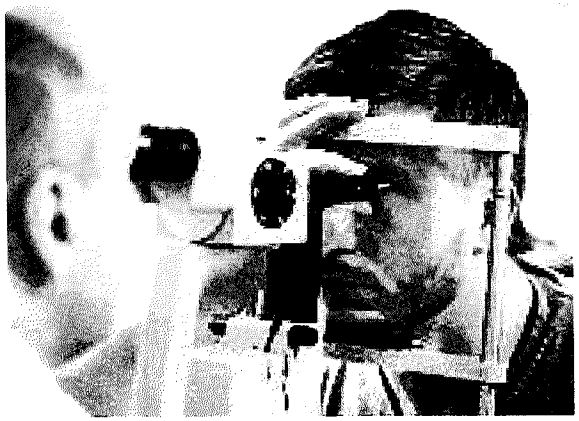
If this bill were to become law, the potential for negative outcomes for Maine eye patients would be great. This by no means is an attempt to diminish the field of optometry. The fact is we all play a critical role and serve as a team here in the state of Maine on behalf of Maine patients. However, placing an optometrist in a role that they are not adequately educated in or trained for is dangerous not only to that practitioner but to the patient as well and may lead to unnecessary procedures and increased healthcare costs.

I urge you to oppose LD 1803. Thank you for your time and the opportunity to speak on behalf of this important subject today.

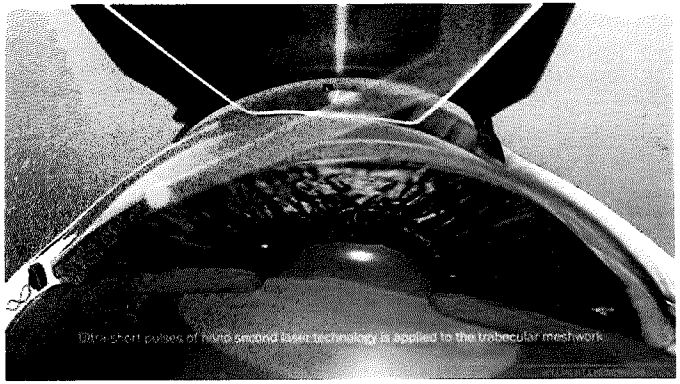
Attachments:

1. Ocular Laser Procedures and Eyelid Anatomy
2. LD 1803 Will Allow Optometrist to Perform Eye Surgery: No Surgery is Simple and Routine
3. A Bad Dose of Medicine for Maine Patients, Vote "No" on LD 1803

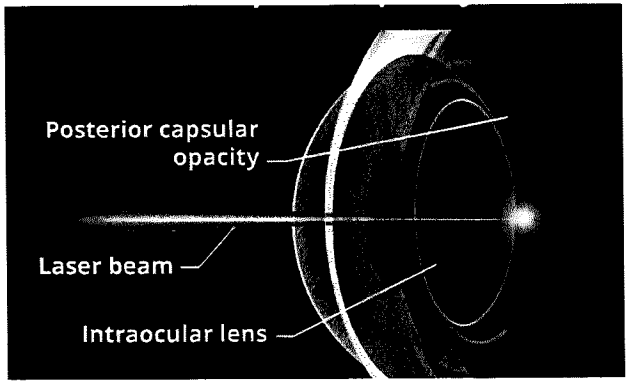
Ocular Laser Procedures



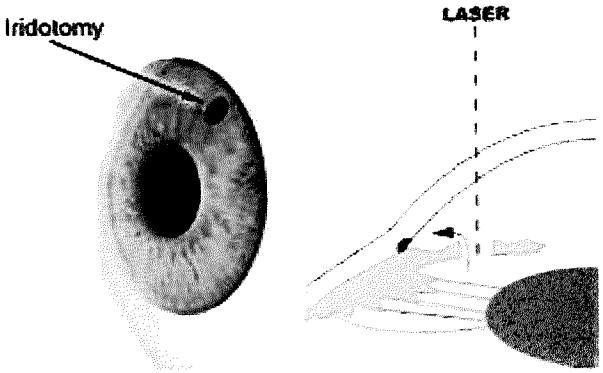
Selective Laser Trabeculoplasty (SLT)



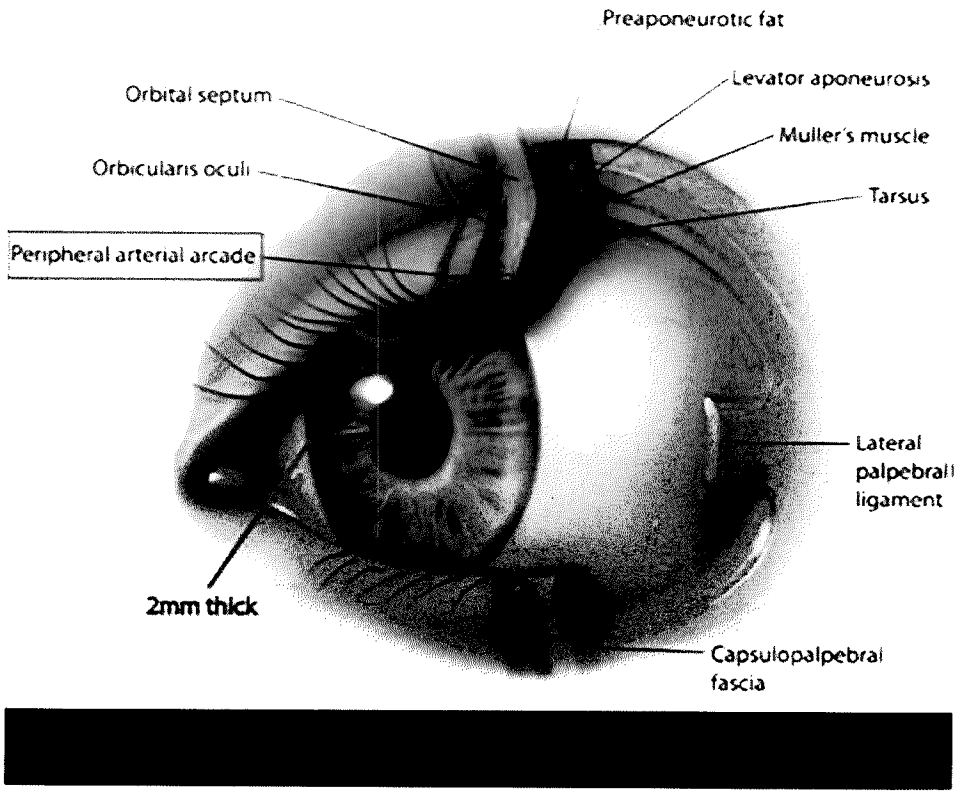
ND:YAG Laser Capsulotomy



Laser Peripheral Iridotomy (LPI)



Eyelid Anatomy



Maine Society of

LD 1803 Will Allow Optometrists to Perform Eye Surgery

No Surgery is Simple and Routine

Despite claims otherwise, the language in LD 1803 will authorize optometrists, who are not medical doctors or trained surgeons, to perform numerous types of delicate eye surgeries on and around the eye using lasers and scalpels. While the bill explicitly prohibits optometrists from doing *some* procedures, they would be authorized to perform over 200 other surgeries not on that list. The surgeries that would be authorized are not "minor procedures" and if done improperly can have serious repercussions to a patient's vision and health.

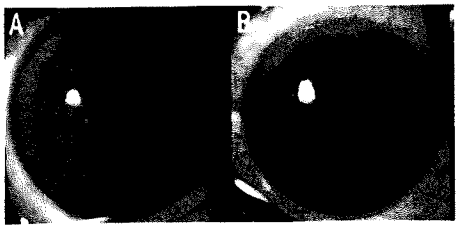
Potential Consequences of improper surgery without proper education and training:

- Misdiagnosis of eye disease can lead to unnecessary or additional surgery.
- Delay to obtaining correct treatment from an ophthalmologist (MD).
- Severe harm to the eye and possible vision loss.
- Improper surgical techniques can lead to disfigurement of the eyelid.

LD 1803 would allow optometrists perform laser surgeries such as YAG capsulotomy, Laser Peripheral Iridotomy (LPI), Select Laser Trabeculoplasty (SLT), microsurgical procedures such as removal of lesions from the eyelid and injection procedures around the globe of the eye.

Samples of laser surgeries in LD 1803 and What Could Go Wrong

Lens pitting from YAG



Bleeding resulting from a LPI

LASER SURGERY	COMPLICATION
YAG capsulotomy – Often needed after cataract surgery to remove a cloudy layer or scar tissue that develops after the surgery. A YAG is a laser used to make an opening in the cloudy capsule to allow light to pass through again.	YAG capsulotomy can result in damage to the lens implant, requiring the full replacement of the newly implanted replacement lens in a procedure far more complex than the original surgery.
LPI – Uses a laser to create a tiny opening in the iris (the colored part of the eye) to help widen the pathway to the drain of the eye and reduce pressure to treat glaucoma. Becoming phased out as standard of care.	LPI can include worsening high pressure, inflammation, bleeding blurred vision, haloes, glare, and double vision. Performing this would delay surgical referral to an ophthalmologist, which could lead to permanent vision loss.
SLT – Uses lasers applied to the drainage tissue in the eye to start a chemical and biological change in the tissue to improve drainage of fluid through the drain and out of the eye for reducing pressure for primary open-angle glaucoma.	Laser Trabeculoplasty can result in abnormal accumulation of fluid in the eye, burns and scaring. If performed in secondary glaucomas, can actually worsen the condition.

Lasers are surgical instruments that cut as deeply and sharply as any scalpel. It is easy to make the cut. It requires extensive education and training to choose the right procedure for your patient and to address complications once they are made.

Maine Society of
Eye Physicians & Surgeons

"Minor Lumps and Bumps" and Injections

In addition to authorizing optometrists to perform laser surgery, LD 1803 also authorizes them to perform scalpel eyelid surgery and the injection of potent medications, anesthesia and other pharmaceutical agents into and around the eyelid.

The injection procedures proposed in LD 1803 are neither benign nor routine. Anytime a needle is placed near the eye, there are serious risks to patients that require adequate clinical experience and judgment. A surgical error of just a few millimeters can result in a punctured eyeball and catastrophic vision loss.

Can you tell which of these pictures shows a life-threatening lesion?

- What appears simple and superficial can be invasive cancer that can spread throughout the body and kill you.
- Sometimes large areas of the eyelid must be removed to prevent the recurrence and spread of eyelid cancer.
- Unlike ophthalmologists, optometrists do not possess the rigorous training required to diagnose eye diseases and perform the necessary surgery to correct the problems.
- Optometrists are not trained to deal with invasive cancer. Cancer treatment is not routine eye care!

Answers:
A. Precancerous skin growth, B. Stye, C. Sebaceous cell carcinoma, D. Lymphoma

While the removal skin tags and skin lesions sound simple and routine, they are scalpel surgery and can have serious repercussions if cut improperly or on the wrong type of lesion. LD 1803 prohibits treating lesions that "*appear*" non-cancerous. But too often, skin lesions that have no malignant characteristics can still be cancerous. Improperly diagnosing and surgically removing any part of a malignant lesion— regardless of whether or not is looks benign—is beyond the optometric education and training curricula.

Optometry school is not a substitute for medical school, and a 32 hour-course cannot possibly compare to the three-year residency an ophthalmologist completes to gain clinical experience, especially when handling immediate complications that can arise. LD 1803 is too great a risk for Maine's patients!

A Bad Dose of Medicine for Maine Patients
Vote "No" on LD 1803

LD 1803 is a blank check for optometrists - who are <u>not</u> medical doctors or trained surgeons - to practice medicine and perform surgery <u>without</u> a medical degree!

- **LD 1803** allows optometrists—who are not medical doctors or trained surgeons—authority to perform over 100 different types of surgeries on and around the eye. While restricts optometrists from performing a handful of specific procedures, ***they would be able to perform ANY type of eye surgery NOT listed.***
- Ophthalmologists on the other hand complete four years of medical school, and four years of a hospital of surgical training program before they can independently see, treat, and if required perform surgery on a patient.

LD 1803 authorizes optometrists to perform surgeries using multiple surgical instruments including:

- Scalpels to cut out potentially cancerous skin lesions
  - The bill prohibits treating lesions that *appear* non-cancerous
  - But too often, skin lesions that have no malignant characteristics can still be cancerous
  - Properly Diagnosing and surgically removing malignant lesions—regardless of *appear* benign is beyond the optometric education and training curricula
- Lasers to perform glaucoma and post-cataract surgery. Lasers are surgical instruments that cut as deeply and sharply as any scalpel.

LD 1803 would also allow optometrists to take a needle and inject potent pharmaceutical agents and anesthesia into the tissues surrounding the eye.

- The injections proposed in the optometry bill are not as benign and routine as its sponsors may suggest.
- Anytime a needle is placed near the eye, there are serious risks to patients that require adequate clinical experience and judgment.
- A surgical error of just a few millimeters can result in a punctured eyeball and catastrophic vision loss.
- Injections performed incorrectly could potentially cause cardiac events, perforate the globe of the eye, cause allergic reactions, or result in a drug entering the blood stream too quickly if a vein is inadvertently injected.

LD 1803 would permit optometrists to administer and dispense hydrocodone, a powerful highly addictive opioid, in combination with analgesics.

- Ophthalmologists (medical doctors and surgeons) RARELY prescribe these drugs, and when they do, it is usually related to major eye surgery--which optometrists cannot perform.
- A basic "rule of thumb" in ophthalmic care is that if you need a controlled substance, you missed the diagnosis.

Eye surgery involves more than performing a technical procedure. Knowledge gained through years of medical education and surgical training is required to not only perform the surgery, but just as important, deciding which patients require surgery and which ones do not. It involves patient education and the ability to identify and manage immediate surgical complications when they arise. **LD 1803** eliminates the safety and quality assurances that patients demand and expect from a properly trained eye surgeon.