Testimony regarding proposed Subchapter 7: Ophthalmic Procedures Endorsement
Jeffery D. Young, MD

Chair. White, Vice Chair. Pollina, and members of the Senate Committee on Government Operations:

I am a comprehensive ophthalmologist right here in Central Vermont (Berlin) and have practiced here for over 6 years. I regularly perform all of the procedures that our Optometry colleagues are requesting in the language they submitted to this committee. Comprehensive surgical training (only available in an accredited 3 year Ophthalmology residency) after medical school is essential to ensure the highest level of care and to ensure safety of patients.

My main concern is that allowing optometrists with only cursory procedural training to perform surgical procedures, puts vulnerable Vermonters at risk. Most Vermonters might have difficulty describing the difference between an Ophthalmologist, Optometrist, and Optician. The names are similar and all are important parts of the healthcare team, but the difference in length and focus of training is profound. Expanding surgical privileges to non-physician Optometrists would only further confuse those seeking care. As any professional (from pilots to electricians) will tell you, training matters. When dealing with the delicate tissues of the eye that have the consistency of wet tissue paper and are in some cases less than 1/10,000th of an inch thick, there is no room for error. The hours that I invested (thousands of hours for a residency trained Ophthalmologist) working with skilled surgeons and performing procedures under their careful supervision, make procedures safer, and protect patients. The training available to optometrists includes minimal hands on training (in this legislation only in a lab or simulation), and no requirement for supervision by a trained surgeon when performing any procedures to ensure safety and proficiency.

I would like to highlight a few of the procedures that this bill proposes.

There are 4 requested laser procedures (and the proposed framework allows this list to grow and include more extensive procedures). 3 of the 4 procedures use a YAG laser. First, let me tell you about a YAG laser. This is short for neodynium-Yttrium/Aluminum/Garnet laser, which is a solid state laser, meaning that the light is intensified in a solid medium. The intensified light is then aimed at the targeted tissue and an aperture is opened emitting a brief pulse of very intense light. The type of laser light emitted by this laser produces a micro shockwave which is used to disrupt tissues. Now for the specific procedures:

Selective laser trabeculoplasty (SLT) is treatment of the trabecular meshwork (or internal drainage network of the eye) to treat open angle glaucoma. The laser targets this delicate tissue in order to increase drainage of fluid and lower intraocular pressure. This procedure carries with it risks including inflammation, increased (rather than decreased) intraocular pressure, and retinal detachment. If carried out improperly or performed too frequently it can cause permanent damage to the trabecular meshwork and result in scarring and significantly elevated intraocular pressure. This procedure is elective and never performed on an emergent basis. It is generally

used in conjunction with topical medications to treat early to moderate glaucoma. One disturbing finding in the Journal of the American Medical Association Ophthalmology which is included in the supplementary materials showed that optometrists in Oklahoma (where optometrists are allowed to perform this procedure), were more than twice as likely as ophthalmologists to perform repeat laser treatments.

Peripheral iridotomy uses the YAG laser to create a permanent hole in the iris to facilitate the passage of fluid to the drain. It is used in a particular type of glaucoma called angle closure glaucoma. This procedure is most often performed on an elective basis in patients who are at high risk for angle closure. Unlike SLT this procedure is sometimes performed on an emergent basis for patients experiencing acute angle closure. If this procedure is not properly carried out for a patient in acute angle closure, a patient may require incisional surgery, or become completely blind. Risks include visual glare, increased intraocular pressure, inflammation, cataract formation, and retinal detachment.

YAG Capsulotomy is a procedure that involves using the YAG laser to create an opening in the thin capsule that surrounds the lens implant (which is placed after cataract surgery). The capsular tissue behind the lens can be only 4 microns thick (just over 1/10,000th of an inch). The YAG laser is used to create a tiny explosion behind the lens implant and make a hole in the capsule which has become cloudy. This is purely an elective procedure. Complications include lens damage, decentration, or dislocation, inflammation, increased intraocular pressure, and retinal detachment.

Peripheral iridoplasty is an extremely rare procedure that uses an argon laser (also sometimes called a “thermal laser”) that causes burns in the peripheral iris to reshape its contour or help reshape or recenter the pupil. This procedure is significantly less common than the other laser procedures and is elective. The potential complications with this laser include irregular, dilated, or decentered pupil, inflammation, increased intraocular pressure, and retinal detachment.

As you can see, laser eye procedures are complex, carry with them significant risk, and cause permanent changes to the eye. In fact, the Department of Veterans Affairs (VA) has issued a specific policy prohibiting optometrists from performing laser procedures in any VA facility, this even applies to optometrists located in states which have granted such privileges. (VHA directive 1132)

Also, included in the list of procedures is the following broad and misleading language “Removal of benign eyelid and eye growths.” Adding the word “benign” makes it seem like removing lesions from the eyelid or eyeball is no big deal, after all it is “benign.” But, the wording of this request demonstrates poor understanding of the gravity of these procedures. There is no one who can tell whether a lesion is benign or malignant just by looking at it. I have removed a lot of eyelid lesions, and have on several occasions removed lesions that had all the features of a benign lesion, but which turned out to be skin cancers. If such cancerous lesions are removed improperly or incompletely there is a significant risk of spread of cancer, or of greater difficulty

with reconstruction afterward. I have included some pictures that demonstrate the difficulty in distinguishing “benign appearing” lesions, from malignant lesions.

As an ophthalmic surgeon and advocate for my patients, I ask that you not to allow this legislation to proceed. We need to protect patient safety and ensure the highest standard for eye surgery in Vermont. We will all likely end up on the other side of a laser, needle, or scalpel some day, what standard of training would you want for the person on the other end?

Thank you,
Jeffery D. Young MD