My name is Shane Havens. I am a board-certified ophthalmologist. After ophthalmology residency, I completed a glaucoma fellowship certified by the Association of University Professors of Ophthalmology (AUPO). I work in private practice in Omaha and at the Omaha VA Medical Center Eye clinic where I supervise ophthalmology residents from UNMC in the glaucoma and cataract surgery consult clinic for our state and region's veterans. During a typical weekly glaucoma consult clinic at the VA, I work with a junior and senior resident seeing 12-15 glaucoma consult patients referred by VA ophthalmologists and optometrists for consideration of SLT and surgical planning. I see each patient with the resident, confirm clinical findings, including observing gonioscopy and performing a second gonioscopy myself, and then guide the development of an appropriate treatment plan. If SLT is an appropriate next step in treatment, I then watch the resident perform the SLT through a side scope to ensure correct laser application and advise on laser energy adjustments depending on the tissue response with each laser pulse. When anatomy or positioning makes the SLT difficult I can step in to ensure the patient gets a safe and complete treatment. The residents also work in UNMC's glaucoma consult clinics, in which they work with another glaucoma fellowship-trained ophthalmologist in a busy clinic seeing 30+ glaucoma patients each day. On average, ophthalmology residents graduate with fifteen primary SLT lasers, all of which are performed under direct supervision, after observing many SLT's being performed by board certified glaucoma specialists.

For the last 8 years, I have worked with the UNMC residency leadership team to formulate didactic, clinical, and surgical curricula for ophthalmology residents and evaluate ophthalmology resident competence and procedural performance throughout their training and upon graduation. We adhere to and work to exceed surgical minima established by the Resident Review Committee of the Accreditation Council of Graduate Medical Education (ACGME) for each resident during their training. This is the current standard for ophthalmologists performing SLT in the state of Nebraska and around the country. This model has helped ensure high-quality surgical care is during ophthalmology training and beyond.

On behalf of the Nebraska Academy of Eye Physicians and Surgeons (NAEPS) I would also like to provide responses focused on two of the very thoughtful questions asked by the committee member Dr. Chasek.

2. In the NMA's opposition letter, they highlight the need for patients to be assessed for risks prior to surgery. They further state that optometrists do not have the training or expertise to be able to evaluate and identify risks before the surgery. Please explain the risks and what exams are needed. Do providers need medical training to understand and evaluate the risks or is the initial training and/or continuing education of optometrists sufficient to assure these risks are minimized?

0phthalmology residency consists of 3.5-4 years of direct clinical and surgical education, made up of thousands of complex patient encounter, supervised by experienced board-certified staff ophthalmologists dedicated to managing all severities and complexities of eye pathologies. The ACGME requires a minimum of three thousand outpatient clinical encounters during ophthalmology residency. During ophthalmology residency, it takes 3.5-4 years, over 40-50 hours/week of supervised clinical care, including overnight and weekend call coverage at a level-1 trauma center, to achieve 10,000 hours of direct patient care. While in consultant glaucoma clinics this extensive training helps the ophthalmology resident master gonioscopy with 1-on-1 mentorship and observation over countless clinical encounters and provides the necessary clinical experience to assess, treat, and follow patients with glaucoma. Expert gonioscopy is a skill necessary to perform high-quality SLT. Incorrect gonioscopy technique and mis-identified angle structures can lead to an incorrect diagnosis and thus an incorrect treatment plan resulting in at best… a delay in more definitive care, but in the worst case

scenario, uncontrolled eye pressure elevation, corneal edema, or intraocular inflammation. Infrequent and incorrect gonioscopic assessment makes treating the wrong part of the eye with the SLT laser more likely. These errors can lead to permanent vision loss and the potential need for emergent/urgent surgical interventions which may have been avoided. The complex patients seen in ophthalmology clinics during residency and the concurrent performance of ophthalmic surgical procedures helps generate the skill and ability to recognize relative and absolute contraindications to SLT before a procedure is recommended. Subtle clues and variations of eye anatomy may redirect the treatment plan altogether and potentially avoid unnecessary procedures otherwise. For decades, the standard for this level of surgical care has been medical school followed by ophthalmology residency training that meets or exceeds standards of the ACGME. Only ophthalmology training provides a sufficient volume of complex glaucoma patients to learn examination techniques, appropriate indications and contraindications for SLT, as well as a sufficient volume of 1-on-1 mentored laser procedures to develop the skill and competence to perform SLT.

3. Along this same line, if complications occur during or after the surgery, who can treat those complications? If the basis of the argument to expand the scope of practice because patients are too far away from ophthalmologists to access the surgery, how will they get the care they need if problems happen? How critical is it to have the care immediately versus waiting until the patient can get from the rural area to specialty care?

In glaucoma, especially in severe cases with advanced visual field loss, eye pressure can be directly correlated to loss of central vision and the possibility of permanent blindness and disability. The biggest risk of SLT is that it may not have any effect on eye pressure. In fact, 20% of patients do not have an eye pressure reduction after SLT and will need advancement in their glaucoma treatment. It can take a minimum of 6 weeks to see the full pressure lowering after SLT. If ineffective treatments are repeated the related delay in more definitive care can result in irreversible vision loss. Even more concerning, 5-10% of patients will experience an eye pressure elevation after SLT. This eye pressure elevation after SLT can be significant and does not always respond to additional eye drops or eye pressure lowering pills. The eye pressure elevation often lasts 1-2 days but sometimes can persist. Even short-term eye pressure elevations may result in significant vision loss in patients with moderate to severe glaucoma. If the eye pressure elevation persists the patient may require urgent or emergent referral to an ophthalmologist for definitive glaucoma surgical management. Surgical glaucoma interventions are beyond the training and experience of optometrists. Even a short delay in referral to an ophthalmologist after such a complication puts the patient at risk of progressive and permanent vision loss.

Thank you for your thoughtful consideration of this very important decision.

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