Dr. Brian Kim S.158

Thank you for allowing me to speak with you today. Please let me introduce myself. My name is Brian Kim and I am Chief of Ophthalmology at UVM. I serve as the Shipman Professor of Ophtho at the Larner College of Medicine and also serve as a board examiner for the American Board of Ophthalmology, the governing board for continuing board certification for Ophthalmologists. I've served as Chief of Ophthalmology for ten years now, and have been here at the University for over 15 years. The best part of my job at the University is being able to help the people of Vermont. With regards to my training, after four years of medical school in St Louis and one year of a medical internship, I completed three years of ophthalmology training at the Cleveland Clinic, and two years of combined medical and surgical retina fellowship at Johns Hopkins. As I'll speak about, I believe all of these experiences important to safely perform surgery.

I want to start by stressing I firmly believe optometry provides a crucial and necessary role in providing primary eye care for patients who need it. And I also believe that this care expands well beyond just performing visual acuity tests, fitting glasses and contacts, as I believe some people feel to be the case. They are vital and necessary partners in providing primary eye care in concert with ophthalmologists. I have worked very hard my entire career to be inclusive and not exclusionary in my partnership, and I stress the word partnership in the care of my patients. I consider optometrists as valued colleagues, and many I consider personal friends. Even with these personal and professional relationships, and because ultimately we are both dedicated to safe patient care, I have to make an important distinction. While I believe strongly that optometry has the necessary training to perform primary eye care, their training simply is not sufficient to perform surgical cases. In the new bill being put forward, the privileges being sought for include "ophthalmic surgery". That is an important distinction that needs to be highlighted and clarified. To perform "ophthalmic surgery", the providers have to be appropriately trained with stringent, standardized, careful oversight by surgeons with years of hands on surgical experience in these fields. In their current curriculum and training, optometry simply does not have that.

If you look at my training path that I listed above, it seems like a long path. And believe me, it felt that way while I was going thru it. While I accumulated well over 10,000 hours in direct training over many years, and performed more than a thousand surgeries over that period of time, the most important part of my training was the manner in which it was undertaken.

It may seem odd that I would feel that four years of medical school would be necessary to be an eye surgeon. Those four years however were the foundation of everything to follow. To truly be a surgeon in any specialty, one has to have a base understanding of the human body, and all the parts of if that contribute to patient care. I've relied on the skills obtained not only in the classroom, but also in clinical settings like the ER, ICU and general medical clinics many times over the course of my surgical retina career that have had direct impact on my patients. Safe surgery not only entails the actual act of lasering, incising, excising: more importably, it entails all the details of patent care prior and post surgery that rely on an excellent font of general medical knowledge.

To safely perform eye surgery on my patients, I then went through an additional 6 years of comprehensive, intensive training, which included didactic lectures, extensive literature and written study, but most importantly, actual surgical experiences with real patients under the direct supervision of a specialized eye surgeon who had performed each of these cases thousands of times. This is a key separator of ophthalmologic surgical teaching from optometric teaching. While optometric training relies on didactic lectures, literature and written study, the actual performing on these procedures is generally via observation or on inanimate models or

cadavers. There is absolutely no substitute for performing any surgical procedure, whether it is laser, injection, or incision on an actual human patient.

I'd like to share one of my very first experiences with a patient performing an injection.

So you can see, while I already had extensive training with hundreds of hours of reading, lectures and model work, and felt prepared to perform my first injection in as controlled an environment as could be hoped for, the procedure did not go as planned. And if I did not have the proper oversight, and immediate treatment of the issue I had caused by an experienced surgeon who had thousands of these procedures under their belt, this patient would have undeniably had a poor outcome that could very well have been permanent. This would have led to retinal detachment, one of the most significant vision threatening consequences that can result in blindness even with surgical repair.

And this is why the ophthalmology model of surgical training is so vital to perform even what has been called a "simple" procedure. The reliance of Ophthalmology surgical training on work with actual patients with a surgical senior mentor directly overseeing every movement during surgery is repeated over and over again for each procedure we learn to master. There is no substitute for this method, which further also relies on a national, standardized registry to demonstrate the bare minimum required. I have been part of efforts to develop AI or virtual models aimed to supplement the experience obtained by working with real patients. I can also say with certainty, that even the most advance AI models do not simulate real patients at this juncture in time. They can really only be used successfully in conjunction with, and to augment and not replace real surgical patient experience.

The current bill for optometry performing ophthalmic surgery proposes a minimum of 32 hours of training, observation and practical work with models to be sufficient to perform some of these tasks. As I know from personal experience, and more critically from my own failures and setbacks, that is not nearly enough time, nor with the actual human patient interaction necessary to perform even what has been called "simple surgery". Laser, incisions, excisions are all significant events which lead to permanent alteration and controlled destruction of human tissue. And all of these can lead to permanent visual loss.

I would also like to say that the bill in front of you is different than 2019. In the 2019 version, the bill was more inclusionary, ie it spelled out specifically what procedures were being sought out. With an inclusionary bill, there was much more specificity, given that each procedure being asked for could be specifically vetted for appropriateness of training. There would be no grey area as to what could and could not be performed. The OPR study that was a result of this bill stated that "OPR cannot conclude that optometrists are properly trained in and can safely perform the proposed advanced procedures." Further, "the proposed advanced procedures, if performed by untrained individuals, pose risk to the health and well being of the public".

This new bill is exclusionary in nature. While it still allows for the same procedures asked for last time to be performed, such as lasers and removal of benign lesions, it specifically excludes procedures, including any surgery requiring incision of structures including the iris, vitreous and retina. At first glance, it appears that the exclusions would limit significantly what surgical privileges are being requested. Rather it does the opposite. With the exclusionary list, as requested for in this bill, the number of procedures that optometrists might perform is exponentially larger, and would constantly change as research develops new technology and

procedures. The exclusionary list also makes confirming that the training aligns with the scope and authority much more difficult. Thus this new bill appears to be significantly more impactful and broad than the last. Importantly, not enough time has passed since the OPR study to indicate that optometric training has changed significantly enough to address OPR's past conclusion and concern that optometry has not demonstrated that they have the necessary training needed to safely perform the procedures being asked for in this new bill.

This is not the first time optometry and ophthalmology have come before the state to discuss the delivery of care to the people of Vermont. I want to end again by referencing the OPR report just completed. In delivering primary care to the people of Vermont, OPR concludes, "it is not clear to OPR that the proposed advanced procedures are "simple" and part of "primary eye care". They further state that past assertions by the Vermont Optometric Association, who represents the Optometrists of Vermont also did not always consider these procedures to be "primary eye care" either. During the 2003 Vermont optometric scope expansion report process, the Vermont Optometric Association asserted that "surgical and tertiary medical eye care" went beyond primary eye care." Now while much has changed and advanced in that period of time, what has not changed is the lack of surgical training and direct surgical patient experience offered by optometric curriculum.

In the over 10,000 hours of training I have received, I would say that without direct surgical experience on human patients, I would not feel safe performing surgery. I shared the story of my own failures in training to highlight the need for standardized, hands on oversight by experienced surgeons. The risk to the patients, and in this case, the people of Vermont is just too high. I would ask that you please consider the data and conclusions of the OPR study just completed. Nothing has changed dramatically in the training of optometrists that address the base concerns of the safety that we are all here to protect and uphold.

Again, I have nothing but the deepest respect for optometry and in particular the optometrists in the state of Vermont. While we work together to delivery primary eye care to all of our patients, that should not include advanced procedures especially in the exclusionary manner they have been requested for.

Thank you very much for your time.