

Testimony in support of House Bill 2173  
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Chair Lively and members of the Committee, thank you for the opportunity to share my thoughts with you today.

My name is Dr. Miles Ellenby and I reside in Portland. I'm a professor of Pediatric Critical Care at OHSU's Doernbecher Children's Hospital and also serve as the Medical Director for the university's rapidly growing TeleHealth Program. We currently provide remote virtual healthcare and education throughout the state and region, through a variety of platforms, to the full spectrum of patients and providers, and in situations ranging from acute care in community hospital Emergency Rooms, to chronic care delivered in skilled nursing facilities and directly into the home.

I additionally have had the honor of serving for 10 years on the Oregon Broadband Advisory Council since its inception in 2009 and am here to provide testimony in support of House Bill 2173, to create the Oregon Broadband Office and to continue the work of the council. I want to share with you the important role that broadband plays today and in the future of healthcare delivery.

Currently OHSU offers emergency consults to hospitals around the state via telemedicine, allowing access to specialists that aren't otherwise available in their communities. As an example, Oregon has three Pediatric Intensive Care Units, all located within 10 miles of each other in Portland. Access to Pediatric ICU specialists is greatly restricted by geography. But in 2007 we created the first acute care telemedicine connection in the state, linking the emergency room and pediatric ward at

Sacred Heart Medical Center at Riverbend in Springfield to our ICU in Portland. Historically a large number of these children would have been transported at great expense and risk to Portland, often due to a perceived lack of comfort on one end or the other of a phone interaction. We demonstrated that, with the additional information that can be gained via a real time video connection, a significant percentage of these children could be safely cared for in Springfield. And on the other, unfortunate, end of the spectrum, we have assisted with resuscitations, partnering with local providers, at times to dramatic benefit because we can now see the child, observe their response to therapies and guide the local team in assessments and procedures they fortunately don't have to do very often. The benefits of face to face communication allows for superior data exchange as compared to the old standard of telephone only. And while we would all agree that a picture is worth a thousand words, in moments of severe critical illness, live interactive video is priceless.

Since 2010, OHSU had expanded its telehealth network to include services ranging from emergent stroke assessment and management, adult ICU coverage, pediatric critical care consults to neonatal resuscitation support. In collaboration with local providers, our team has assisted with the emergency care of approximately 2400 Oregonians, at times with dramatic life-saving effects. These consults occur 24/7 via real-time video conferencing, assisting onsite emergency providers with immediate specialist involvement when caring for these critically ill patients.

Additionally, OHSU is providing outpatient telemedicine visits for those who have limited access to care based on geography or limited mobility. Historically patients would travel the many hours to Portland for a brief 15 to 30 minute encounter, with a provider with whom they have an established relationship, for a condition where part of, but not all of, the physical exam was needed. So, families were left with 2 options. Either make the long trip, often missing a day or two of work or school, sometimes with the added expense of an overnight stay, all at a great personal cost – we all know that insurers cover the cost of the medical visit, but the significant transport expenses are often left to

the patient. Or unfortunately, and all too frequently, they would not make the trip at all and not get the appropriate care. Now these brief follow up visits can be provided by telemedicine, both to clinic settings where a nurse, medical assistant or even primary care provider participates and assists with gathering of vital signs and exam components or directly to the patient's home, for more cognitive level interactions. This platform can offer improved compliance for follow-up care and huge cost savings, to those with chronic diseases and even to those who simply need a post-op wound check following surgery.

Another telehealth area that is rapidly growing is Remote Patient Monitoring, which allows those with chronic diseases to continue to live safely and independently at home. Now when high risk patients are discharged home from the hospital, they can be sent out with a connected tablet. Daily they report their progress, symptoms and overall status via the connected device. They also upload pertinent physiologic data like their blood pressure, oxygen levels or weight directly to their care team at the hospital. Based on the responses, the team can identify patients not doing well and intervene in a proactive fashion, with the goals of avoiding unnecessary emergency room visits, re-admissions and most importantly improving their health outcomes. Providers can much more easily continue to monitor these patients and patients are empowered to take an active role in their disease management. These connected technologies and platforms are in their infancy but allow patients to be discharged sooner and more safely to their home environment.

As you know, healthcare is facing a global aging problem as the baby boomers hit retirement age. Already stretched resources will need to be expanded; but instead of building more hospital and inpatient beds, telehealth technologies will allow for virtual care – allowing patients to live as independently as is safely possible through remote patient monitoring.

Finally, I would be remiss if I didn't mention the advances made in the areas of Health Information Exchange. Indeed, Oregon has been a recognized leader in health informatics and in the implementation of electronic health record. As a provider, I now have access to records and imaging studies from across the state via health information exchange networks. This allows me the best access to information, reduces redundant testing and improves outcomes.

The broad areas that I've touched on, acute & chronic care video consultations, health information technology exchange & remote patient monitoring, are the pillars of the rapidly growing field of tele-health, also known as connected health, virtual health, or e-health.

But none of these quality-improving and cost-saving tech applications would be possible without the reliable real time connectivity of a robust broadband infrastructure. And connections of all scale are necessary to leverage the power of these advances. Between community hospitals and large medical centers via dedicated networks; and from your doctor's office to your home via the last mile connections.

In 2019, a robust broadband network facilitates the delivery of healthcare by extending the reach of a limited number of providers, increasing access to care both geographically and temporally, in both acute care and chronic care situations. Broadband connectivity allows patients & providers rapid access to their electronic health record and facilitates data sharing across providers.

As we struggle with an ever-mounting healthcare crisis, efficiencies, cost savings, and improved outcomes are all possible with the application of these technologies - realization of this potential is dependent on a strong broadband backbone. We therefore greatly support the goals and direction as laid out in this forward-thinking legislation.

Thank you for this time. I welcome your questions.