THE UNIVERSITY of TENNESSEE UT
HEALTH SCIENCE CENTER

Telehealth
920 Madison Avenue, Suite 434
Memphis, TN 38163
Phone: (901) 448-4330
Fax: (901) 448-4324

Good afternoon Chairman Kohl, ranking member Corker and Senator Wyden. Thank you for having me here today. I am grateful for the opportunity to testify regarding Aging in Place and the associated healthcare technology which has such a significant impact on the quality and dignity with which our citizens receive healthcare.

My name is Richard Kuebler and I am responsible for the Telehealth program at the University of Tennessee Health Science Center (UTHSC) in Memphis. Our program is nearly 12 years old, and is one of the oldest programs in the country. I have worked within the Telehealth environment for 10 years. We have seen Telehealth (telemedicine, eCare) work across a myriad of specialties, and we use Telehealth as a clinical delivery mechanism over distance. Telehealth can be as simple as remote glucometer monitoring or as complex as real time diabetic retinopathy diagnosis. However, the results are the same. Telehealth as a delivery mechanism for healthcare works. We see a diverse scope of patients and since Tennessee borders more states than any other State in the country, our providers are able to see patients from any of our 8 bordering States. Patients see no discernible difference between the levels of care. One provider was stunned when, at the conclusion of a consult, the patient stood up to shake his hand despite being 200 miles away. We have seen Telehealth save lives, increase the quality of life and treat chronic diseases across our State and our region.

Specifically, healthcare delivered remotely into the home has had a significant impact on health outcomes and cost savings. We at the University of Tennessee Health Science Center in Memphis have the research outcomes that show home-based Telehealth used on an "at risk" population for congestive heart failure decreased hospital admissions by 80%. Hospital readmission rates were reduced by 85% and as a result the cost per patient dropped from $10,000 to $2,500. Nationally, there are 5 million hospital days per year for congestive heart failure costing approximately $8 billion (based on $1600/year average). The national implications of utilizing Telehealth in this single specialty could reduce health care costs by $3.8 billion.

At University of Tennessee Health Science Center in Memphis, we have developed the only real-time diabetic retinopathy technology program in the world. Diabetes is an epidemic that affects 21 million of our citizens and 20% of Tennessee's population. An additional 7.5 million people across the country have pre-diabetes. Diabetic retinopathy is the leading cause of blindness among adults in the industrialized world, and currently in the United States 400,000 patients are screened for diabetic retinopathy every month. Traditionally, the screening is done as a store-and-forward method taking as long as several days to a week for results to be returned. The patient then has to be rescheduled and the diagnosis delivered. Utilizing digital imaging and a highly advanced computer algorithm, we are able to deliver the result within 90 seconds, saving costs and drastically increasing the efficiency of patient care.

There are associated costs with Telehealth, not the least of which is connectivity. The FCC has several programs which subsidize connectivity into rural and underserved areas which offsets the cost by up to 85%. While existing home monitoring technologies may not be bandwidth-intensive, the access of broadband at home can establish a platform for ancillary medical services such as clinical videoconferencing, education and medication management technologies. The expansion of wireless 4G technology or traditional land-based fiber optics would have significant impact on the level of care delivered to the home or “last mile.”

A successful business model for Telehealth is direct contracting between the service providers such as University of Tennessee Health Science Center and Managed Care Organizations (MCO’s). In the case of maternal fetal medicine and pediatric cardiology, providing blanket service for a regional population can provide cost capitation for the MCO while also covering the cost of delivering Telehealth services into outlying or metropolitan areas.

The most significant barrier to adoption is reimbursement. In the previous real world Telehealth applications of both chronic heart failure and diabetic retinopathy there is no reimbursement for providing these services. When left to altruism alone, there is little hope of a sustainable business model for Telehealth. In most cases where Telehealth practices are reimbursed, it is done on a lower scale than a traditional brick and mortar patient encounter. If a provider is reimbursed 2-3 times as much for a traditional clinical encounter versus a Telehealth encounter, which type of health care is incentivized? Telehealth is being “dis”-incentivized by the current fee-for-service model.

While reimbursement varies from State to State, the successes of Telehealth implementation, from a billing standpoint, have been inclusion of Telehealth as a traditional method of care. Whether delivery of healthcare into the home, or the extension of specialists into rural and underserved areas, there must be an equitable billing mechanism for Telehealth to be sustainable. Currently, Telehealth is reimbursed as an exception, or as a “less than” method of care delivery. States such as California and Missouri have incentivized the practice of Telehealth by State Medicaid provisions which reimburse equally for Telehealth services which meet certain technical criteria. Telehealth should be viewed as an accepted level of care versus an exception to the rule from a reimbursement standpoint whether delivering care into the home or treating a patient a rural clinic.

At UTHSC Memphis we have seen the opportunity and radical improvement to healthcare that Telehealth can afford. The implications can go far beyond the quality of life for our aging population, preventing hospital stays and nursing home enrollment. The significant cost of health care for our aging population is undeniable and we have demonstrated that the cost savings exist. Ultimately, a model must be created to ensure that Telehealth care providers are equitably reimbursed; otherwise there is no incentive to change traditional delivery of care. Telehealth is not a panacea and like any other form of healthcare practice there is potential for abuse; however, the potential of healthcare is almost limitless in the ability to provide quality medical care over distance.

Chairman Kohl, ranking member Corker, Senator Wyden and the committee, thank you for the opportunity to speak about the incredible opportunity that faces us regarding advancing the level of healthcare in our State and the country. I am happy to answer any questions you may have.