Testimony before the 2017 Special Committee on Health.
October 20, 2017- Brian J Hunt, MD, FACP

Good morning to you chairman Hawkins and esteemed colleagues. Thank you for allowing me this opportunity to discuss Telehealth and in particular Telemedicine. It is my sincerest hope that the information I provided to you today will give you a better understanding of this new field of medicine.

To begin with I would like to introduce myself.

My name is Brian Hunt. I have had the great opportunity to grow up in Southern Kansas on a cattle and wheat farm. I am a first-generation Physician. I graduated from Kansas State University in 1985. I subsequently received my medical degree in 1990 at Kansas University School of Medicine. I completed my Residency in Internal Medicine/Pediatrics in 1994 at the University of Kansas Medical Center. Since finishing my residency, I practiced primary care in Linn County Kansas for 10 years. This county is one of the few in our State where there are no hospitals. I and a mid-level provider cared for patients in two clinics. I then practiced Emergency Medicine in Lawrence for 10 years. I subsequently practiced Hospital Medicine in Lawrence for the past 6 years. Over the past 4 years I have provided Telemedicine services in Kansas as well as across the country. During this 26-year period of time I had the distinct privilege to serve ten years as Medical Director for Kansas Foundation for Medical Care (Quality Improvement Organization for the State of Kansas). I have had the opportunity to speak at several conferences regarding Telemedicine services. I also have become a Fellow in the American College of Physicians.

Most importantly I have examined well over 3,000 patients across the country utilizing telemedicine technology. I provide Telemedicine services in over 25 hospitals from west to east coast. Two years ago, I, Dr. Jason Kimball and Dr. Marc Scarbrough formed a company called Sunflower Telemedicine LLC. In collaboration with Eagle Telemedicine, our company focuses on providing telemedicine services to over 10 hospitals to date in Kansas alone. We truly are Kansans caring for Kansans.

An introduction regarding Eagle Telemedicine: Eagle Telemedicine was founded in 2008. They are based out of Atlanta Georgia and provide inpatient Telemedicine solutions to over 80 hospitals and hospital systems across the country. Eagle Telemedicine was one of the first companies to emerge in the inpatient telemedicine physician service arena and continues to be an industry leader as well as a pioneer in the industry today. The company currently offers telemedicine programs and solutions in Hospitalist Medicine, Stroke and Acute Neurology, Psychiatric Care, Cardiology, Pulmonary/Critical Care and Infectious Disease. Sunflower Telemedicine has had the distinct privilege of partnering with Eagle Telemedicine as we work with Hospitals in Kansas. The following map shows the breadth of Eagle Telemedicine's services across the United States.

EAGLE TELEMEDICINE

EAGLE LOCATIONS

KEY

- TeleHospitalist
- Tele-Cross Coverage
- TeleStroke / TeleNeuro
- Tele-ICU
- TelePsychiatry
- TeleNephrology
- TeleCardiology
- Tele-ID

The intent of this summary is to demonstrate that I possess the unique perspective of having provided care in multiple settings in multiple capacities and have extensive experience in the field of Telemedicine.

I would like to move on and discuss some definitions pertinent to the discussion today.

Telehealth consists of the broad categorization of services that are a collection of means or methods for enhancing health care, public health, and health education delivery and support using

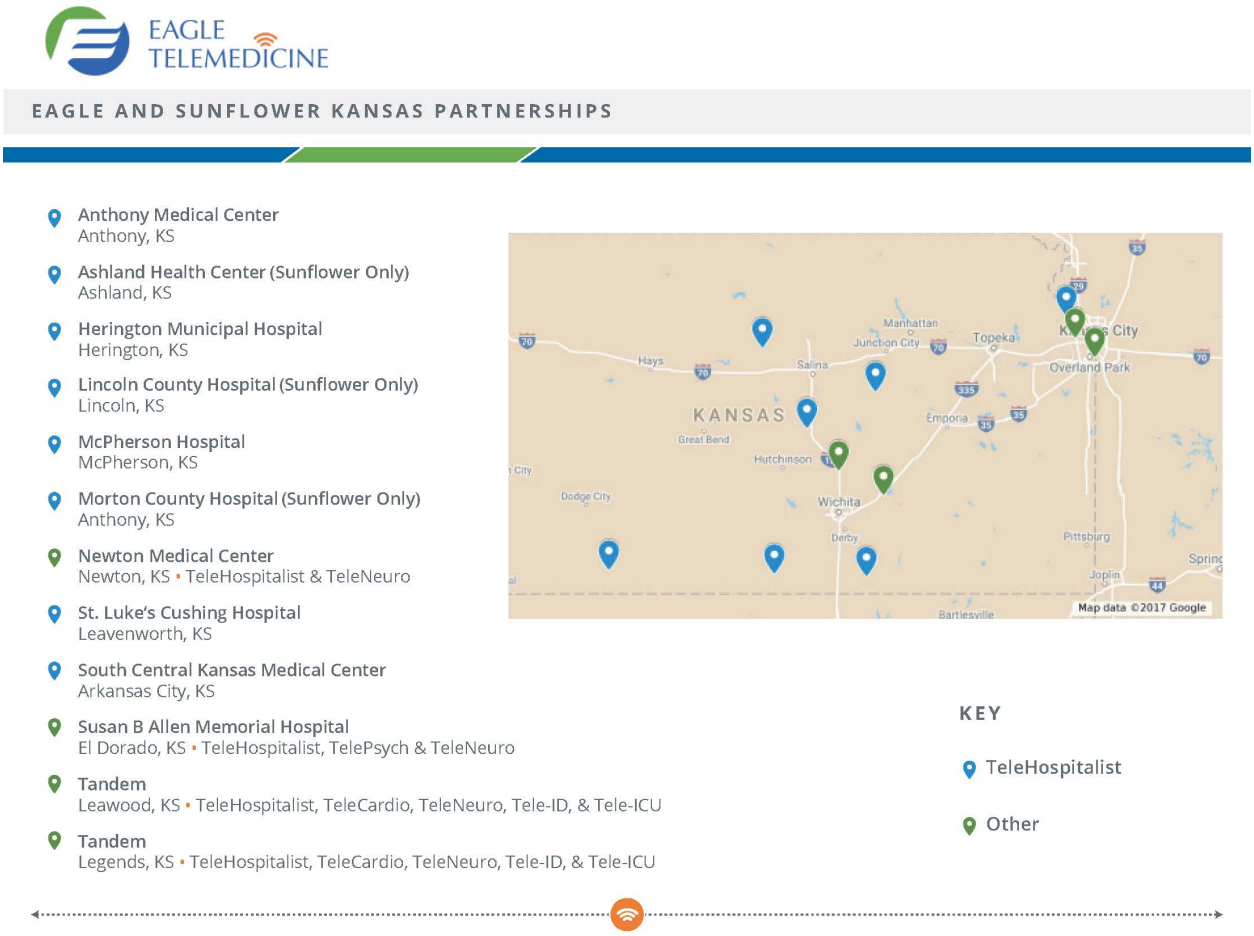
telecommunications technologies. (“Center for Connected Health Policy, The National Telehealth Policy Resource Center”) This encompasses many areas of health care. One subset is the delivery of Telemedicine.

Telemedicine refers to the traditional clinical diagnosis and monitoring of patients. Essentially the physician is interacting as if they were on site managing patients who are acutely ill, typically in a hospital setting. It is this area of Telehealth that I would consider myself an expert in and would like to offer testimony today.

Telehospitalists are a collection of physicians who provide services in a multitude of capacities. They could be a Cardiologist, Pulmonologist, Psychiatrist, Neurologist and an Internist/Family Medicine physician. (To name but a few). What is true of everyone practicing Telemedicine is that we are all licensed in the State in which we are practicing. Further we are all fully credentialed in the Hospitals in which we are practicing. We are fully engaged in the activities of the Hospitals in which we provide service. There are no exceptions to this and we are held to the exact standards of any physician practicing on-site in these Hospitals.

Currently in Kansas there are many hospitals that utilize Telemedicine services. As mentioned earlier this includes Pulmonary/Critical care, Cardiology, Neurology, Psychiatry, Dermatology and Primary Care. The earliest use of Telemedicine was the subspecialists. As is provided in graphic form below there are

many regions of our State that are currently being served by Telemedicine. This is highlighted so that you can see that this is not a brand-new reality in medicine. This is out there and it is growing. With our company alone and in collaboration with Eagle Telemedicine, we have added 3 new providers over the past year and are projected to add at least another 7 during the upcoming 2 years.



So far, we have discussed what defines Telemedicine and the types of services that are being offered. I would like to move on and discuss the importance of Telemedicine for the future of our communities.

There are multiple issues to consider when addressing this topic. It is my belief that Telemedicine is important in the support of our Critical Access Hospitals across the State. Further it has the capability to improve the stability and growth of all Hospitals regardless of their size.

It is well described that there is an ongoing and escalating shortage of Physicians across the Country. It is projected that by 2025 there will be a shortage of over 90,000 physicians. ("2016 report released by the Association of American Medical Colleges") Every community across the country will be competing for these Physicians. This shortage is disproportionally represented across geographic boundaries. Those communities in rural settings are having fewer physicians starting or joining practices. Kansas already recognized this and many years ago and set up the KMS sponsored medical student loan repayment program. More recently KU opened a satellite medical school campus in Salina. These are but a few examples of the efforts ongoing to promote the recruitment of physicians into more rural communities.

Additional well documented facts are the following:

67% of Hospitalists reported career burnout was significant or very significant.

Over 20% of US citizens live in rural areas but only 10% of doctors practice there.

Over 80 rural hospitals have closed since 2010, with another 670 plus in danger of shutting their doors.

Telemedicine can play an important role in assisting with this ongoing Physician shortage and changing dynamics without our rural hospital communities.

Telemedicine can assist in physician retainment. Our company has participated with communities with one physician practicing who has not previously been able to step away from clinical duties even when on vacation. By backing this physician up using Telemedicine, this physician is now able to have a true break from practicing medicine. I think we all can appreciate how important that would be.

For those practices where they have a Hospitalist group that manage the patient 24 hours a day, a Telemedicine presence during the night hours relieves the group of this responsibility and improves job satisfaction. In a majority of the hospitals we work with this is the form of Telemedicine being provided.

Another area where Telemedicine benefits is Physician recruitment. When recruiting physicians into a community one of the questions being asked frequently is, are there Telemedicine services being provided. If a community can answer in the affirmative they are more likely to recruit that provider.

By improving Physician retention and Physician recruitment, Telemedicine is positioned to assist local communities in the stabilization of their medical community.

Moving on, I would like to discuss other positive aspects of Telemedicine. With the utilization of the Tele specialty services it is much easier to keep patients local. Some examples to illustrate:

A patient presents to a community hospital that has a critical care unit staffed by either family medicine or internal medicine physicians. This patient has a straight forward pneumonia and is admitted without undue concern for his stability. This patient develops unexpected respiratory distress and is admitted into the ICU and intubated (tube placed in his lungs). In this example this hospital has access to an "e" ICU which consists of a Tele-Pulmonologist/ICU trained physician who is then able to "beam-on" into the room and participate in the care of this critically ill patient. Because of this capability this patient is much more likely to be kept locally. Without this support the local physician would be forced to transfer this patient to a higher level of care. The patient receives the services he needs. The family is happy that they don't have to travel 60 miles or more to see their loved one. The hospital is happy because they keep this revenue stream local.

A second example. A patient presents to the Emergency Department (ED) with stoke like symptoms, specifically not moving the right side of her body. The ED physician has the potential option of administering a "clot busting" drug to hopefully resolve this patients stroke. Using Tele-Neurology this patient can be immediately assessed in the ED setting by a Neurologist and determined if this "clot

busting" drug is indicated. Further by this form of intervention it is more likely again that this patient can be kept locally. Once again, all parties benefit from the form of health care delivery.

These are but a couple of examples where the use of tele specialist can play a crucial role in helping keep patients local and support local health care systems. Without this support almost without questions many more patients would be transferred out of their community.

One can imagine the pride a community would have to be able to say that their hospital can do this level of care. This is not a small factor in the stability of a local hospital.

I would now like to move forward and discuss the different models of Telemedicine that I have experienced over the past 4 years.

Model A

Tele-Nocturinst program

In this program a local health care system (for example Newton Medical Center) one of the hospitals we provide services to; asks that we take over the medicine service starting at 7pm until 7am the following morning. During this time period we are in charge of all patients currently being cared for by their on-

site Hospitalists; typically, anywhere from 30 to 50 patients. Additionally, any patient that needs to be admitted during this time, either from the emergency department, directly from the community or in transfer from an outside hospital is cared for by our service.

The process is essentially identical as if we were on site. The ED would text us through a secured texting program. We would call the ED and receive the patient report from the ED provider. After concluding that this patient was appropriate to be admitted we would then give instructions to the ED provider to start the admission process. We would then go into the Electronic Medical Record (EMR) system and remotely place orders into their system. (again, as if were there on-site). Once the patient is admitted into a hospital room the nursing staff would text us through a secured system and inform us that we could examine the patient.

We would then remotely access the robot (videoconferencing device) similar to what was demonstrated yesterday morning. We would introduce our self and ask permission for the examination to be performed. At that time the nurse would use the electronic stethoscope that would than transmit the sounds. On our end we utilize sound reducing earphones and can hear the patient's heart tones and lung sounds and abdomen sounds as if we were there. We work with nursing staff to complete the remaining pertinent aspects of the physical examination.

We recognize that this process does have limitations during the physical examination but in my experience, there has not been an occasion where the exam has limited my ability to care for the patient.

Once the exam is complete, we visit with the patient and family regarding the specifics of their need for hospitalization. It is important to emphasize that we interface with all concerned parties present in the room. There are no limitations.

Once the exam and interview are completed we are then able to finish the admission process and put in what is termed a "History and Physical" into the medical records.

When the on-site physician comes in the following morning this patient is completely worked up. Not only does that make the start of their day more efficient it also starts the care of this patient sooner.

Model B

Critical Access Model

There are those CAH that utilize extensively the mid-level providers. (ARNP's and PA's). Typically, there is a community physician that is available that sponsors these mid-level providers and allows them to check the patients out to them.

In some circumstances the community (typically one physician) cannot cover both clinics and hospital duties full time. What is occurring is that Telemedicine is utilized to back up the mid-level 24 hours a day. This relieves the Physician in town to focus more on outpatient care and it allows the Mid-level providers direct and immediate access to Physicians that can give their undivided attention to their issues at hand. We would participate in a consultative role dealing with ED patients, assist with managing patients in the clinic setting and would round with them every day on their patients that are being cared for in the hospital. This benefits the communities as it gives relief to the typically solo practitioner in town. Thus, making it more likely that this physician would continue practicing in the community. It supports the mid-level providers in such a role that they are more likely to continue practicing in the community. Patients are more likely to stay local. All parties benefit from this arrangement.

Again, this is typically of benefit in those communities with limited Physician coverage and where the bulk of the care is provided through mid-level providers.

We have had the privilege of partnering with Anthony Medical Center for over two years in this capacity.

Model C

CAH without local physician backup

This is a similar model as just described. The only difference is that now there is not a local physician able to sponsor the mid-level providers. The hospital system is at true risk of not being able to continue providing care and closing. Telemedicine can be utilized in this setting just as described previously. Nothing else changes. The additional responsibility is that our service sends a Physician out to the hospital each month to serve as "medical director" of the facility. The patients are seen by the mid-level providers and the Telemedicine provider daily. Care is not interrupted. The Joint Commission for Accreditation of Hospitals requires that there be a Physician presence on site to maintain a Hospitals certification of participation. We fulfill this requirement and once again the patients can stay local when appropriate and the Hospital can continue to provide care to its community. All of this is made possible through the use of Telemedicine technology.

These are but a few examples of how Telemedicine can serve Kansas. I have seen it work. It does make a difference in these communities. What we are doing is helping keep hospitals open, caring for patients.

I would now like to discuss the limitations of Telemedicine.

The first limitation is the actual technology. Telemedicine relies on broadband access. Fortunately, that is becoming less and less of a barrier, but it does still exist.

Another large roadblock for telemedicine is reimbursement, which is dictated by four key areas: where the patient is seen, how the consultation is conducted, where the service is provided and the type of provider servicing the patient. This needs to change, given the aging baby boomer population and reliance on Medicare. Right now, there isn't a clear and consistent understanding of how the big three (Medicare, Medicaid and commercial payers) reimburse telemedicine. Having a clear strategy and focus on this from a regulatory standpoint, could help drive further acceptance from providers and healthcare systems. This would lead to increased adoption of telemedicine strategies now and into the future.

One other limitation refers to the actual physical aspect of providing care. There are those patients that would require a procedure to continue their care in their local setting. While not common it has occurred where this has resulted in a patient being transferred. Otherwise, if a patient needs intubation the providers in the emergency department or even local EMS agencies can participate in that process. In my experience this has occurred only a couple of times over the past four years of Telemedicine care.

It is appreciated that the application of Medicine is evolving. There would be those who advocate for the centralization of health care, more specifically to allow the CAH to change their role in the delivery of health care. The change would be from a full-service center of care to a triage model with the regional health care systems absorbing the patients that needed greater resources. I suppose in a State that has one-half the geographical size of ours that is more densely populated both in terms of health

care systems and patients, that might work. But for those States where there is a less dense population this “centralization” of health care does not make sense. We help hospitals now that send their patients to other States when they cannot keep their patient’s local. If we allow these hospitals to close then patients are truly having to drive not dozens, but 100’s of miles to seek health care in and outside our boarders. We all know that there is a segment of our population that will not do this and ultimately their health with suffer. They deserve every effort by all parties to provide health care locally.

In conclusion:

I have been privileged to be able to care for patients across not only Kansas but across this Country. I am a convert. When I started my medical career, the computer was just beginning to be utilized. Over the past 26 years I have seen amazing changes in how health care is being delivered. I can remember as a medical student Dr. Robert Ardinger (pediatric cardiologist @ KUMC) in a studio examining a pediatric patient in Hays Kansas. Never would I have imagined that I could take what he started and help it mature into the field of medicine that has such a great potential to help.

I would welcome any questions at this time. Thank you again

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Sunflower Telemedicine LLC

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