Enhancing Rural Hospice Care with Mobile Tablets

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TOPIC: leveraging technology (e.g., EMR, telehealth)

BACKGROUND:

The University of Kansas Center for Telemedicine and Telehealth (KUCTT) has an extensive history of utilizing telemedicine to address training and service needs related to palliative care. Under Dr. Gary Doolittle's leadership, the KUCTT established one of the first telehospice programs in the country in 1998 (Whitten, Doolittle, et al., 2003). Telehospice care throughout the United States has expanded over the last decade and a half with innovation both in technology delivery and models of staff and family participation (Oliver, Demiris, et al., 2012). The interdisciplinary project team is building on the KUCTT's experience by leveraging mobile tablet technology to enhance hospice services in rural Kansas.
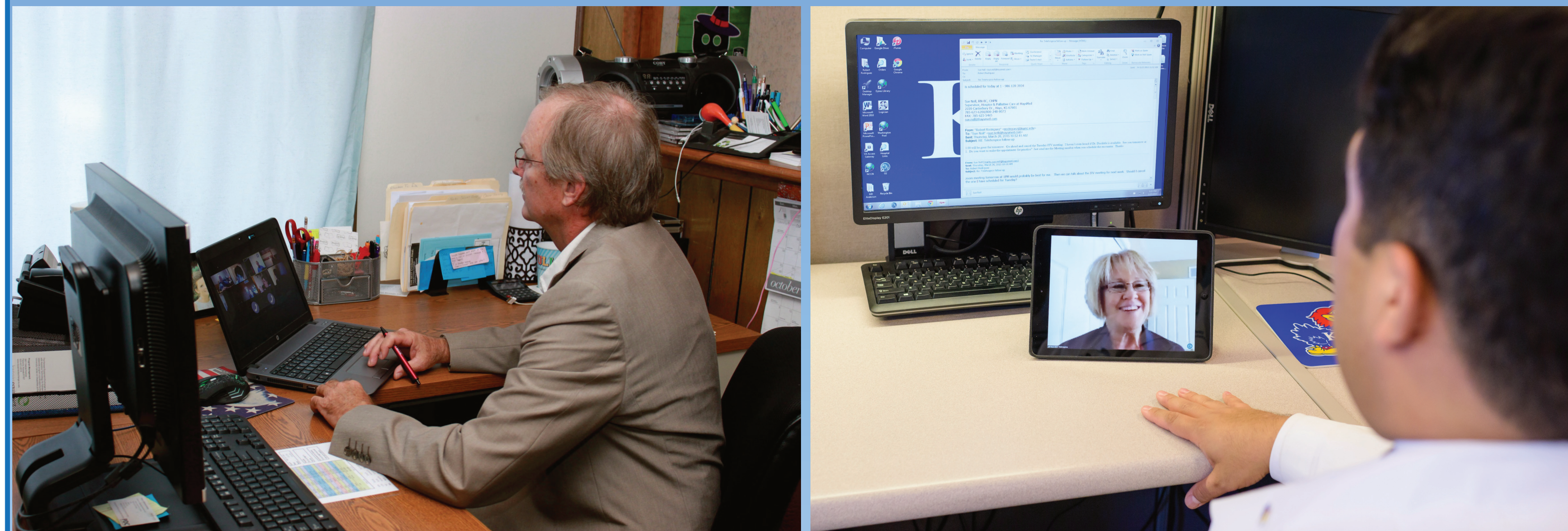
In rural communities, hospice providers often travel great distances to reach patients across expansive service areas, resulting in unique challenges to maintain quality as funding decreases. That travel raises concerns around cost-effectiveness, access, and safety. For hospice visits in which the patient could have been evaluated and supported using technology just as effectively as an in-person evaluation, the travel time and associated costs are unnecessary expenses to the system. Safety becomes an issue when hospice providers have to travel in dangerous weather conditions.
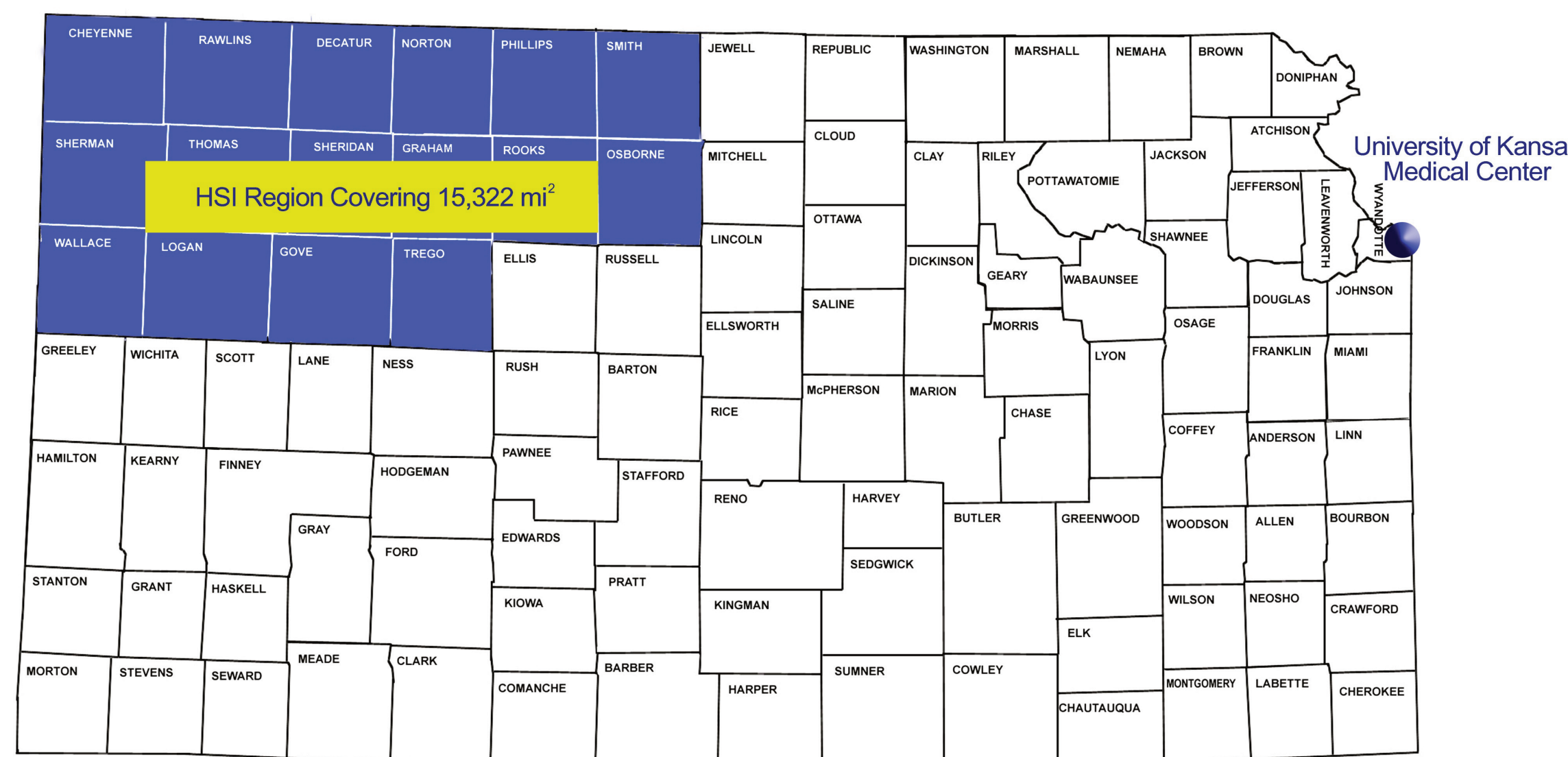
PROJECT DESCRIPTION:

A telehospice service utilizing low-cost, secure mobile tablets (iPads) has the potential to support family-centered, timely care directly to patient homes. This academic-community partnership aims to enhance palliative care capacity in Kansas' rural and frontier communities. Leveraging lessons learned around technology limitations, attitudes about technology, and cost from the original telehospice project, the project team at the University of Kansas Medical Center (KUMC) adapted the telehospice home-based approach for mobile tablet technology. A secure, cloud-based videoconferencing solution was chosen for ease of use. Selection of hospice partners for the pilot was guided by the Organizational Change Manager (OCM) implementation survey (Gustafson, et al., 2003).

Telehospice: *the use of interactive video technology to provide hospice care and services to patients and their families from a distance*

16 Counties Served by Hospice Services, Inc.

HSI Region Covering 15,322 mi²

University of Kansas Medical Center

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DATA COLLECTION:

Based on OCM feedback from 16 staff, Hospice Services, Inc. (HSI), a not-for-profit, community-based hospice serving 16 rural Kansas counties, was selected to partner with KUMC to implement telehospice. Overall, responses indicated positive attitudes.

Survey Item / Statement	Respondents in Agreement
Telehospice will save travel time and enhance my job.	75%
Telehospice will help HSI meet its goals.	73.3%
The project will help meet staff needs.	81.3%
I know how the project will connect the hospice medical director with the clinical team at patient homes.	81.3%
I know how the project will connect clinical staff with each other.	86.7%
I know how the project will connect clinical staff with families in their homes.	81.3%
HSI leaders have endorsed telehospice in visible ways.	86.7%
A clear project aim has been specified.	75%

SUMMARY:

The KUMC and HSI teams meet regularly via phone and videoconferencing to collaborate on project development, implementation, and evaluation. Key implementation considerations include: initial and ongoing training, protocols, ongoing technical/administrative support, and introductory telehospice information. Data further indicate that HSI personnel utilize the iPads to connect in many ways, such as meetings and presentations. Telehospice connections have allowed hospice nurses at the home to videoconference with additional HSI personnel, including the medical director as well as social workers. Furthermore, the project has provided a tremendous opportunity for an academic medical center to increase engagement and collaborate with a hospice in a rural community.

FUTURE DIRECTIONS:

Eventually, iPads will be utilized in patient homes to enhance hospice care through symptom assessment and support for both patients and caregivers. These technology-based assessments will help hospice nurses determine if an in-person visit is necessary, which has the potential to reduce travel and other costs. Though visits are not intended to replace traditional hospice visits, telehospice's potential to supplement hospice services and improve hospice care while reducing hospice costs is significant.

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