Telehealth in Rural America
Authors: Windy Alonso, Elizabeth Crouch, and Nicole Thorell

I.   Introduction

Telehealth broadly encompasses technologies and healthcare fields that deliver education, health, and medical services over a distance. Telehealth includes the fields of dentistry, counseling, therapy (physical and occupational), home health, chronic disease monitoring and management, disaster management, and consumer and professional education. States and federal agencies define telehealth differently. Telehealth modalities include live video (synchronous), store and forward (asynchronous), remote patient monitoring, and mobile health. Live video is a two-way interaction between a person and provider. Store and forward includes the transmission of health history, images, or other patient health data to a practitioner at a distant site, which may help patients in remote areas access care from a specialist. Remote patient monitoring is monitoring of physiologic parameters using non-invasive or invasive means by a provider when a patient has gone home or to a different care facility. Mobile health involves the communication of public health information via mobile communication devices. Telemedicine differs, as it refers to traditional clinic diagnosis and monitoring. Both vary greatly by state. Telemedicine adoption rates vary significantly by state (Adler-Milstein et al 2014). Alaska has the highest rate in the country with an adoption rate of 75%. Yet, states frequently require providers to be licensed in the same state as the patient they are treating (Adler-Milstein et al 2014).

II.   Statement of the Issue

Rural and frontier America constitute the greatest portion of land mass in our country and represent 60 million people; 9 million who live in frontier areas (Morales and Romeo, 2009). Seventy-five percent of rural counties have been designated as medically underserved areas (Morales and Romeo, 2009). Worsening statistics show that 166 rural counties with 10,000 or more residents have no primary care physician (Morales and Romeo, 2009). Telehealth (also known as telemedicine and digital health) is used to exchange medical information from one site to another via electronic communication (Okrent, 2015). Telehealth has the ability to increase access to physicians, specialist, and other healthcare services for patients in rural, frontier, and underserved areas. However, there are many barriers to wide adoption of telehealth in rural America. Telehealth enables remote primary care providers to have timely access to specialist at larger facilities, and specialist to be able to serve a larger geographic area (Bashshur and Shannon, 2009). Patients benefit by being able to receive care close to home, either primary care or from specialist. This paper will identify and characterize the telehealth in rural America by discussing current relevant national policy, barriers including coverage and reimbursement, adequate broadband coverage,

and cross-state licensure. Policy issues include credentialing and privileging, prescribing, informed consent, privacy and security, and malpractice liability. The benefits of telehealth accrue to not only patients, but also for providers.

III. Analysis of Current Relevant National and State Policies on Telehealth by Payer

Medicare: For individuals 65 years of age and older, or under 65 with specific disabilities or end stage renal disease, Medicare reimburses for established telehealth services under certain conditions (Centers for Medicare and Medicaid Services, (CMS) 2018). Medicare does not cover remote patient monitoring or store and forward delivery services, except in Alaska or Hawaii. Services covered are described by Current Procedural Terminology (CPT) or Healthcare Common Procedure Coding System (HCPCS) codes. In 2018, code 99091 allowed providers to get reimbursed for remote monitoring of data collection and interpretation (CMS, 2018).1 In November of 2018, CMS approved a new rule that allows reimbursement for virtual check-ins to determine if a patient issue warrants an office visit or seeking emergency care. CMS will reimburse for the check-in only if it does not result in a face-to-face encounter. In addition, the rule will allow reimbursement for "store and forward" services of images or other pre-recorded patient information that could not substitute for an in-person appointment. Lastly, the rule includes reimbursement for technology-facilitated interprofessional consultation (National Consortium of Telehealth Resources (NCTR), 2018). CMS also added a new interim rule that would allow exemptions to the requirements for originating sites (NCTR, 2018). These exceptions would allow a patient's home to become an originating site when being treated for substance abuse disorders and also allow mobile stroke units to be considered a reimbursable originating site (NCTR, 2018).

New reimbursable service are categories that include services similar to those already approved for telehealth delivery such as consultations or office visits, and services not similar to Medicare approved services, but services where technology may prove beneficial. Medicare Advantage plans may reimburse for telehealth but charge higher premiums or copays. Providers who can deliver telehealth services include physicians, nurse practitioners, physician assistants, nurse midwives, clinical nurse specialists, clinical psychologists and clinical services workers, and registered dietitians or nurse professionals (CMS, 2018).

The originating site for telehealth is the patient's location at the time of service, which must be in a health professional shortage area (HPSA) or county outside of a Metropolitan Statistical Area (MSA) (CMS, 2018). Rural HPSAs, defined by the federal office of rural health policy (FORHP), are facilities located within an MSA but in rural census tract which can be made an eligible telehealth site (HRSA, 2018). Eligible telehealth sites are provider offices, hospitals (including critical access hospitals), rural health clinics, federally qualified health centers, skilled nursing facilities, community

mental health centers, and hospital based or critical access hospital based renal dialysis centers. In addition to those identified above, exceptions to the Medicare telehealth reimbursement include programs such as the Next Generation ACO, Shared Savings Programs, Episode Payment Models, and Comprehensive Care for Joint Replacement Models (CMS, 2018).

Medicaid: Telehealth reimbursement via Medicaid is allowed if service delivery meets federal requirements for efficiency, economy, and quality care. There are wide parameters given to each site on how to both assemble and manage their state telehealth policy. If services are reimbursed for the same amount as when delivered face to face, there is no need for states to submit a state plan amendment to Medicaid (Medicaid 2018).

No states have the exact same definition and regulation of telehealth. Forty-nine states reimburse for live video Medicaid services, with only fifteen states providing reimbursement for store and forward. Twenty states reimburse for remote patient monitoring and twenty-three states restrict what constitutes as an originating site. Thirty-two states offer either a transmission or facility fee when using telehealth (Medicaid 2018).

Private Payer Telehealth: Most states (thirty-eight and DC) legislate policies on private payer reimbursement for telehealth, with no federal legislation for private payers to provide coverage for telehealth services. The state laws are mixed, with some states requiring the same level of reimbursement for face to face and some requiring a minimum level of reimbursement (CHCP 2018). The most restrictive state policies involve health professional licensing across states, with state professional boards providing differing telehealth standards for their providers (CHCP 2018).

IV.   Analysis of Current NRHA Policy Positions Relevant to the Issue

Geographic Medicare Telehealth Restrictions: Currently, Medicare requires the originating site of telehealth services be outside of a MSA and for reimbursement services must be provided in a HPSA (Center for Medicare and Medicaid Services, 2018) (with note made to the exceptions identified above). MSAs were created by the Office of Management and Budget as a system to delineate levels of urbanization in the U.S. by county (OMB, 2018). To be designated as an MSA, counties must be associated with an urban area with a population greater than 50,000 and strong commuting patterns and economic integration with a core urban area (OMB, 2018). HPSAs are areas of the U.S. with geographic-, population-, and/or facility-based shortages in primary care, dentistry, and/or mental health care (Health Resources and Services Administration, (HRSA), 2018). HRSA will designate areas as auto-HPSA, or those automatically designated or State Primary Care Offices can apply on behalf of an area to be considered for designation as an HPSA (HRSA, 2018). Those applying for designation are selected based on population: provider ratio, the proportion of the

population that is below 100% of the Federal Poverty Level (FPL), and travel time to care outside the area requesting designation as an HPSA (HRSA, 2018). These limitations create challenges for the implementation of telehealth in rural areas. A policy statement from the National Rural Health Association in 2017 suggests an expansion of the geographic limitations and removal of the HPSA requirement (Sanders, Allen, & Maurer, 2017).

V. Target Areas for Improvement

Reimbursement

Reimbursement needs to be examined when it comes to expanding telehealth practices. The implementation of telehealth services can be costly for a facility while it can also have a positive impact on providing services to rural and frontier communities. Adequate reimbursement is not provide to all sites. Reimbursement is paid more favorable to the distant site where the provider is paid on the Medicare physician fee schedule; while the originating site is compensated minimally. The originating sites (site where the patient is) compensation needs to reflect the technology costs and the nursing services that are incurred at the originating site. Regulation also varies from state to state. Currently work has been done on equity of coverage, but not on payment (Telehealth Resource Centers, (TRC), 2017).

Infrastructure

Broadband: One large barrier to the adoption of telehealth is broadband infrastructure. Many rural, frontier and underserved areas do not have access to appropriate broadband to allow for the use of telehealth. According to the Federal Communications Commission (FCC), 34 million Americans still lack access to adequate broadband (Sanborn, 2018). Also, there is a large divide when it comes to broadband strength with 40 percent of those living in rural areas lacking access (Sanborn, 2018). The FCC's Rural Healthcare program supports broadband adoption, with an annual cap that was increased to 571 million dollars from 400 million annually (Sanborn, 2018).The rural healthcare program is currently made up of three programs: the Healthcare Connect Fund, the Telecommunications Program, and the Rural Health Care Pilot Program (FCC, 2018). In 2012, the commission released a report and order that created the Healthcare Connect Fund to reform the Rural Healthcare Program (FCC, 2018). The healthcare connect fund provides support for high capacity broadband connectivity to eligible healthcare providers and encourages the formation of state and regional broadband networks (FCC, 2018). While the FCC has started to now fiscally support pilot programs to expand broadband access the application process still remains burdensome for rural facilities with fewer resources than their urban counterparts and a restrictive rural definition.

Patient Privacy: Maintaining patient privacy and confidentiality is another concern for telehealth implementation. HIPPA does not specifically address the level of compliance necessary for telehealth (TRC, 2017). Currently a provider must meet the same requirements as if the patient was being seen face to face in the office (TRC, 2017). There are privacy requirements both federally and at the state level, in which the state may have increased requirements (TRC, 2017). As a telehealth provider it is important and burdensome to be aware of all the privacy requirements to ensure compliance. States may also have specific internet vendor laws that apply to telehealth vendors. The HIPPA guidelines listed in the HIPPA privacy and security rule stipulate a system of secure communication should be implemented to protect the integrity of electronic personal health information (https://www.hipaajournal.com/hipaa-guidelines-ontelemedicine/).

Legal

Licensure: Licensure is under the privy of the state board of licensure in the state in which the patient is receiving care (Center for Connected Health Policy, (CCHP), 2016). Licensure requirements vary by state creating a burdensome process for providers to be licensed in multiple states. Currently practicing across state lines is permitted for health professionals employed by federal agencies, specifically the Department of Veterans Affairs, the Indian Health Services, and the military (Morales and Romeo, 2009).

Clinicians are also able to practice across state lines if they are licensed in compact states. In the last few years, license compacts have been implemented in medicine (April 2017) and nursing (January 2018), and are underway in physical therapy and psychology. Telehealth practice is included in the compact agreements which licenses clinicians to provide telehealth services to patients across the country that live in compact states (Center for Telehealth & 5 eHealth Law, 2018). These compacts hope to improve access to health services for underserved areas, including rural America through the use of telehealth.

Credentialing and Privileging: The Joint Commission defines credentialing as "the process of obtaining, verifying, and assessing the qualifications of a practitioner to provide care or services in or for a health care organization" (Joint Commission, n.d). In essence, credentialing is a check of a provider's evidence of licensure, education, past training and employment history. Privileging is "the process whereby a specific scope and content of a patient care services (that is clinical privileges) are authorized for a healthcare practitioner by a health care organization, based on an evaluation of the individual's credentials and performance" (Joint Commission, n.d.). In short, privileging are the authorizations to perform given tasks as deemed appropriate by the organization based on the outcome of credentialing and the facility features and needs. Credentialing and privileging become a challenge in telehealth delivery in rural locations because of the cost associated with credentialing (CCHP, 2016). In 2011 CMS

approved the originating site or clinic to contract with a larger health care provider (hospital) through proxy credentialing. In this scenario, credentialing is completed by the distance site and this credentialing is adequate to credential the provider at the clinic (CCHP, 2016). However, it is important to note that not all state policies align with proxy credentialing so in some areas this will remain a challenge for telehealth providers (CCHP, 2018).

Online Prescribing: Current prescribing guidelines may inhibit a telehealth provider from prescribing medication to treat telehealth patients. According to the Center for Connected Health Policy (2016), prescribing standards are set at the state level with the exception of the Ryan Haight Act. This Act outlines specific criteria that must be met to prescribe controlled substances including: 1.) "A patient is being treated and physically located in a hospital or clinic registered to distribute under the Controlled Substance Act 2.) The patient is being treated and in the physical presence of a practitioner registered to distribute under the Controlled Substance Act, 3.) The practitioner is an employee or contractor of the Indian Health Service (IHS) or working for an Indian tribe or tribal organization under contract or compact with HIS, 4.) Has obtained a special registration from the US Attorney General," or 5.)"In an emergency situation (21 USC 802(54).)" (CCHP, 2016, p. 3). More development of policies on prescribing are needed at the state level.

Malpractice Liability: The concern of malpractice liability for providers is no less apparent in telehealth than in traditional clinical practice. The number of telehealth litigations is increasing as telehealth becomes a more common method of care delivery (Dunn, 2004). Malpractice insurance providers are not required to cover telehealth malpractice claims nor are they required to cover a provider in a state other than their own, except in Hawaii (CCHP, 2016). Hawaii was the first state to enact law that required insurance carriers to cover telehealth malpractice (CCHP). Other carriers that do provide coverage for telehealth practice may do so at a higher premium (CCHP).

Informed Consent: Most state Medicaid programs require that informed consent be obtained from patients prior to initiating a telehealth visit (CCHP, 2018). The Center for Connected Health Policy (2018) contends that this requirement is a detriment to telehealth as it gives the impression that telehealth is a service outside of traditionally delivered health services.

State Legislation: According to Roll (2017), telehealth standards are listed as a high priority target for state medical boards. Detailed telemedicine statutes have been put in place by many states which has encouraged state medical boards to review and update telehealth practice standards (Roll, 2017). Recently, Texas introduced a bill that would allow physicians and patients to establish a relationship via telehealth (without an initial in-person visit as is required in most states).

Competition vs. Support for Rural Providers: The delivery of telehealth in rural areas may increase competition for rural primary care providers. This concern stems from the idea that patients may choose to do all services virtually. However, allowing rural patients to receive telehealth services in the context of their community setting may allow additional revenue streams to be generated as a patients stay local for laboratory testing and imaging and a larger patient volume can be seen by providers (Rural Health Information Hub, 2017). In addition, telehealth has been shown to reduce primary care provider isolation by fostering collaboration and learning between those practicing in rural areas and those in larger medical centers (New England Journal of Medicine Career Center, 2013).

VI.   Financial Impact

Telehealth has the potential to be a cost-effective strategy for care delivery in the U.S. The increase in cost to fund telehealth has been projected to be negligible. In addition, some have speculated that telehealth could ultimately decrease the cost of healthcare by providing specialist access and in turn mitigate the cost of inpatient care that is associated with a lack of access to specialty providers.

VII.   Summary

Telehealth has the ability to increase access to physicians, specialists, and other healthcare services for patients in rural, frontier, and underserved areas. This paper characterized telehealth in rural America by discussing current relevant national policy, barriers including coverage and reimbursement, adequate broadband coverage, and cross state licensure. Policy issues include credentialing and privileging, prescribing, informed consent, privacy and security, and malpractice liability. Telehealth has the potential to be a cost-effective strategy for care delivery in the U.S.

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