Improving Access to Care: Use of Telehealth by Critical Access Hospitals

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RHRC
Rural Health Research & Policy Centers
Funded by the Federal Office of Rural Health Policy
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Maine Rural Health Research Center

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Maine
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Overview

- How does telehealth fit into the revised program area III - Population Health Management and Emergency Medical Services Integration?
- Expanding access to needed local services using telehealth technology
- Terminology
- Telehealth technologies
- Reimbursement issues
- Impact of telehealth use
- Examples from the field involving CAHs

III. Population Health Management and Emergency Medical Services Integration

- Program area III focuses on work to:
  - Improve the health of rural communities through population health management
  - Communication and collaboration between different health care providers
  - Improving patient experiences when transitioning from one care setting to another
  - Building EMS capacity to best serve CAHs and their communities
- Telehealth falls under the first two goals
- Key uses of telehealth:
  - To improve system functioning
    - Provide crisis support for patients in the emergency department (ED), tele-trauma to support ED, telepharmacy to fill gaps in pharmacy coverage, teleradiology
  - Provide key needed local services
    - Mental health, specialty services, tele-endocrinology for diabetes management

Use of Telehealth to Expand Access to Care

- Telehealth can increase access to and quality of healthcare in rural communities
- Allows rural patients to see specialists without leaving their communities, permits local providers to take advantage of distant expertise, and improves timeliness of care
- According to the American Hospital Association (AHA), 52% of hospitals used telehealth in 2013. Another 10% were starting the process to use telehealth .
- Delivery of mental health services is a common use
- In Illinois, small and rural hospitals were most interested in telepsychiatry, tele-endocrinology, teledermatology, and teleneurology
- Other clinical services include telestroke, teleradiology, tele-ICU, telepathology, cybersurgery, remote monitoring, telepharmacy, and other specialty consultations and services

Terminology

- Originating site: where patient is located and "seen"
  - Physician offices, skilled nursing facilities, Federally Qualified Health Centers (FQHCs), Rural Health Clinics (RHCs), Critical Access Hospitals (CAHs)
- Distant (presenting) site: Where provider of service is located
  - Provider can include physicians, psychiatrists, clinical psychologists, clinical nurse specialists, clinical social workers, other providers
- Difference between telemedicine and telehealth
  - Telemedicine refers specifically to remote clinical services
  - The Health Resources & Services Administration (HRSA) defines telehealth as the use of electronic information and telecommunications technologies to support long-distance clinical health care, patient and professional health-related education, public health and health administration
  - Telehealth includes videoconferencing, the internet, store-and-forward imaging, streaming media, and terrestrial and wireless communications

Telehealth Technologies

- Live Videoconferencing (Synchronous): Live, two-way interaction using audiovisual telecommunications technology
- Store-and-Forward (Asynchronous): Transmission of recorded health history to a practitioner who uses the information to evaluate a case or render a service outside of a live interaction
- Remote Patient Monitoring: Personal health/medical data collected from a patient via electronic communication technologies and transmitted to a provider in a different location for use in care and related support
- Mobile Health (mHealth): Health care and public health practice and education supported by mobile communication devices. Applications range from targeted text messages that promote healthy behavior to wide-scale alerts about disease outbreaks.

Medicare Reimbursement Issues

- Originating site must be in a rural health professional shortage area (HPSA), counties outside metropolitan statistical areas (MSA), HPSAs located in rural census tracts of an MSA
- Authorized originating sites: physician/practitioner offices, CAHs, hospitals, community mental health centers (CMHC), skilled nursing facilities (SNF), RHCs, FQHCs, hospital-based dialysis center
- Distant site providers: physicians, nurse practitioners (NP), physician assistants (PA), clinical nurse specialists (CNS), registered dieticians (RD), certified nurse midwives (CNM), certified registered nurse anesthetists (CRNA), clinical psychologists, clinical social workers

Medicare Reimbursement Issues

- Originating sites may bill a facility fee
- Distant sites are reimbursed at the provider fee schedule
- Limited to face to face (real time interactions) except in demonstrations in Alaska and Hawaii and FCHIP where store and forward is allowed for specified services

Medicaid Reimbursement Issues

- Coverage varies from state to state
  - Check state coverage policies
- Example: Medi-CAL (California)
  - Must be real time (face to face) for evaluation and management services
  - Technology must, at minimum, meet procedural definition of the code provided through telemedicine
  - Distant provider must be licensed in California and enrolled in Medi-Cal as a provider
  - Originating site must obtain and document oral approval prior to providing service via telemedicine
  - Store and forward limited to ophthalmology and dermatology
  - Telephone conversations, faxes, and emails are excluded from the definition of telemedicine
  - Originating sites can bill a facility fee, distant sites are paid at the current fee schedule

Commercial Reimbursement Issues

- Coverage varies from plan to plan and state to state
  - Check state coverage policies
  - Some states such as Georgia require all payers to pay for services provided through telehealth (if they pay for the service delivered in person)
  - The ability to bill an originating fee depends on the plan
  - Typical both originating and distant sites must be members of the health plan

Potential Impact of Telehealth Use

Telehealth/Telemedicine		
Impact on Access	**Impact on Medicare Costs and Utilization**	**Impact on Quality of Care**
▪ Improved access to specialty services within the community ▪ Reduced travel barriers to local residents ▪ Expanded support for hospital specialty services such as stroke, trauma, and intensive care services	▪ Reduce unnecessary hospitalizations, readmissions, and emergency department use for ambulatory and long term care patients ▪ Reduce length of stay in ED and reduced length of hospital stays ▪ Reduce high cost patient transfers for stroke and other emergencies ▪ Reduce the need to refer patients to more expensive urban facilities ▪ Reduce delay in receipt of care thereby improving treatment of care at a less-acute stage of the illness	▪ Improve timeliness of services ▪ Reduce barriers to care ▪ Improve coordination of care ▪ Improve access to specialty consultations for local providers (better partnerships to improve patient care) ▪ Reduce provider “isolation” in frontier communities ▪ Improve outcomes due to earlier diagnoses and treatment outcomes ▪ Improve support for EDs and ICUs results in reduced mortality rates, reduced complications, and reduced hospital stays

Facts from California Telehealth Resource Center

- Mortality rate dropped from 13.6% to 11.8% after tele-ICU was implemented, and length of stay in the intensive care unit (ICU) fell from 13.3 days of 9.8. (JAMA 2011)
- The Veterans Administration (VA) reports reductions in utilization of between 20% and 56% when care coordination and home monitoring are employed. (Department of Veterans Affairs, June 2009)
- A VA home telehealth program for vets with chronic conditions reduced hospital admissions by 19% and total bed days of care by 25%. (Telemedicine and e-Health, Dec. 2008)
- California prison officials provided roughly 9,000 telehealth consultations in 2004, saving taxpayers more than $4 million in transportation and escort costs. (California HealthCare Foundation, 2008)
- Telemonitoring reduced hospitalizations by 75% and ER visits by 83%. (Pennsylvania Homecare Association)
- In 2007, Sutter estimated that 425 sepsis related deaths were prevented and the eICU resulted in $2.6 million in savings (Computer World 2007)

Wabash Valley Rural Telehealth Network, IN

- Crisis Services in CAHs
- Problems with mental health patients clogging EDs
- Hub & spoke model: CMHC provides crisis services to 6 CAHs
- Services are provided CMHC's 24/7 access center using licensed clinical social worker (LCSW)/licensed mental health (LMH) staff and psychiatrist
- Standardized protocols/algorithms used to assess patients
- CMHC "sees" patient using telehealth technology and prepares consultation report and disposition plan
- ED length of stay (LOS) reduced from 16-18 hours to 240 minutes
- Hospital pays $125 per consult to CMHC
- Learning points:
  - Substantial savings (lower ED LOS), fewer unnecessary hospitalizations
  - Standardized protocols and 24/7 access key

Northern Human Services, NH

- Rural CMHC Network - Umbrella health organization includes 5 CMHCs and 7 CAHs in northern New Hampshire
- Started with Rural Health Outreach funding
- Primarily funded through Medicaid and 3rd party billing
- Grant funding to secure more equipment
- Uses telemental to increase access and shore up the network
- Concerns about sustainability under developing Medicaid managed care program
- Dealing with a number of credentialing related challenges

Northern Human Services, NH

- CMHCs rotate telemental service coverage through all five sites, sharing responsibility for ED coverage (previously in-person)
- ED services:
  - Involuntary Emergency Admission (IEA) Assessments for state hospital, crisis stabilization and emergency assessments, pediatric psychiatric consultations by an outside psychiatrist
- Dealing with a number of credentialing related challenges
- Savings:
  - Approximately 50 staff days/year are saved by reducing staff travel time
  - Reduces burden on law enforcement due to access to IEA assessments
- Learning points:
  - Reimbursement doesn't cover technology acquisition
  - Potential Medicaid reimbursement changes threaten sustainability

Avera St. Benedict Health Center, Avera Health, SD

- Part of Avera Health a regional Catholic health system based in Sioux Falls, SD.
- Avera Health is “very well wired” with a central telehealth center known as Avera eCARE Services (based in Sioux Falls)
  - 24 hour access to specialty care physicians and pharmacist and supports the rural health care workforce.
  - Provides numerous telehealth services including ICU, emergency, stroke, pharmacy, mental health, consults, women’s health, pulmonary, internal medicine, long term care (LTC), palliative care, and dermatology
- Avera St. Benedict Health Center located in Parkston, SD
  - A 22 bed CAH, 3 RHCs, a 25 bed assisted living facility, a 50 bed long term care facility, and a licensed day care
  - Involved with telemental health since 2010

Avera St. Benedict Health Center, Avera Health, SD

- Service created with outreach grant funds
- Services provided;
  - **Geriatric psychiatry**: A geriatric psychiatrist based at the Avera Behavioral Health Center in Sioux Falls provides services to residents of the Avera St. Benedict's residential care and long term care services and the patients of the RHCs on a one half day per month basis
  - **Adolescent psychiatry**: Adolescent psychiatry based out of the Avera Health network is working with Our Home, Inc. (not part of the Avera system) to provide telepsychiatry services directly to their residential psychiatric facility in Parkston
  - **Ambulatory mental health services**: Social worker at the hospital uses telemental to "fill in the gaps" when she is unable to be on site at the Lake Andes RHC
  - **Continuing medical/professional education:** Provided for the staff of the clinics and hospitals, typically once or twice per month.

Grande Ronde Hospital, OR

- CAH operating hub and spoke telemedicine program
- Goal: Increase access to specialty care
- "Virtual health system" using telemedicine
  - Began with perioperative services provided by specialists from St. Alphonse Regional Medical Center in Boise, ID
  - Added other high acuity services including intensivist coverage, neurology, maternal fetal medicine, psychiatry/behavioral health, ICU, neonatology, pediatrics, oncology, dermatology, and cardiology
  - Specialists from Oregon Health and Science University, Walla Walla Clinic, Hearing Speech, and Deafness Center (Seattle), and Advanced ICU Care (St. Louis, MO)
  - Access foreign language interpreters including sign language

Grande Ronde Hospital, OR

- Benefits for patients - better access to care and substantially reduced travel time
  - Examples:
    - Oncology service saved 191 patients 36,737 miles in travel, 717 travel hours, and $18,729 expense. Reduced physician travel by 291 hours
    - Dermatology saved 229 patients 49,016 miles, 1021 miles, and $24,511 in travel time and expenses
- System savings:
  - ICU experience -in 64 months, 69 patient transfers were avoided saving the system over $1.9 million
  - Generated 515 additional ICU and med-surg days
- Other benefits:
  - Money saved for insurers, patients, and families
  - Improved timeliness of care closer to home
  - Improved recruitment and retention of primary care providers

Hedrick Medical Center (HMC), MO

- Municipal CAH that is part of the St. Luke's Health System
- Sees patients through its endocrinology telehealth clinic
  - Also offers diabetes care at the Hedrick Diabetes Center
- St. Luke's specialists provide telemedicine services at HMC:
  - Allergy, cardiology, endocrinology, neurology, psychiatry, pulmonology, rheumatology, wound care
- Evidence Base for tele-endocrinology:
  - Study-66 patients from five rural areas of Tennessee were followed by specialists from the telemedicine unit at the Univ. of TN-Memphis
  - 85% of the 20 diabetic patients showed significant improvements in Hemoglobin A1c at 6 months, decreasing from 9.1% to 7.5%
  - 70% of patients with dyslipidemia showed improved lipid profiles
  - Coordinates with primary care providers
  - 97% were comfortable receiving telehealth services