Kansas Telemedicine and Advances in Tele-Pediatrics

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Disclosure

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• I do not intend to discuss an unapproved/investigative use of a commercial product/device in my presentation.

Preview of Presentation

1. National Overview
   1. Status
   2. Trends
2. Kansas Telemedicine
   1. Examples
   2. Reimbursement
   3. Medico – Legal
3. Tele-Pediatrics
   1. School-based
   2. Autism Spectrum
   3. UC Davis
   4. Other issues
Definitions

- Telemedicine – video consultation
- Telehealth – “store and forward” asynchronous images or data
- Distant Site – provider location
- Originating Site – patient location
- mHealth – mobile health
- “apps” – smart device applications

National Overview

- Current telemedicine movement began in late 1980’s
- Most states have at least one telemedicine program, often in university medical centers
- 32% of the 4,727 reporting hospitals use at least one type of telehealth service (HIMSS)
- Over 100,000 iOS and Android health care apps (Modern Healthcare)
- American Telemedicine Association
  www.americantelemed.org
- mHealthSummit
  www.mhealthsummit.org

States with Medicaid/Private Coverage
Telehealth “Parity” Legislation

National Observations
- Health systems; private sector
- Reduced system utilization as drivers
- Home (or other private) setting
- Patient initiated
- Specialty care to primary care
- Mobile, smart devices, wearable
- Interstate

Kansas Telemedicine Experience
- First implemented in 1991 with one hospital
- Primarily facilitated by interactive videoconference
- Program has expanded into more hospitals, schools, nursing homes, and clinics
- Cardiology, mental health, oncology, pediatrics, many others
Mobile, multi-point connection with additional clinicians or other stakeholders

Home Parenteral Nutrition
- Bypasses the GI tract in bowel disease
- Lifelong twice daily infusion of solutions via pump in home
- Risk of infections and complications
- Current study with 80 families in U.S.
- RNs observe care from a distance
- Limits social life, work, meals; depression common

Additional Kansas Projects
- Tele Stroke (KU Hospital)
- Tele ED (KU Hospital)
- Pediatric Epilepsy (KUMC)
- Kansas ECHO (KUMC)
Kansas ECHO

• “Extension for Community Healthcare Outcomes”
• Primary care, case-based presentations to specialty team using technology
• Pioneered in New Mexico
• Supports rural practices’ management of chronic conditions
• CE provided
• Some reimbursement
• Kansas implementation early 2015 – pain management

There is Reimbursement!

- Medicare (2001)
- Most large, private insurers in Kansas (mid-2000’s)
- Blue Cross/Blue Shield of Kansas was one of first insurers in nation to cover telemedicine (1995)

KMAP

- 90791GT
- 90832GT - 90838GT
- 90847GT
- 90853GT
- 99201GT - 99205GT
- 99211GT - 99215GT
- 99261GT - 99263GT
- 99271GT - 99275GT
- H0001GT
- H0004GT
- H0005GT
- H0006GT
- H0007GT
- H0008GT
- H0009GT
- H0038GT
- H0038HQGT
Medico - Legal

- Credentialing and Privileging
- Licensure
- Malpractice

Generally Treated same as Outreach
- Where patient is located is place of service
- Providers need to be credentialed/privileged/licensed at each place/state of service
- TJC and CMS now both allow credentialing by proxy
- Standard malpractice insurance covers telehealth
- Very low risk service to date
- National effort to create telemedicine license

Advances in Tele – Pediatrics
- TeleKidcare
- Implemented 1997 with 4 Kansas City, KS schools; 12 at peak
- Primarily for urgent care with KUMC pediatrics
- Evolved to more mental health
- New programs in New York and North Carolina
Additional Peripherals

- Stethoscope
- Dermascope
- Ophthalmoscope
- General exam camera
- Handheld retina camera
- Integration of peripherals with P.C.

Autism Spectrum Service

- Train existing Autism Interdisciplinary Teams (AIT) and Part C Network teams in the assessment tools used to diagnose autism
- Teams collect the information and write their findings to pass to a local physician or CCHD team via telemedicine who determine a Diagnostic Impression.
- GOAL: From referral to diagnosis, children and families are seen in 45 days
  - Currently, a wait-time at the available diagnostic clinics varies from 3 months to 1 year.

Autism Telemedicine Services

- For the Diagnostic Impression, teams connect to CCHD staff via telemedicine
  - The family, the school or Part C network, and CCHD staff meet to discuss the assessment findings, clarify the information, discuss medical history, and make a Diagnosis.
- Appointments are 45 minutes long
- Telemedicine sites throughout the state using ITV network
UC Davis Telemedicine
- Connecting to 120 sites/year
- >40,000 total consults to date
- >6,000 pediatric consults to date
- Applications at UC Davis
- Outpatient services
- Interpretation of studies
- ED services (stroke, trauma, ICU)
- Inpatient ward, ICU, NICU
- Remote Patient Monitoring (RPM)
- Training, Mentoring, Education
- Use by Advanced Practice Provider

Interpretation of Studies
- Tele-radiology: standard of care
- Tele-dermatology
- Cardiac ultrasound
  - Cyanotic Congenital Heart Disease Screening
- EEG interpretation
- Screening for retinopathy
- Tele-psychiatry, behavioral health

Pediatric Critical Care Telemedicine Network
As of 5-2014:
- 27 EDs
- 3 Inpatient wards
- 4 Nurseries
- 2 ICUs
Telehealth:  
Leveraging Technology to 
Provide Patient Centered, 
High Quality, and 
Cost-Effective Care

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Practice Parameter for Telepsychiatry with Children and Adolescents 
from American Academy of Child and Adolescent Psychiatry

<table>
<thead>
<tr>
<th>Principle</th>
<th>Brief Description</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>The need for child and adolescent psychiatric services and whether telepsychiatry is an option for meeting that need should be determined. This clinical need should drive the service, not the technology or some other purpose. A proposed service that does not originate with a clinical need is doomed to failure. Moreover, the advantages, disadvantages, community support, infrastructure and other issues should be fully reviewed before implementation.</td>
</tr>
<tr>
<td>2</td>
<td>The sustainability of the telepsychiatry service should be determined. Though sustainability can be loosely defined, ongoing support of the project will be needed. Some programs have chosen to fund operations through continuous research funding support, while others have decided to maximize revenue or cost savings. Whatever the mechanism, this decision should be made early in the project.</td>
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<tr>
<td>3</td>
<td>The patient population, the model of health service delivery, and services to be offered should be determined. Closely related to Principle 1, but administratively more specific details about patient inclusion criteria, limited services and consultation versus therapeutic responsibilities of the psychiatrist.</td>
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HIPAA Issues

- Interactive teledmedicine not governed by HIPAA
- Not considered PHI
- Not recorded or stored like other PHI
- HIPAA does not require encryption (but we encrypt)
- Use private connections when possible
- Teledmedicine room should be private just like any other clinic room
- Emerging opinions on mobile devices
Health Reform & Telemedicine

- Handful of direct telehealth provisions
- Mostly indirect via quality, capitation or care coordination
- 30 day readmission rule
- Concurrent with National Broadband Plan
- Most significant indirect is CMI

Created new CMS Center

- Center for Medicare and Medicaid Innovation (CMI)
- Test both payment and delivery models
- Funded at $10 billion
- Health Care Innovation Challenge (HCIC)
- Announced November 2011
- $1 billion
- $1 million to $30 million awards
- Reportedly 100,000 letters of intent

ACA also directs CMI to...

- “Facilitate inpatient care, including intensive care, of hospitalized applicable individuals at their local hospital through the use of electronic monitoring by specialists, including intensivists and critical care specialists, based at integrated health systems;”

- eICU model
Other Medicare Provisions for Telehealth

- Includes use of remote monitoring for eligible medical practices in the Independence at Home Demonstration Program
- Allows physicians to use telehealth to certify the need for home health services or durable medical equipment
- Allows telehealth technologies to be used by a pharmacist or other qualified provider in performing an annual comprehensive medication review of Medicare drug plan medication therapy management programs as well as needed follow-up interventions.
- For the new Community-Based Collaborative Care Network Program, the legislation recognizes the role of telehealth to expanding the program’s capacity.

30 day readmission

- CMS authorized to penalize beginning in 2013
- CHF, AMI, pneumonia
- 2015, COPD, bypass, percutaneous intervention, other vascular surgery procedures
- Home telehealth or other remote monitoring for post-discharge period

Medicaid...

- legislation provides a “health home” option for chronic conditions that includes:

  “a proposal for the use of health information technology in providing health home services...and improving service delivery and coordination across the care continuum (including the use of wireless patient technology to improve coordination and management of care and patient adherence to recommendations made by their provider)”
Future

The Telehealth Resource Center Grant Program

Technical assistance for starting or expanding telehealth services.

www.telehealthresourcecenters.org
HTRC SERVICE AREA

KANSAS - MISSOURI - OKLAHOMA

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