Telehealth: Today & Tomorrow
National Health Policy Forum

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Telehealth today & tomorrow

• Missouri Telehealth Network

• Evolving mission

• Telehealth tomorrow
Telehealth In Missouri

Missouri Telehealth Network

University of Missouri School of Medicine
Missouri Telehealth Network

- Mission: to use telehealth to increase access & quality of healthcare & provide education

- Provides Continuing Medical Education (CME) credits for providers in rural Missouri
- Partners with the Heartland Telehealth Resource Center promoting telehealth in the state & beyond
- Helps economic development in rural areas by keeping pharmacy, lab, and x-rays in local communities
What kind of care is delivered via telehealth?

Clinical care provided from a distance

Primary care
Medical Specialties
Intensive Care
Emergency Departments
Home care- monitoring
Why do we do it?

- Safety Net Hospital – care for uninsured & vulnerable populations
- Location – largely rural practice
- Academic mission – obligation to pursue excellence in innovation and to find ways to deliver high value care at lower cost
Why Telehealth?

- Clinical Shortages
- Maldistribution of providers
- Rural / Urban underserved
- Aging population
- Travel time, cost & hardship
- Delayed Treatment
- Language barriers
- Clinical education programs
- Administrative meetings
Rural Populations

• Nearly one-third of Missouri’s population lives in rural areas

• In comparison with urban Missourians, rural residents have
  • Higher poverty rates
  • A larger percentage of elderly
  • Tend to be in poorer health
  • Have fewer physicians, hospitals, and other health resources
  • Face more difficulty getting to health services
Missouri Telehealth Network Sites

Over 200 endpoints
In 70 counties

FY2013 34,792 clinical encounters
In 28 specialties

Red = counties with existing sites
Orange = counties w/ planned sites
Growth of MTN Clinical Telehealth

Encounters

Includes all MTN member site usage.
Types of Locations

- Hospitals
- Federally Qualified Health Care Centers
- Community Mental Health Centers
- Specialty Medical Clinics
- Rural Health Clinics
- Cancer Hospital
- Missouri Division of Youth Services locations
- Missouri Department of Corrections facilities

- Army Hospital
- Rehabilitation Hospitals
- School of Medicine
- Nursing Home
- State Health Facilities
- School of Nursing
- School of Health Professions
- Urgent Care Clinic
- Student Health Center
Clinical Specialties

- Psych/Mental Health
- Dermatology
- Cardiology
- Radiology
- Neurology
- Rehabilitation
- Autism
- Surgical Follow-up
- Internal Medicine
- Genetics
- Gastroenterology
- Rheumatology
- Genetics Follow-Up
- Pediatric
- Dermatology
- Sign Language Interpretation
- Orthopedic Consults
Clinical Specialties cont.

- Trauma
- Infectious Disease
- Diabetes Education
- Endocrinology
- Burn/Wound Care
- Pre-operative Evaluation
- ER Fetal Monitoring
- Ethics Consultations
- Geriatrics
- Tele-Home Care/Remote Monitoring
- Bariatric Surgery Education
- Occupational
Telehealth Reimbursement

- Medicare reimburses if the patient is in a rural area (non-MSA) in an approved originating site
- MO HealthNet (Missouri Medicaid)
- State mandated private insurer telehealth reimbursement coverage
MTN funding history

• Telecom industry grants
• Federal grants – HRSA/OAT, FCC
• State appropriations
• State grants/federal flow through
• Foundation funding

• Line item in state budget – 50%
• Institutional/member funding – 50%
Hybrid teledermatology
Tele- MDID Project

Far Site

Near Site Clinic – University Hospital

We developed an app!!!
Barriers to Success

• Provider buy-in
• Additional personnel resources and training are required at both hub and spoke sites
• Costs- equipment & broadband
• Documentation and paper work flow disruption
• Reimbursement
• Credentialing/ Licensure
• Quickly changing environment
• Education- awareness
Lessons Learned

• Telemedicine is simply a tool used to deliver health care at a distance
• People are more important than technology
• Telemedicine must be integrated into the everyday way physician’s practice
• It works best in augmenting established referral relationships
Mission Evolution.............
Trends driving telehealth

• Focus on Value rather than Volume
  – Keep patients healthy and out of the hospital
  – Reduce costs

• Evolving payment structures
  – Alternative payment models
  – Integrated care – PCMH, ACOs, clinically integrated networks

• Provider payment reforms - procedures paid less, cognitive services the same or more
Future applications........
Every specialty finding its way

- Teledermatology
  - Tele-triage
  - Tele-direct care
  - Tele-consultation
Health care is about more than doctors and hospitals

Good health begins where we live, learn, work, and play – RWJF

Health care is enhanced when it can be delivered regionally, if not locally
Immediately available at the point of care

The future of dermatology
Health Care

• Yesterday – the hospital

• Today – the ambulatory care environment

• Tomorrow – wherever the patient is
The future of telehealth

• Video and electronic connectivity to health providers
  – In urgent care, EDs, in clinics, in ICUs, in hospitals
  – In schools, in the workplace
  – In the home, on the TV
  – On your cell phone, on your lap top
  – Remote monitoring – disease management
  – Biosensors uploading health data continually
  – In long term care, correctional facilities, courts

  – Integrated with your EHR
mHealth Definition

Jama, 10/24/2013 definition:
“use of mobile telecommunication technologies for the delivery of health care and in support of wellness”
Why mhealth?

- Digital divide is less pronounced in mobile phones than Internet
- Mobile phone technology easier/cheaper to roll out to large areas than fixed technologies
- Mobile phones used by all
  - Male/female; rural/urban; young/old
Early mHealth research outcomes promising

- Texting improves health outcomes
- Effective self-management of disease and successful clinical outcomes
- Better quality of life
- Texting leads to better medication adherence
- Better maternal child health
- Improve attendance to healthcare appointments

**caveat much research was inconclusive showing need for additional research**
Show-Me ECHO

• ECHO - Extension for Community Healthcare Outcomes
• Model started by Dr. Arora, University of New Mexico
• Telehealth model for Education & Training
• Best practice dissemination
• Team care/Community health workers
• Track outcomes
Show-Me ECHO

• Future ECHO clinics
  • Hepatitis C
  • Chronic Pain Management
  • Autism
  • Mental Health/Subst. Abuse
  • High Risk OB
  • Diabetes
  • Dermatology

• Partnered with
  • Missouri Dept. of Social Services
  • Missouri Department of Health
  • Missouri Primary Care Assoc.
Telehealth is **High Value** Patient Centered Care