



FCC Healthcare Workshop

Building Sustainable Adoption:

Role of the Federal Government

***Karen S. Rheuban MD
Professor of Pediatrics
Medical Director, Office of Telemedicine
University of Virginia
President, American Telemedicine Association***

Telehealth applications

- *Videoconferencing for patient care*
- *Store and forward applications*
- *Telepharmacy*
- *Remote monitoring and home telehealth*
 - *m-Health*
- *Health information exchange*
- *Emergency preparedness/disease surveillance*
- *Distance learning*



Partnerships to improve health

- *Academic-community hospital linkages*
- *Departments of Defense, Veterans Affairs*
- *Rural clinics (FQHCs, Veteran's clinics)*
- *Free clinics*
- *Health departments*
- *Correctional facilities*
- *School health*
- *Nursing homes*
- *Home telehealth*
- *Workplace*
- *Medical offices*
- *Retail clinics*



Enhancing access



Benefits of telehealth

Patients

- *Timely access to locally unavailable services*
- *Improved triage when transfer required*
- *Improved quality of care*
- *Reduced readmission for same diagnosis*
- *Improved chronic disease management*
- *Spared burden and cost of transportation when transfer unnecessary*

Benefits of telehealth

Health professionals

- *Access to consultative services*
- *Each consultation is inherently educational*
- *Access to continuing medical education*
- *Primary care oversight of patient care*
- *Reduces sense of isolation*

Benefits of telehealth

Rural communities

- *>85% of patients remain in local community*
- *Care in the community (lower cost) environment*
- *Enhanced healthcare/economic empowerment*

Society

- *Lower cost of care*
- *Improve outcomes*
- *“Green” technology*

*Cardiology
Dermatology
Diabetes
Emergency Medicine
Endocrine
ENT
Gastroenterology
Genetics
Geriatrics
Gynecology
Hematology
Infectious Disease
Nephrology
Neurology
Neurosurgery
Ophthalmology
Orthopedics*

*Obesity
Oncology/Tumor boards
Pain management
Pediatric cardiology
Pediatric nephrology
Pediatric oncology
Plastic surgery
Psychiatry
Pulmonary medicine
Radiology
Rheumatology
Surgery
Thoracic/cardiac surgery
Toxicology/Poison control
Urology
Wound care*

Innovative ⇒ mainstream applications

- *Infant mortality – Virginia Productivity Investment Fund*
 - *Arkansas Angels*
 - *Improve access to prenatal care*
 - *Reduce neonatal mortality, premature delivery (26% decrease)*
- *Congenital heart disease*
- *Childhood asthma*
- *Childhood obesity*
- *School health and daycare applications*
 - *Reduced ER visits, parental time away from work*

■ *Tele-ophthalmology*

- *Screening for diabetic retinopathy*
- *Retinopathy of prematurity*
- *ATA: standards*

■ *Tele-dermatology*

- *ATA standards*
- *Store forward/live interactive*

■ *Tele-mental health*

- *Critical shortage of mental health providers*



Innovative → *mainstream applications*

■ *Acute stroke*

- *Time is of the essence, TPA administered in < 3hrs*
- *Increased use from 4-23% in rural hospitals*
- *AHA/ASA consensus statement*

■ *Mobile digital mammography*

- *Increase access to screenings*
- *Early diagnosis*



■ *e-ICU^R*

- *Hospital mortality and length of stay decreased 25%*

■ *Remote access to clinical trials and community based participatory research*

Chronic disease management

Remote monitoring and home telehealth

▪ ***Need***

- *Medicare data: Unplanned admissions \$17.4 billion*
- *Hospital readmissions within 30 days - 20%, within 90 days - 34%, within 1 year 56%*
- *MedPAC - \$7,200 dollars per readmission deemed preventable*

▪ ***Remote monitoring/home telehealth can reduce costs***

- *Congestive heart failure, Diabetes, Chronic obstructive pulmonary disease*

▪ ***VA care coordination/home telehealth***

- *19% reduction in hospital admissions*
- *25% reduction in hospital days*

Role of the federal government

Issues/solutions/challenges

- ***Funding of telehealth systems and projects***
 - ***The federal government has invested billions of dollars in telemedicine networks, technologies and research***

- ***Reimbursement: current status***
 - *Medicare: very narrow coverage in non-MSA counties, only covers 21% of Medicare beneficiaries nationwide*
 - *Total expenditures over 5 years = \$2 million/year (<5¢ / beneficiary / year)*
 - *Store and forward only for Alaska and Hawaii demo projects*
 - *Medicaid: no federal mandate*
 - *Other payers: VA, DoD*

Recommendations to drive adoption

- *Eliminate the rural requirement under Medicare*
- *Fund remote monitoring and home telehealth*
- *Fund store and forward telehealth in lower 48*
 - *HPSAs, FQHCs*
- *Eliminate the credentialing barrier under Medicare*
- *Ensure Medicaid coverage across the states*
- *Ensure that any plan receiving federal dollars covers telehealth*

Role of the federal government

Issues/solutions/challenges

- *Interagency mal-alignment of policies and definitions*
 - *Definition of rural (HRSA, USDA, FCC)*
 - *Conditions of participation standards for hospitals (CMS)*
- Credentialing and privileging at each site*
- ***Joint Commission (Telehealth standards, 2000/2004)***

Role of the federal government

Issues/solutions/challenges

- *Licensure is state determined (HRSA BHPR)*
 - *DoD, VA*
- *Telecommunications venue/costs (FCC, USDA, NTIA)*
 - *Universal service fund plays critical role*
 - *Rural healthcare program and pilot still underutilized*
 - *Regular program: 12 years , \$249 million total, 63% to Alaska*
 - *Pilot Program: In third year of program, only 1.4% of funds awarded disbursed*
 - *Expansion of eligible entities, such as EMS*
 - *Cover Administrative costs*
 - *Cover for profit hospitals with Emergency Departments as in regular program*
 - *Other administrative modifications*

Role of the federal government

Issues/solutions/challenges

- *Fund research projects related to telehealth (NIH)*
- *Cost effectiveness and savings (ONC, AHRQ)*
- *Industry standards (NIST)*
 - **ATA Practice guidelines**
 - **Continua Health Alliance – vendors pledge interoperability**

Future of telehealth

- *Demonstration projects (ARRA)*
 - *Sustainability of federal investment*
- *Sound federal policies to facilitate sustainability*
- *Integration into mainstream medicine*
 - *Medicare*
 - *Medicaid*
 - *National health reform*
 - *Private pay*

*Telemedicine improves access, efficiency,
economy, and quality of care.*



Thank you FCC!