Advancing Policy Through Research: Program Evaluation and Outcomes in Rural Telehealth

2016 South Central Telehealth Forum
Nashville, TN
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Wyoming Telehealth Network offering technical assistance grants (through the WY Office of Rural Health) – 18 awarded
“ACOs Add Telehealth, Despite Regulatory, Reimbursement Barriers to Implementation”: 20% of ACOs surveyed by eHealth Initiative

Why invest?
Why integrate into care?
Why pay for the service?
Challenge to evaluation-community to answer
What are the questions?
Where do we seek answers?
How do we assess the answers?
How do the answers inform policy choices?
A Taxonomy to Organize Questions

- Technology deployment: Synchronicity, network, connectivity
- Applications in care process: Specialty, Disease, Site, Treatment
- Functionality: consultation, diagnosis, mentoring, monitoring
- Next?

Types of Questions

- **Efficacy**: Can care be delivered with high quality results?
- **Care integration**: How do services delivered through telehealth “fit”?
- **Infrastructure**: Can the technology be supported?
- **Efficiency**: Assessing both process improvement and expenditures
Simple but Powerful Questions

- Does it work?
- In what settings does it work best?
- What is necessary for effectiveness?
- Are the services more or less costly if delivered through telehealth?
- What are the benefits and costs?
Calls for well-designed research have persisted since early days of telehealth, including a 2009 conference convened by National Center for Research Resources and NIH.

Recent emphasis on methods used to evaluate the deployment of telehealth.

In part the answer is in use by health systems under global payment arrangements.
Seeking data to match the questions, example of how to assess cost effectiveness in the absence of complete data

Measurement during demonstrations and pilots, AHRQ recommendations

Measures not necessarily unique to telehealth
AHRQ-NQMC Categorization Scheme for Measures

Health Care Delivery Measures
Measures of care delivered to individuals and populations defined by their relationship to clinicians, clinical delivery teams, delivery organizations, or health insurance plans. Denominators for these measures are defined by some form of affiliation with a clinical care delivery organization, e.g. recipients of health care, health plan enrollees, clinical episodes, clinicians, or clinical delivery organizations.
Sampling of Measures

- Changes in access to healthcare services
- Estimated provider travel time saved
- Quality: mortality rate
- Stroke treatment rates and time
Study Methodology

- Recommendations from 50 reviews of previous studies
- Larger and more rigorously designed controlled studies to assess impacts
- Standardization of interventions, measures, populations
- Combine qualitative and quantitative approaches

An Evaluation Tale

- Three-year evaluation of an e-health suite that included emergency room, pharmacy, and intensive care unit
- Mixed-method design, all within the implementation group
- Evaluation completed, with multiple findings/publications
- But some of the key questions remain ...
Challenges

- Evaluation not initiated coterminous with the demonstration – issues for data collection
- Shifts in sources of data during the evaluation
- Small numbers
But Lots to Learn

- Benefits beyond substitution value of telehealth (in tele-emergency)
  - Improvements in clinical quality
  - Expanded clinical care teams
  - Improved care coordination
  - Recruiting physicians
  - Stabilize rural hospital patient base

But Lots to Learn

- Benefits of pharmacy services for hospitals with limited staffing
- Analysis of ED use shows use for clinical situations as expected
- Business case for tele-emergency exists when participating hospitals adjust processes of care to substitute for physician ED backup and staffing

Results Change When Incorporating Savings for Patients

- From study of Veterans Health Affairs use of telemedicine
- Average travel savings of 145 miles and 142 minutes per visit
- Meant up to $63,804 for travel pay from VHA, 3.5% of total disbursement

Research Evidence Supports

- “Remote patient monitoring for patients with chronic conditions
- Communication and counseling for patients with chronic conditions
- Psychotherapy as part of behavioral health”

Shifting Research Focus

- Synthesizing studies in some topics such as consultation and maternal and child health
- Further primary evidence in some uses including triage for urgent care
- Use and impact of telehealth in new delivery and finance models

Same source as previous slide
Medicare policy makers still slow to expand, still concerned about unnecessary services

Ironically, current Medicare reimbursement policies not used much: 69,000 patient encounters in 2014

MedPAC Commissioners in Spring, 2016 meeting debated expanded eligibility for payment, with no conclusion
Policy Consideration: Network Adequacy

- As a substitution for providers with whom insurers cannot negotiate
- NAIC model law says can use telemedicine to meet network adequacy standard

Discussion

- Policy developments
- Delivery system reform and what that means, e.g., Next Generation ACOs
- Role of research
For further information

The RUPRI Center for Rural Health Policy Analysis
http://cph.uiowa.edu/rupri

The RUPRI Health Panel
http://www.rupri.org

Rural Telehealth Research Center
http://ruraltelehealth.org/

The Rural Health Value Program
http://www.ruralhealthvalue.org