Underrepresentation of Health Information Exchange in Rural Medicine

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Background

Rural Medicine
Health Information Technology
Health Information Exchange
Urban vs. Rural

- Urbanized Clusters of 2,500 to 50,000
- Urbanized Areas of 50,000 or more
- Rural areas include one-fifth of the country’s population
Challenges of Rural Medicine

- Distance
- Cost of access to care
- Lack of providers (specialties)
Health Information Technology

- Storing
- Sharing
- Analyzing
Health Information Exchange

Making the **right information** available to the **right people** at the **right time** across products and organization, in a way that can be relied upon and meaningfully used by recipients.

**Benefits:**
- Avoid readmissions
- Avoid medication errors
- Decrease duplicate testing
- Improve diagnoses
Methods
Methods

• Main resource:
  • HSRProj Excel Database (November 2017)

• Additional resources:
  • Office of National Coordinator
  • CDC/National Center for Health Statistics
  • Journal of Rural Health
Search Strategies

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**Telemedicine**

Telemedicine [N04.590.374.800] ➔
- Remote Consultation [N04.590.374.800.550]
- Telepathology [N04.590.374.800.600]
- Teleradiology [N04.590.374.800.700]
- Telerehabilitation [N04.590.374.800.850]

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Results

Visualizations

Gap

Solution
Underrepresentation of Health Information Exchange in Rural Medicine
Supporting Agencies

- AHRQ projects
- HRSA/ORHP
- VA projects

![Bar chart showing the number of projects supported by different agencies](chart.png)
Trend over time

- **2004:**
  - HIT: 9
  - Telemedicine: 1

- **2013:**
  - HIT: 1
  - Telemedicine: 8
Gap

• Hurdles to a successful HIE implementation within rural communities

  • Financial reasons
  • Lack of infrastructure and technical support
  • Adoption behavior due to lack of trust and motivation

• Other post implementation analysis does not apply to rural medicine due to distinct workflow in such areas

  • One size does not fit all

• Telemedicine has the potential fill the gap
Proposal & Hypothesis

Proposal
• Exploring the opportunities for Regional Health Information Organizations (RHIO) to merge HIE and telemedicine to identify the areas that can be enhanced in rural medicine

Hypothesis
• This would gain the trust over time
• Leads to better care quality by providing necessary information at the point of care in a timely manner
• Reduce cost in long-term through better treatment and prevention
• Incentive models need to be explored
References


Thielst CB. At the crossroads: NRTRC white paper examines trends driving the convergence of telehealth, EHRs and HIE. World Hosp Health Serv. 2010;46(4):17–23.

