Making the Research Case for Using Health IT and Information Management to Improve Rural Healthcare: A Call to Action on Research Priorities

Nov. 15, 2010

A CALL TO ACTION: National Stakeholder Summit Unveils Research Priorities

A national public/private stakeholder summit entitled, “Setting a Quality Improvement Research Agenda to Leverage HIT/HIM in Rural America” (April 22-23, 2010), was funded in part through a small conference grant awarded to the AHIMA Foundation by the Agency for Healthcare Research and Quality, and from Institute for Improvement of Minority Health and Health Disparities in the Delta Region. The summit provided a national forum for setting a specific QI research agenda that supports several key areas enunciated in the recently enacted US Health Reform (March 2010) and forms the basis for this practical document.

Purpose

This case brief is intended for use by researchers, public/private stakeholders that fund health services research/applied research, and corporations that have a stake in research and healthcare reform. It makes the case for the urgent need to enhance rural-specific research on health information management (HIM), health information technology (HIT), and telehealth (which includes telemedicine but is more than telemedicine). Also, the brief recommends:

- Research to inform the cost-effective adoption of HIM, HIT, and telehealth that strengthens rural healthcare and improves rural Americans’ health.
- Steps to put the research agenda into action, especially in public-private partnerships.

The research agenda results from a government-sponsored summit with 83 practitioners, experts, industry leaders, and policymakers.

What’s at Stake?

At this critical point in our nation’s healthcare system, a roadmap is needed to effectively deploy HIM/HIT in rural areas. Governments and industry are investing billions of dollars in HIM, HIT, and telehealth for quality improvement, access to patient-centered care, health disparities reductions, and cost efficiencies. However, available evidence shows many rural communities face multiple, serious barriers to adopting HIM, HIT, and telehealth. The inadequate knowledge base means:

- Policymakers and stakeholders have little information about how to best support HIM/HIT uptake by rural providers and patients.
- HIM/HIT remains a high-risk investment for most rural providers because of high costs and uncertain benefits.
• Rural providers may not qualify for significant dollars provided through federal “meaningful use” incentives.
• People in rural areas will continue to have limited opportunities to benefit from electronic clinical systems that support high quality care.

This research agenda comprises rural healthcare stakeholders’ priorities for studies to help policymakers and practitioners effectively deploy HIM, HIT, and telehealth in rural areas to improve patient care and achieve long-term cost-savings. Eighty-three rural healthcare experts, providers, public health practitioners, consumers, and other national and local health industry stakeholders helped set the agenda at a summit convened by the American Health Information Management Association (AHIMA) Foundation, with support from the Agency for Healthcare Research and Quality.

What Is Known?
HIM, HIT, and telehealth, when effectively integrated into clinical systems, can strengthen rural communities by:
• Improving access to and the quality of healthcare in rural areas.
• Reducing disparities in healthcare treatment and outcomes among rural and underserved populations.
• Enhancing the economic viability of rural providers to deliver high quality, patient-centered care.

In the long-term, cost-savings are possible if HIM/HIT investments optimize care, reduce medical errors and waste, enable coordination of care between providers and patients, and achieve new administrative efficiencies. However, rural HIM/HIT adoption is very low. In 2009, only 1% of rural hospitals had systems that met meaningful use criteria, and in 2008, just 13% of rural physicians had basic electronic health records (EHR) systems. Among the barriers to HIM, HIT, and telehealth in rural areas are problems with access to broadband services and capital, workforce shortages, and provider isolation.

Currently, many rural providers strain to meet patient needs because of limited healthcare system capacity. The overload contributes to health inequalities. For instance, rural populations—especially low-income, racial/ethnic minority groups, and adults age 65 and older—tend to be medically underserved, receive less recommended healthcare, and are less healthy than other urban and higher income groups.

What Knowledge Gaps Need Closing?
Policymakers, healthcare providers, consumers, and other stakeholders need better information about HIM, HIT, and telehealth deployment in rural settings. To close gaps, research partnerships should focus on the three following areas, highlighted below with a sampling of priority studies.
Quality Improvement: *Adoption and use of HIM, HIT, and telehealth to enhance patient care and access in rural communities.*

- Determine effective strategies for deploying HIM/HIT as part of a comprehensive quality improvement system.
- Identify critical HIM, HIT, and telehealth elements that improve access to high quality, safe patient care.
- Evaluate the effectiveness of external technical, financial, and policy support for HIM/HIT deployment.

Health Disparities: *Use of HIM, HIT, and telehealth to improve healthcare treatment and outcomes among underserved populations in rural areas.*

- Examine how HIM, HIT, and telehealth can support effective healthcare partnerships between underserved populations and their providers.
- Evaluate the impact of HIM, HIT, and telehealth on underserved populations and on health disparities.
- Test consumer-focused health technologies with underserved populations.

Economic Value: *Use of HIM, HIT, and telehealth to improve clinical performance and the economic viability of these systems for rural providers.*

- Assess the value of HIM, HIT, and telehealth and impact on patient care, including patients’ perceptions.
- Determine effective strategies for redesigning workflow and improving EHR usability for rural providers and patients.
- Examine how HIM, HIT, and telehealth adoption is affecting rural workforce demand and supply.

To advance these focal areas, a crosscutting priority is developing new methods to study small populations. Another is new taxonomies that capture variation in rural settings, populations, and providers.

What Should Researchers, Funding Agencies, and Corporate Stakeholders Do?
Implementing this research agenda will require public-private partnerships that bring together investigators, funding agencies, and healthcare stakeholders (both traditional and nontraditional). Figure 1 outlines specific steps.
FIGURE 1. Call to Action to Support the Research Agenda

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<th>Researchers</th>
<th>Funders* &amp; Stakeholders</th>
<th>Actions to Implement the Research Agenda</th>
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<td>Expand quality improvement research in rural settings based on the priorities in this research agenda.</td>
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<td>Integrate rural-specific analyses into existing studies.</td>
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<td>Educate others on the need to expand quality improvement research on HIM, HIT, and telehealth in rural settings.</td>
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<td>Develop multi-disciplinary research collaborations.</td>
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<td>Alter funding processes and requirements to diversify the investigator pool and assure consumer involvement.</td>
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<td>Translate research findings for use by policymakers, healthcare providers, consumers, and technology companies.</td>
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<td>Broadly disseminate the resulting research findings.</td>
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* Funders can be government agencies; private foundations; healthcare, technology, and telecommunications companies; as well as nontraditional research partners, including employers, global corporations, unions, and consumer groups.

Conclusion

Researchers, funding agencies, and corporate stakeholders must heighten their commitment to research in rural settings to learn how best to leverage HIM, HIT, and telehealth for quality improvement. Findings from the recommended studies ultimately will support cost-effective HIM/HIT investments that enable all rural Americans, especially underserved populations, to get safe, timely, patient-centered care and to lead long lives.

For additional information on the detailed research agenda and summit report, please contact Nadine Caputo at the AHIMA Foundation, nadine.caputo@ahimafoundation.org

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