

# **Setting a Quality Improvement Research Agenda to Leverage HIT/HIM in Rural America**

*A National Stakeholder Summit*

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## **Final Progress Report**

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## **Structured Abstract**

### **Purpose**

To identify critical knowledge gaps and stimulate new research, the American Health Information Management Association (AHIMA) Foundation convened rural healthcare experts, providers, public health practitioners, consumers, and other national and local health industry stakeholders for a summit, entitled "Setting a Quality Improvement Research Agenda to Leverage HIT/HIM in Rural America."

### **Scope**

Eighty-three stakeholders interested in rural healthcare participated in the invitation-only 2-day summit. A wide array of disciplines was present, including health sciences, healthcare administration, economics, public health, HIM, health law, communications, and information technology.

### **Methods**

Upon receiving notification of the small conference grant award from AHRQ, the AHIMA Foundation led all conference planning efforts, including convening a summit steering committee, setting an agenda, securing speakers, inviting participants, securing meeting logistics, and soliciting evaluation responses.

### **Results**

Based on expert panel presentations and discussions, the summit produced a research agenda designed to inform healthcare policy and practice by examining how the adoption and use of HIM, HIT, and telehealth may support quality improvement in rural healthcare and among underserved populations. Three priorities for research emerged: Adoption and Use, Underserved Populations, and Economic Value. This research agenda has the potential to improve stakeholders' understanding of HIM, HIT, and telehealth in rural settings, with the support of public and private funders.

### **Key Words**

Health IT, Disparities, Rural, Quality Improvement, Economics, Underserved, Conceptual Framework

## Purpose

Unprecedented US federal support aims to push the healthcare sector into the digital age. These national investments have been envisioned to improve the quality of healthcare and reduce health disparities, among other goals. In rural America, a key obstacle to realizing this vision is the relative dearth of evidence to inform the adoption and use of health information management (HIM), health information technology (HIT), and telehealth.

To identify critical knowledge gaps and stimulate new research, the American Health Information Management Association (AHIMA) Foundation, with support from the Agency for Healthcare Research and Quality (AHRQ), the Institute for Improvement of Minority Health and Health Disparities in the Delta Region, Verizon, and other partners convened a summit of rural healthcare experts, providers, public health practitioners, consumers, and other national and local health industry stakeholders. The goal of the AHIMA Foundation's 2-day summit, "Setting a Quality Improvement Research Agenda to Leverage HIT/HIM in Rural America," was to develop a quality-improvement research agenda to advance knowledge in research, practice, and policy about how to best leverage HIM, HIT, and telehealth to strengthen rural healthcare and, ultimately, improve the health of rural low-income and underserved populations. Specific objectives were fourfold:

- Review the economic, strategic, and tactical (practical) impact of HIM, HIT, and telehealth on quality improvement efforts in rural settings; specific agenda items included healthcare disparities, access, workforce shortages, patient safety, consumer acceptance, and economic and other performance incentives
- Discuss the current state of quality improvement research in relation to current policy and practice challenges in deploying HIM, HIT, and telehealth in rural settings to strengthen patient-provider partnerships and support the delivery of high-quality, safe care
- Create a quality improvement research agenda for rural settings to address gaps in current research, policy, and practice
- Set the stage for multi-stakeholder research collaborations.

## Scope

### **The Opportunity**

Health reform stakes are high for rural communities, but little is known about how to deploy HIM, HIT, and telehealth in rural settings to support optimal patient care and safety. To remedy this situation, the AHIMA Foundation—with support from AHRQ, the Institute for Improvement of Minority Health and Health Disparities in the Delta Region, Verizon, and other partners—convened rural healthcare experts, practitioners, policymakers, researchers, and other stakeholders in a 2-day summit. The purpose was to establish a quality improvement research agenda on leveraging HIM, HIT, and telehealth to strengthen rural healthcare and reduce disparities in rural low-income and underserved populations. The resulting knowledge would inform policy and practice.

For rural providers and patients, health reform offers both promise and peril. HIM, HIT, and telehealth have the potential to advance the quality of care in rural communities. Careful use of these systems can support high-quality, efficient, patient-centered medical care.<sup>1-11</sup> At the same time, other research cautions that HIM, HIT, and telehealth can be expensive investments that yield minimal benefits if not carefully implemented.<sup>4, 11-16</sup> Finally, expanding telehealth and consumer-focused technologies open new avenues for consumers and providers to be partners in managing health.

The American Recovery and Reinvestment Act of 2009 committed new federal resources and policy support to prompt HIM/HIT uptake. Federal health reform in 2010 authorized demonstration projects that could have HIM, HIT, and telehealth components. Health reform and other policy changes implicitly institutionalize the use of HIM/HIT in the health system.<sup>17</sup> In addition, the pay-for-performance movement provides additional incentives for providers to use HIM/HIT in managing their patients' health.

Much is unknown about how to realize the benefits of HIM/HIT in rural healthcare. As observed by Carolyn Clancy, MD, AHRQ director: "After almost a decade of public- and private-sector experimentation through demonstrations and grants, the path from health IT adoption to high-quality, high-value healthcare remains largely uncharted."<sup>4</sup>

### **Status of Rural Health and Healthcare**

Rural healthcare has many strengths. Medicare data indicate that patients in rural and critical access hospitals are more likely than patients in other hospitals to receive some types of recommended hospital care.<sup>18</sup> In rural areas, scarce resources can prompt providers to be innovative and can facilitate the development of partnerships to address local healthcare and community-based priorities. For example, small rural medical practices have improvised effective strategies to meet the needs of patients with limited English proficiency.<sup>19</sup> High-performing health systems in rural areas have used HIM, HIT, and telehealth in multi-component efforts to improve quality of care, access, and efficiency. Results include higher productivity and patient satisfaction rates, shorter hospital stays, lower readmission rates, trimmed medical costs, and better control of chronic conditions.<sup>5, 20, 21</sup>

Yet national data show that rural populations—especially low-income people, racial/ethnic minority groups, and adults age 65 and older—often are medically underserved, receive less recommended healthcare, and are less healthy than other urban and higher-income groups. For example, compared to Americans in metropolitan areas, nonmetropolitan residents are less likely to receive recommended care for diabetes and heart attacks. People in nonmetropolitan regions also are more likely to have chronic conditions, problems accessing care, and fair/poor health. Healthcare access and quality challenges also are found in urban settings as well.<sup>18, 21-25</sup>

### **Quality Improvement and Rural Healthcare**

Quality improvement is a strategy for improving healthcare outcomes. As defined by Dr. Clancy, *healthcare quality* "is the right care, for the right patient, at the right time, every time."<sup>26</sup> HIM, HIT, and telehealth, especially in combination with non-technology investments, can contribute to advances in healthcare quality and population health. Some ways that HIM, HIT, and telehealth support quality

improvement are by identifying high-risk patients who could benefit from additional support, tracking clinical performance overall, monitoring specific patient groups, providing clinical decision support, and enhancing access to timely care.<sup>3, 5, 27</sup>

New medical technologies, changes in healthcare financing and delivery, and evolving population health needs are some of the forces reshaping healthcare. Now, patients, caregivers, and providers are finding that they have different responsibilities and roles in health management. The patient-physician relationship is also changing. In this context, rising healthcare models—especially the chronic care model, patient-centered medical home, and participatory medicine—emphasize collaborative patient-provider relationships as instrumental to high-quality care.<sup>28-30</sup> These healthcare models also promote HIM, HIT, and telehealth as tools to support patient-provider partnerships. Specifically, health technologies and information management have the potential to enhance patient-provider communications, facilitate shared decision making, provide patients with self-management support, and help the care team follow treatment plans.<sup>8, 31-34</sup>

### **Low HIM/HIT Adoption in Rural Settings**

Surveys have produced a wide range of health technology adoption rates (in part because sponsors used different measures). Results from an early 2008 survey indicate that less than 20 percent of providers have adopted basic HIM/HIT systems.<sup>35-37</sup> Another survey in 2009 indicates that 2 percent of hospitals could achieve federal meaningful use criteria for incentive payments.<sup>38</sup> These and other surveys report that smaller, rural, and critical access hospitals lag behind urban and larger hospitals in HIM/HIT adoption.<sup>18, 35-38</sup> Experts estimate that few dentists have interoperable EHRs.<sup>39</sup> Many rural hospitals report having used one or more forms of telehealth, with use varying by service (e.g., cardiology or emergency care) and by function (e.g., clinical or educational).<sup>18</sup>

Nationally in 2009, only 8 percent of adults have used e-mail to communicate with a doctor, 7 percent have used a personal health record, and 2 percent have used a health-related application for a cell phone.<sup>40</sup> About three in five Americans do go online for health information, with rural consumers doing so at rates similar to those of urban and suburban adults.<sup>40, 41</sup> However, rural Americans are more likely to lack wireless internet access and home broadband services.<sup>42, 43</sup>

### **Need for Rural-Specific Research**

Rural healthcare merits specific attention in research on the adoption and use of HIM, HIT, and telehealth for quality improvement. Rural settings are not little urban settings. Rather, rural communities have unique constellations of strengths, opportunities for improvement, and population health needs. In making research recommendations, summit participants recognized that *rural* encompasses a diverse array of settings and providers.

## Methods

Upon receiving notification of the award from AHRQ, the AHIMA Foundation first met with its AHRQ program officers. The purpose of this meeting was to review agenda and summit plans and solicit suggestions for additional speakers and topics. The program officers were also invited to participate in the summit planning steering committee.

### **Planning Process**

AHIMA Foundation staff notified individuals who had initially agreed to participate on the summit planning steering committee at the time of the original application. The committee began planning during a kick-off conference call. The committee then held several subsequent planning meetings leading up to the summit. Planning tasks included determining the summit topics and speakers, signing off on meeting plans and logistics, contributing names to the invitation list for attendees, and participating in the conference itself, either as a speaker or panel moderator. (See Appendix A for a steering committee roster.)

Using lists from the initial grant application, along with additional suggestions from AHRQ program officers and steering committee members, the AHIMA Foundation staff solicited speakers for the keynote and panel sessions. Invitation e-mails were sent out with proposed agenda times, and, when required, agency protocol was followed to invite high-level government agency speakers to attend (e.g., David Blumenthal, MD, MPP, from the Office of the National Coordinator). A full list of the confirmed speakers and session topics can be found in the summit agenda, Appendix B. After participation was confirmed, AHIMA Foundation staff conducted half-hour conference calls with all moderators and speakers for each session on the agenda so that session participants could discuss their overall perspective, specific topics to address, and research gaps and challenges.

Based on suggestions from steering committee members, AHRQ program officers, and AHIMA Foundation staff contacts, an invitation list was compiled for the summit attendees, consisting of approximately 200 contacts from 140 organizations. Electronic invitations were sent out to those on the list, and responses were solicited through a form attached to the invitation. If unable to attend, invitees could suggest a designee to attend in their place, upon approval from the steering committee.

The AHIMA Foundation solicited additional funding support for this conference in order to convene a greater number of speakers and staff, supplement hotel expenses, and provide food and beverage for summit participants. The two organizations that provided supplemental funding were the Institute for Improvement of Minority Health and Health Disparities in the Delta Region and Verizon.

A total of 83 speakers and attendees participated in the meeting, necessitating a significant amount of logistics planning to conduct the event. Under contract with the AHIMA Foundation, the Hilton Alexandria Old Town in Alexandria, VA, provided meeting space, food, and audiovisual equipment. AHIMA Foundation staff assisted with travel arrangements for speakers, and attending speakers received stipends and expense reimbursements. AHIMA Foundation staff compiled meeting packets for each participant, with materials including a summit agenda, speaker and attendee biosketches (solicited from

individual participants), and an evaluation form. Following the summit, a password-protected website was set up so that participants could access PDF versions of each speaker's presentation.

### **Meeting Evaluation**

The AHIMA Foundation created an evaluation tool to assess satisfaction and learning from summit participants. The evaluation consisted of five rating questions (each on a 5-point scale with additional space for comments) along with one open-ended question. See Appendix C for a sample evaluation form. Evaluations were collected at the meeting as well as through several follow-up e-mail solicitations in the weeks following the summit. Based on formal evaluation responses as well as informal feedback, the summit was very positively received by those who attended.

Eighty attendees were eligible to complete an evaluation (excluding AHIMA Foundation staff); however, not all participants stayed through the entire meeting (for example, some speakers only came for their session), so they likely would not have submitted an evaluation. Taking the entire meeting population into account, the response rate was 28.75%.

Evaluation Scores (average scores on a 5-point scale, with 5 being highest/strongest):

- Overall satisfaction with the Summit: 4.57
- Overall satisfaction level with speakers: 4.48
- Agreement that issues covered at the summit were relevant to participant's work in the industry: 4.55
- Agreement that information received at the summit will be used in participant's work: 4.41
- Agreement that discussions during the summit were helpful and enhanced the experience: 4.14

Based on the evaluation and additional feedback, the conference model (consisting mainly of moderated panel sessions, with each panelist presenting and time for questions and answers via the moderator at the end), seemed to work well to cover the different topic areas. Opportunities to improve on future conferences might include either booking fewer speakers or extending the length of the sessions in order to leave more time for audience discussion and input on identifying research topics. More non-panel discussion time might also be built into the agenda, possibly even to include breaking out into smaller groups. With more discussion time, there would have been more opportunities to gain perspective from the audience members and thus apply more of the session topics back to the rural setting (addressing several concerns mentioned in the evaluations).

### **Summit Deliverables**

Key steering committee members synthesized summit discussions to develop a conceptual framework and an initial draft report of the research agenda. The full summit steering committee reviewed the first draft, and the authors used their feedback to develop a second draft. All summit participants and steering committee members were encouraged to comment on the second draft, which authors subsequently revised. The AHIMA Foundation submitted the final report to AHRQ for review, and the report was published on the Foundation's website. As an additional summit deliverable, the AHIMA Foundation created a guide for researchers, funders, and corporations that have a stake in HIM research and healthcare reform, entitled "Making the Research Case for Using Health Information Technology (HIT)

and Health Information Management (HIM) to Improve Rural Healthcare." Both documents can be found on the AHIMA Foundation's website at:  
<http://ahimafoundation.org/PolicyResearch/ResearchHighlights.aspx>

## Results

### Summit Research Agenda

At the summit, rural healthcare experts and leaders worked together to set a quality improvement research agenda for rural settings. The focus of these presentations and discussions was: **What research is needed to better leverage HIM, HIT, and telehealth to support quality improvement in rural communities in order to improve clinical outcomes and reduce health disparities?**

Three research priorities for leveraging HIM, HIT, and telehealth to improve rural healthcare emerged from the summit.

- A. **Adoption and Use:** integrating HIM, HIT, and telehealth into quality improvement systems to enhance access and optimize healthcare in rural settings
- B. **Underserved Populations:** using HIM, HIT, and telehealth to reduce disparities in healthcare treatment and outcomes, especially in rural low-income and underserved populations
- C. **Economic Value:** using HIM, HIT, and telehealth to enhance clinical performance and thereby support the economic viability of rural healthcare

Figure 1 presents a conceptual framework for the research agenda resulting from the summit. The purpose of this research agenda is to inform rural healthcare policy and practice by developing knowledge of how HIM, HIT, and telehealth can be used to support quality improvement, reduce health disparities, and enhance clinical performance.

**Figure 1. Conceptual Framework for a Quality Improvement Research Agenda to Leverage HIM/HIT Implementation in Rural America**

RESEARCH AGENDA		
Inform healthcare policy and practice by examining the adoption and use of HIM, HIT, and telehealth to support quality improvement in rural settings.		
Research Areas for HIM, HIT, and Telehealth in Rural America		
<i>Focal Points</i>		
<p>A) Adoption &amp; Use for Quality Improvement</p> <p><i>Improve access and optimize care by deploying HIM, HIT, and telehealth in rural healthcare</i></p>	<p>B) Underserved Populations</p> <p><i>Reduce disparities in rural healthcare treatment and outcomes by using HIM, HIT, and telehealth</i></p>	<p>C) Economic Value</p> <p><i>Enhance viability of HIM, HIT and telehealth for rural providers through improved clinical performance</i></p>



Develop and test both new taxonomies and methods for studying rural healthcare.		
<p>A1. Develop theoretical models of HIM, HIT, and telehealth deployment to support quality improvement.</p> <p>A2. Assess facilitators of and barriers to HIM/HIT deployment.</p> <p>A3. Identify critical HIM, HIT, and telehealth elements that improve access to quality care.</p> <p>A4. Determine effective strategies for deploying HIM/HIT.</p> <p>A5. Evaluate the effectiveness of external support for HIM, HIT, and telehealth deployment.</p> <p>A6. Conduct clinical research on telehealth interventions.</p> <p>A7. Assess HIM/HIT impact on access to quality care.</p> <p>A8. Examine ways to integrate medical and dental data.</p>	<p>B1. Conduct analyses using electronic health information to assess, monitor, and understand rural communities' health needs.</p> <p>B2. Examine how HIM, HIT, and telehealth can support effective healthcare partnerships between underserved populations and their providers.</p> <p>B3. Test consumer-focused health technologies with underserved groups and caregivers.</p> <p>B4. Evaluate the impact of HIM, HIT, and telehealth on underserved populations and disparities.</p> <p>B5. Test community-based models for improving healthcare quality, safety, and access.</p>	<p>C1. Assess value of HIM, HIT, and telehealth and impact on patient care, including patients' perceptions.</p> <p>C2. Examine the effect of financial and nonfinancial (reputational) incentives on HIM, HIT, and telehealth use, clinical performance, and economic viability.</p> <p>C3. Determine effective strategies for redesigning workflow and improving EHR usability.</p> <p>C4. Assess the return-on-investment of HIM, HIT, and telehealth in healthcare delivery.</p> <p>C5. Compare ways to maximize the economic value of HIM, HIT, and telehealth.</p> <p>C6. Examine how HIM, HIT, and telehealth affect workforce demand and supply.</p>

**Call to Action**

The research agenda is ambitious and will require public-private partnerships to implement. The imperative is the paucity of information about how to use HIM, HIT, and telehealth in rural settings to improve access to quality care, reduce health disparities, and strengthen the viability and effectiveness of the rural healthcare system. Five steps, summarized in Figure 2, are necessary to move this research agenda from plan to action.

**Figure 2. Call to Action to Support the Research Agenda**

Steps to Implement the Research Agenda
<ol style="list-style-type: none"> <li>1. Develop multi-disciplinary networks of health researchers and rural healthcare stakeholders. These networks should be deliberately developed to diversify the field of health researchers and add consumer perspectives.</li> <li>2. Secure research funding agencies' and investigators' commitment to expanding quality improvement research on the use of HIM, HIT, and telehealth in rural settings.</li> <li>3. Expand quality improvement research in rural settings based on the priorities in this research agenda. A beginning point is integrating relevant research priorities into existing federally and privately funded studies (e.g., annual provider and consumer surveys, program evaluations, public-private funding requests for proposals).</li> </ol>

4. Translate research findings for use by policymakers, healthcare providers, consumers, and technology companies.
5. Broadly disseminate this research agenda and subsequent research findings through strategic national stakeholder collaborations.

First, summit participants urged the use of multi-disciplinary research networks to attain a nuanced understanding of rural healthcare dynamics and the design of effective interventions. As a result of the summit, new research collaborations are underway to explore integrating oral health information into electronic health records that support medical care and test HIM/HIT innovations in chronic disease management. Other investigators can use this research agenda as a springboard for new research collaborations to conduct other recommended studies.

Deliberate efforts are necessary to diversify the pool of research investigators and institutions. Both formative and evaluative research should identify ways to effectively support rural community-based groups that want to conduct research but may not have the capacity to prepare a competitive proposal for research grants. Alternative processes for research grantmaking should be tested to learn how to level the playing field for research proposals in which small or rural groups would have a significant role. For example, how would increasing the quantity of awards by reducing grant amounts affect the mix of recipients? What would be the impact of a requirement to include new researchers, in-the-field rural professionals, or consumers as co-investigators?

Second, this research agenda necessitates a deepened commitment to supporting investigations focusing on the healthcare of rural Americans and underserved populations. Together with rural providers and patients, health services researchers should meet with funding agencies and seek their increased support for studies and evaluations that build knowledge about overcoming rural disparities. Funding agencies' commitments should go beyond research grants to also provide financial support for knowledge transfer (e.g., translation and dissemination, discussed below).

Third, many of the research recommendations address urgent needs for information to guide the process of deploying HIM/HIT systems in rural healthcare. To the extent possible, existing research investments should seek to integrate these priorities. In the near term, rural stakeholders, healthcare experts, and funding agencies can begin planning the next funding cycles using the priorities in this research agenda. These initial steps are valuable, because they set the stage for developing research portfolios that systematically build the evidence base for sustained gains in the health of underserved populations.

Fourth, knowledge generated by quality improvement research on rural healthcare should transfer, as relevant, to various audiences. Potential target audiences include policymakers, providers, public health, patients and caregivers, and technology companies. The knowledge transfer process distills the essence of the findings for a specific audience, puts research results into a context that is accurate, presents the information in audience-friendly formats, and discusses implications.

Fifth, research produced from this agenda must be broadly disseminated to target audiences, tapping into trusted and frequently used information channels. Initial plans include submissions to *Health Affairs*, *Journal of Health Care for the Poor and Underserved*, trade publications, *Parade* magazine, and other consumer-oriented publications. Repeated or follow-on messaging can be beneficial given the congested media environment.

### **Challenging Context for HIM, HIT, and Telehealth in Rural Settings**

Many summit participants expressed concerns that federal policy timelines for HIM/HIT use were out of sync with rural providers' ability to adopt HIM/HIT and qualify for meaningful use incentive payments from Medicare and Medicaid (beginning in 2011). According to participants, many rural providers view HIM/HIT and telehealth as high risk, expensive, and providing uncertain benefits. Reimbursement for telehealth clinical services is piecemeal. Rural providers who are interested in HIM/HIT can face major adoption hurdles, especially limited access to capital, expensive or inadequate telecommunication services, the challenge of re-engineering clinical processes without disrupting patient access and care, and a local workforce without the requisite competencies. Their patients may not consent to electronic exchange of their personal health information; other patients, especially the elderly (80+ years), may consent to EHRs but lack the ability to use consumer-focused health technologies.

Improving the health of rural underserved populations and eliminating disparities will take more than increased access to quality healthcare. Summit participants called for a strong commitment by providers, public health officials, researchers, funding agencies, and consumers to support research using electronic health information for both clinical and community health purposes.

With implementation of Health Information Technology for Economic and Clinical Health (HITECH) Act and the Patient Protection and Affordable Care Act (PPACA) in open throttle, it is imperative that the recommended research in this agenda commences. The findings are needed so that HIM, HIT, and telehealth investments will contribute to improved rural health, especially among underserved populations.

### **Conclusions**

Health technologies will provide unprecedented quantities of health data that can be used to optimize care and improve access. Yet, rural providers' low uptake of HIM, HIT, and telehealth suggests the need to develop effective research-informed strategies for supporting deployment in rural settings.

To close these evidence gaps, rural healthcare experts, providers, public health practitioners, consumers, and other national and local health industry stakeholders came together at a national summit to develop a research agenda and build research partnerships. The resulting research agenda seeks to inform rural policy and practice on how to effectively leverage HIM, HIT, and telehealth to strengthen healthcare and the health of rural and underserved populations.

The research agenda has three priorities. A first set of urgently needed, high-priority research focuses on effective ways to support rural providers in HIM/HIT adoption and how to best use HIM, HIT, and telehealth systems to improve access to high-quality healthcare and patient-provider partnerships.

A second line of investigations should examine how to best utilize HIM, HIT, and telehealth to reduce disparities in healthcare treatment and outcomes for underserved populations. The third recommended research area is to examine ways to enhance the economic viability of HIM, HIT, and telehealth for rural providers by improving clinical performance and outcomes. A crosscutting priority is the development of both new taxonomies and methods for studying rural healthcare.

Implementing this ambitious research agenda will require deliberate efforts to engage additional and sometimes untraditional stakeholders in community settings. Summit sponsors and participants encourage funding agencies to integrate these priorities into their research agendas. They also are establishing multi-disciplinary research collaborations and will transfer the resulting research findings for use in policy and practice. Ultimately, by improving stakeholders' understanding of HIM, HIT, and telehealth in rural settings, this research agenda will increase the odds that national investments in health technologies will enable all rural Americans to get safe, timely, patient-centered care and to lead long lives.

## Lists of Publications and Products

- Final Report: Distributed to all summit participants and posted on AHIMA Foundation's public website\*
- "Making the Research Case for Using Health Information Technology (HIT) and Health Information Management (HIM) to Improve Rural Healthcare" – a guide for researchers, funders, and corporations that have a stake in HIM research and healthcare reform. This guide was distributed to all summit participants and posted on AHIMA Foundation's public website.
- Rudman, W., Jones, W., Hart-Hester, S, Caputo, N., and Madison, M., *Leveraging HIM and HIT to Reduce Disparities and Improve Care in Poor Rural and Underserved Populations*, accepted for publication with revisions by the Journal of Healthcare for the Poor and Underserved in October, 2010.
- \*A special thank you is extended to Molly French, from Potomac Health Consulting, on behalf of the AHIMA Foundation. Ms. French synthesized all of the initial comments, questions, and issues that were discussed during the 2-day summit and assisted in developing the guide for researchers.

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AHRQ Grant # R13HS018117

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## Appendix A: Steering Committee Roster

### ***Setting a Quality Improvement Research Agenda to Leverage HIT/HIM in Rural America***

#### **Summit Steering Committee Members (2009 – 2010)**

**Robert J. Borotkanics, MPH**, Program Officer, Agency for Healthcare Research and Quality

**Nadine Caputo, MS**, Director of Research and Development, AHIMA Foundation

**Gail Graham**, Deputy Chief Officer, Health Information Management, Veterans Health Administration

**Warren Jones, MD**, Executive Director, Institute for Improvement of Minority Health and Health Disparities in the Delta Region

**Patricia MacTaggart**, Lead Research Scientist/Lecturer, George Washington University Health Policy Department

**Mary Madison, MPA**, Executive Director, AHIMA Foundation

**Robert Mayes, MS, RN**, Senior Advisor on Health Information Technology, Agency for Healthcare Research and Quality

**Michael Millenson**, President, Health Quality Advisors, LLC

**William J. Rudman, PhD**, Independent Consultant and Program Director, Policy and Research, AHIMA Foundation

**Christopher Tompkins, PhD**, Associate Professor, Brandeis University

**Charlotte Yeh, MD**, Chief Medical Officer, AARP Services, Inc.

## Appendix B: Summit Agenda

# Setting a Quality Improvement Research Agenda to Leverage HIT/HIM in Rural America

## *A National Stakeholder Summit*

Hilton Alexandria Old Town - Grand Ballroom  
1767 King Street  
Alexandria, Virginia 22314  
April 22-23, 2010

## Agenda

### Day One – Thursday, April 22, 2010

#### 10:30 – 10:45 **Welcome**

Alan F. Dowling, PhD, CEO, AHIMA

Mary Madison, MPA, Executive Director, AHIMA Foundation

#### 10:45 – 11:15 **Opening Remarks: AHRQ Priorities**

P. Jon White, MD, Director of Health Information Technology, AHRQ

#### 11:15 – 12:15 **Disparities, HIM and Opportunities for Health Services Research**

Moderator: Warren Jones, MD, Executive Director, Institute for Improvement of Minority Health and Health Disparities in the Delta Region

Arthur J. Davidson, MD, MSPH, Director, Public Health Informatics, Denver Public Health Department

Matthew Samore, MD, Professor, Division of Epidemiology, University of Utah

#### 12:15 – 1:15 **Networking Luncheon**

#### 1:15 – 2:00 **National Health Information Network and Future Priorities**

Introduction: Michael Millenson, President, Health Quality Advisors, LLC

David Blumenthal, MD, MPP, National Coordinator, Office of the National Coordinator for Health Information Technology, Department of Health and Human Services



**2:00 – 3:15 Key Stakeholder Perspectives: HIT Adoption, Aligned Incentives and Research**

Moderator: Patricia MacTaggart, MBA, MMA, Lead Research Scientist & Lecturer,  
Department of Health Policy, George Washington University

Gail Graham, RHIA, Deputy Chief Officer, Health Information Management, Veterans  
Health Administration Office of Health Information

MaryAnne K. Peifer, MD, Associate Director of Informatics, Lehigh Valley Physician  
Group, Lehigh Valley Health Network, Allentown, PA

Paul Glassman DDS, MA, MBA, Professor of Dental Practice, Director of Community  
Oral Health, University of the Pacific

**3:15 – 3:30 Break**

**3:30 – 5:00 Quality Improvement Measures: Current and Future Links to HIT/HIM**

Moderator: Michael Millenson, President, Health Quality Advisors, LLC

Floyd Eisenberg, MD, MPH, FACP, Senior Vice President for Health Information  
Resources, National Quality Forum

Steven A. Garfinkel, PhD, Managing Director – Research, American Institutes for  
Research

Carla Huber, ARNP, MS, Clinic Nurse Coordinator, CAT Clinic, Cedar Rapids Healthcare  
Alliance

Phil Renner, MBA, Senior Research Scientist, Research and Performance Measurement,  
National Committee for Quality Assurance

**5:00 – 5:15 Day One Wrap Up**

Warren Jones, MD, Executive Director, Institute for Improvement of Minority Health and  
Health Disparities in the Delta Region

**5:30 – 6:30 Networking Reception**  
***Sponsored by Verizon***

## Day Two – Friday, April 23, 2010

**7:30 – 8:45**      **Continental Breakfast**  
**Welcome and Summary from Day One**  
**Telehealth and Telemedicine**

Moderator: William J. Rudman, PhD, Independent Consultant and Program Director,  
Policy and Research, AHIMA Foundation

Ed Brown, MD, CEO, Ontario Telemedicine Network

Dena S. Puskin, ScD, Senior Advisor, Health Information Technology and Telehealth  
Policy, Health Resources and Services Administration

Maysa Namakian, MPH, Assistant Program Manager, Arthur A. Dugoni School of  
Dentistry, University of the Pacific

**8:45 – 9:45**      **Economic Perspective: Hospital and Physician Performance Incentives**

Moderator: Mary Madison, MPA, Executive Director, AHIMA Foundation

Bruce E. Landon, MD, MBA, Associate Professor, Department of Health Care Policy,  
Harvard Medical School

Shinyi Wu, PhD, Assistant Professor, Epstein Department of Industrial & Systems  
Engineering, University of Southern California

**9:45 – 10:00**      **Break**

**10:00 – 11:15**      **Employer View Points on the Role of Quality Improvement in HIM/HIT and Future  
Research Opportunities for the Business Community**

Moderator: John Orwat, PhD, Assistant Professor, School of Social Work, Loyola  
University Chicago and Senior Researcher, Blue Cross Blue Shield Association

Jim Levett, MD, FACS, Chief Medical Officer, Physicians' Clinic of Iowa

Cristie Travis, CEO, Memphis Business Group on Health

Leah Binder, MA, MGA, CEO, The Leapfrog Group

**11:15 – 12:15 Roundtable: Government Health Agency Research Priorities**

Moderator: Christopher Tompkins, PhD, Associate Professor, Brandeis University

Paul Moore, Senior Health Policy Advisor, Office of Rural Health Policy

David Dietz, Senior Policy Advisor, Office of Minority Health

**12:15 - 1:15 Luncheon Speaker**

Peter S. Tippett, MD, PhD, Vice President of Technology and Innovation, Chief Medical Officer, Verizon Business

**1:15- 2:15 Experience from Providers in Rural Areas**

Moderator: Maggie Elehwany, Vice President of Government Affairs, National Rural Health Association

Scott Groom, Vice President and CIO, Cabell Huntington Health System

Ira Moscovice, PhD, Director, University of Minnesota Rural Health Research Center

**2:15 – 3:15 Meeting the Needs of Consumers and Their Families and Caregivers**

Moderator: John Orwat, PhD, Assistant Professor, School of Social Work, Loyola University Chicago and Senior Researcher, Blue Cross Blue Shield Association

Brenda Dyson, RHIA, Community Outreach Coordinator, Mississippi

Charlotte Yeh, MD, Chief Medical Officer, AARP Services, Inc.

**3:15 – 4:15 Legal Insights: Health Information Exchange and QI Research**

Melissa E. Hargiss, JD, Independent Consultant and Former State of Tennessee HIT Coordinator and Director of the Office of eHealth Initiatives

Peter Enko, JD, Partner, Husch Blackwell Sanders

**4:15– 4:30 Closing Remarks and Next Steps**

Nadine Caputo, MS, Director, Research and Development, AHIMA Foundation

Robert Mayes, MS, RN, Senior Advisor on Health Information Technology, Center for Primary Care, Prevention, and Clinical Partnerships, AHRQ

## Appendix C: Summit Evaluation

**Setting a Quality Improvement Research Agenda to  
Leverage HIT/HIM in Rural America  
A National Stakeholder Summit**

**Meeting Evaluation  
April 22-23, 2010**

Name: \_\_\_\_\_

Organization: \_\_\_\_\_

1. What was your overall satisfaction with this summit?

Very Satisfied	Satisfied	Somewhat Satisfied	Not Satisfied	Not at All Satisfied
5	4	3	2	1

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2. What was your overall satisfaction level with the speakers at this summit?

Very Satisfied	Satisfied	Somewhat Satisfied	Not Satisfied	Not at All Satisfied
5	4	3	2	1

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Any comments on particular sessions or speakers:

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3. Issues covered at the summit were **relevant** to my work in the industry.

Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree
5	4	3	2	1

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4. Information received at the summit will be **used** in my work.

Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree
5	4	3	2	1

---

5. Discussions during the summit were helpful and enhanced the experience.

Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree
5	4	3	2	1

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What might we have done differently to improve this summit?

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