



U.S. Department of Health and Human Services



Agency for Healthcare Research and Quality

Advancing Excellence in Health Care • www.ahrq.gov

A National Web Conference on the Factors Contributing to the Use of Health Information Exchange (HIE) in Health Care Organizations

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Agency for Healthcare Research and Quality

March 16, 2016



Agenda

- Welcome and Introductions
- Presentations
- Q&A Session With Presenters
- Instructions for Obtaining CME Credits

Note: After today's Webinar, a copy of the slides will be emailed to all participants.



Presenters and Moderator Disclosures

The following presenters and moderator have no financial interests to disclose:

- William Hersh, M.D.
- Karen Eden, Ph.D.
- Elizabeth Palena Hall, M.S.I.S., M.B.A., R.N.
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How To Submit a Question

- At any time during the presentation, type your question into the “Q&A” section of your WebEx Q&A panel.
- Please address your questions to “All Panelists” in the drop-down menu.
- Select “Send” to submit your question to the moderator.
- Questions will be read aloud by the moderator.

The screenshot displays the WebEx interface for submitting a question. At the top, there are tabs for 'Participants', 'Chat', and 'Q&A'. The 'Participants' panel is expanded, showing 'Speaking:' with 'Panelists: 2' and 'Attendees:'. The 'Q&A' panel is also expanded, showing a dropdown menu with 'All (0)' selected. A red arrow points to the 'Ask:' dropdown menu, which is currently set to 'All Panelists'. Below the dropdown is a text input field with a placeholder: 'Select a participant in the ask menu first and type your question here. There is a 256 character limit.' and a 'Send' button.



AHRQ HIE Webinars

- **Webinar 1 (today):** Factors Contributing to the use of Health Information Exchange in Health Care Organizations
- **Webinar 2 (April 21, 2016):** Advanced Application of Health Information Exchange Systems

(<https://healthit.ahrq.gov/>)



Learning Objectives

At the conclusion of this activity, the participant will be able to—

1. Describe the current use of Health Information Exchange (HIE) in various health care settings.
2. Discuss clinical and health care utilization outcomes associated with HIE in health care and other organizations.
3. Identify the facilitators and barriers to implementation and sustainability of HIE in health care organizations.
4. Describe practical tools and resources for implementing HIE in long-term/post-acute care (LTPAC) settings.
5. Explain the benefits of HIE implementation in LTPAC settings.
6. Describe existing policies advancing HIE and interoperability in LTPAC.



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Health Information Exchange: Systematic Review and Future Research Directions

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March 16, 2016

Evidence Report/Technology Assessment
Number 220

Health Information Exchange

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JMIR MEDICAL INFORMATICS

Hersh et al

Original Paper

Outcomes From Health Information Exchange: Systematic Review and Future Research Needs

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Review article

Barriers and facilitators to exchanging health information: a systematic review



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The Evidence Base for Health Information Exchange

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Outline

- Rationale
- Past work
- Effectiveness
- Barriers and facilitators
- Future directions for research

U.S. Has Made Substantial Investment in Health IT

CNN.com

We

HOME WORLD U.S. POLITICS CRIME ENTERTA

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updated 7:42 a.m. EST, Mon January 12, 2009



Obama's big idea: Digital health records

President-elect Barack Obama, as part of his effort to revive the economy, is proposing a massive effort to modernize health care by making all health records standardized and electronic. The government estimates about 212,000 jobs could be created by this program, CNNMoney reports. [full story](#)

“To improve the quality of our health care while lowering its cost, we will make the immediate investments necessary to ensure that within 5 years, all of America’s medical records are computerized ... It just won’t save billions of dollars and thousands of jobs, it will save lives by reducing the deadly but preventable medical errors that pervade our health care system.”

January 5, 2009

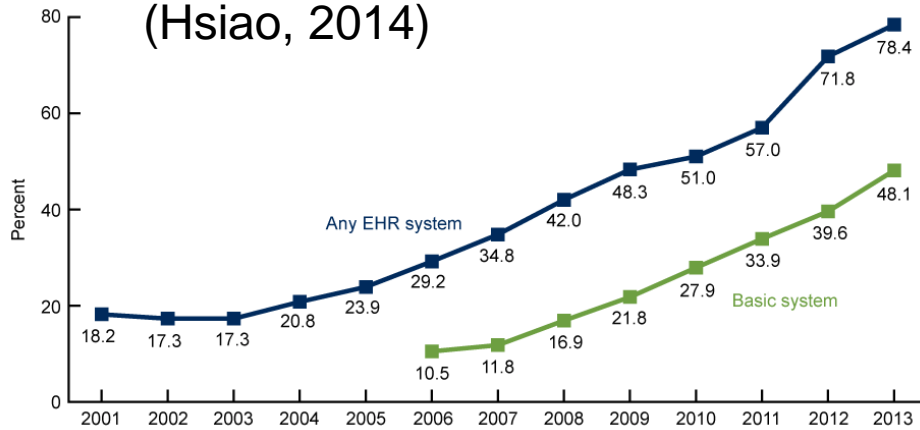
Health Information Technology for Economic and Clinical Health (HITECH) Act of the American Recovery and Reinvestment Act (ARRA)

- Incentives for electronic health record (EHR) adoption by physicians and hospitals (\$30B)

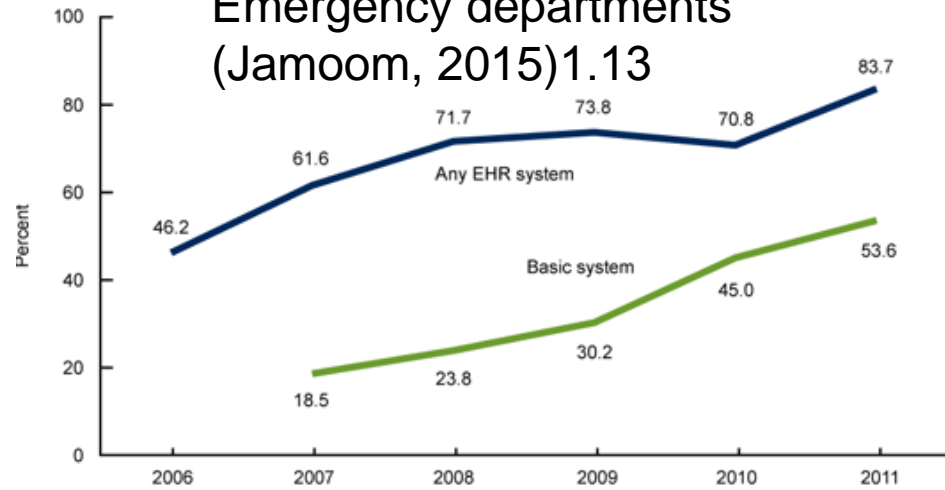


Leading to Substantial EHR Adoption

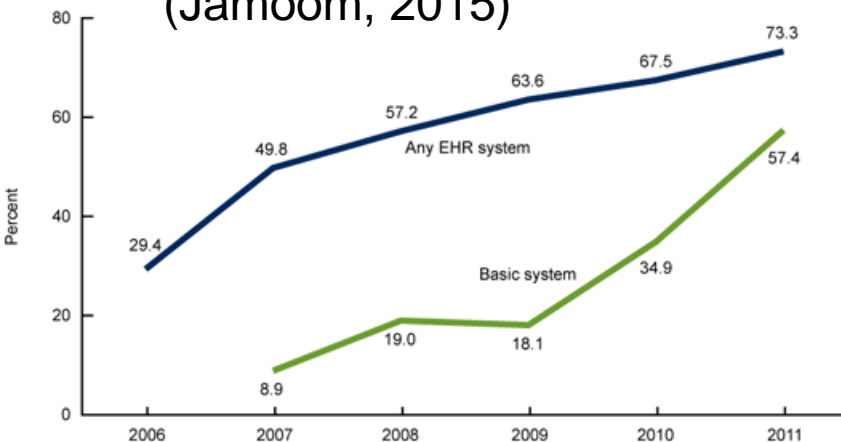
Office-based physicians
(Hsiao, 2014)



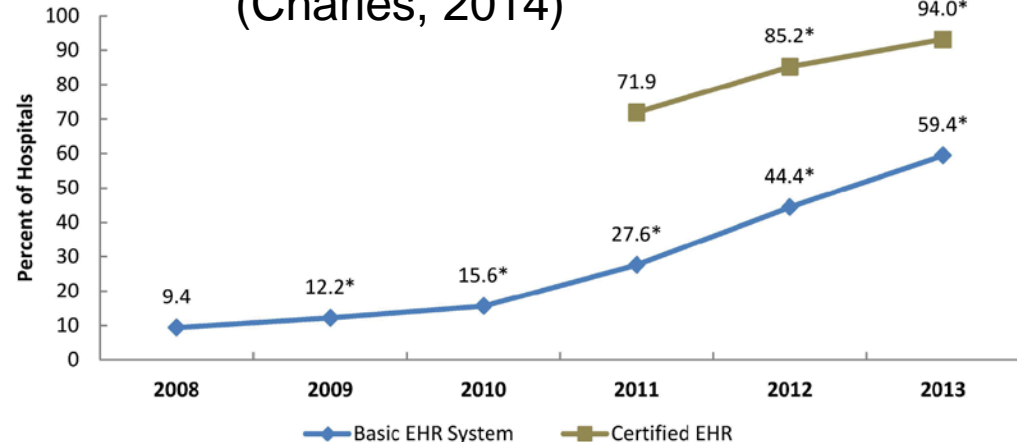
Emergency departments
(Jamoom, 2015)



Outpatient departments
(Jamoom, 2015)

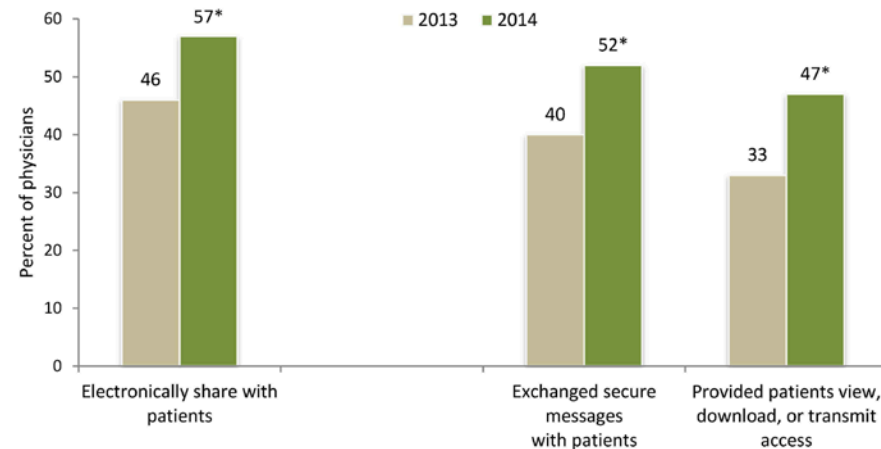
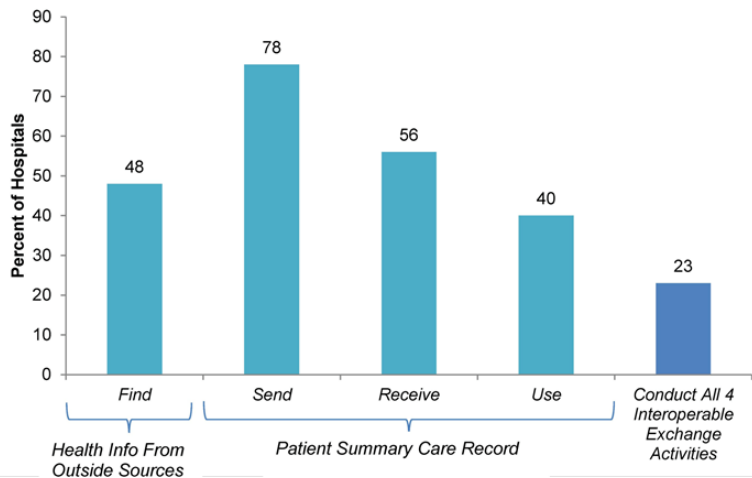
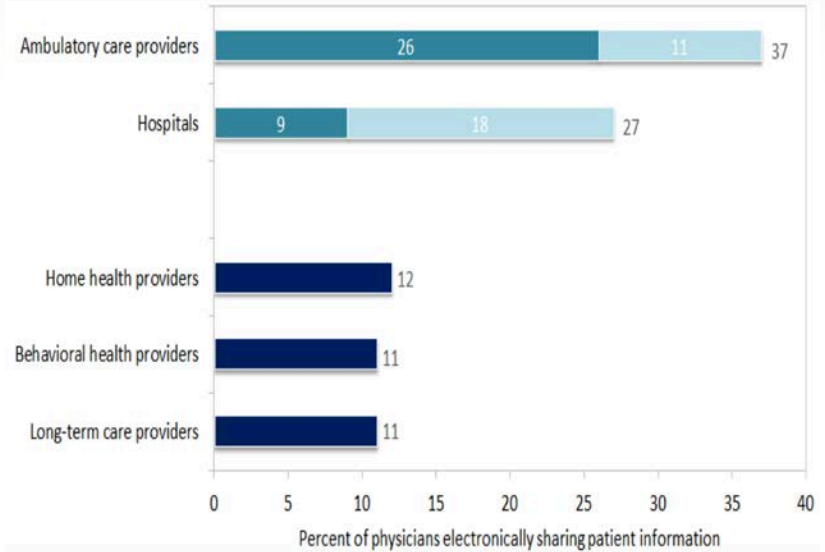
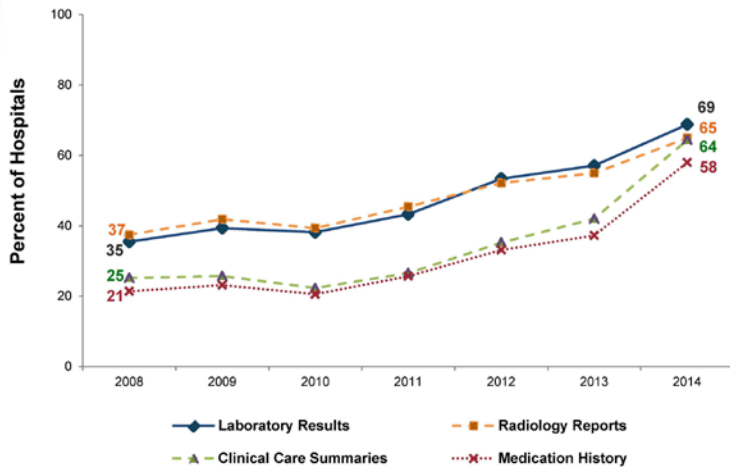


Non-Federal hospitals
(Charles, 2014)





Although Less HIE Uptake, Especially in Ambulatory Settings



Hospitals (Swain, 2015)

Physicians and their patients (Heisey-Grove, 2015)

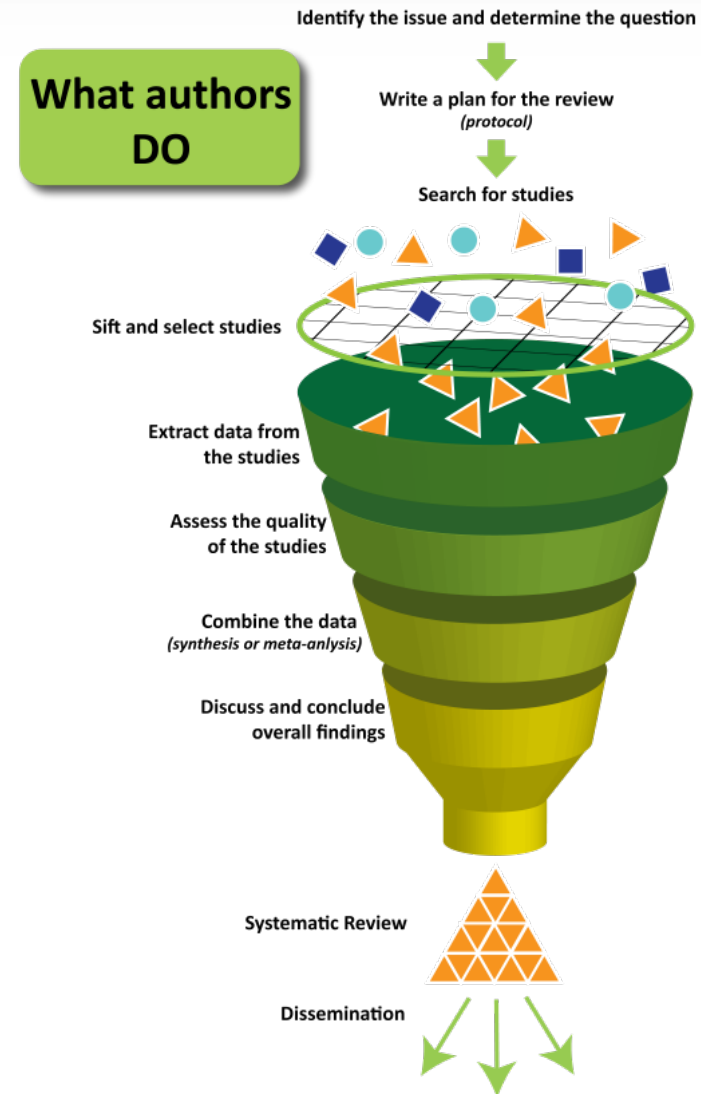


What is the Value of HIE?

- Value as demonstrated by evidence from scientific studies
 - ▶ Can apply techniques of evidence-based medicine.
 - ▶ When there are many studies, next step is to perform a systematic review.
- We undertook a systematic review looking at four major aspects of HIE:
 - ▶ Effectiveness
 - ▶ Use
 - ▶ Implementation
 - ▶ Sustainability
- Funded by AHRQ Evidence-Based Practice Centers program
 - ▶ Contract No. 290-2012-00014-I, Task Order 11

What is a Systematic Review?

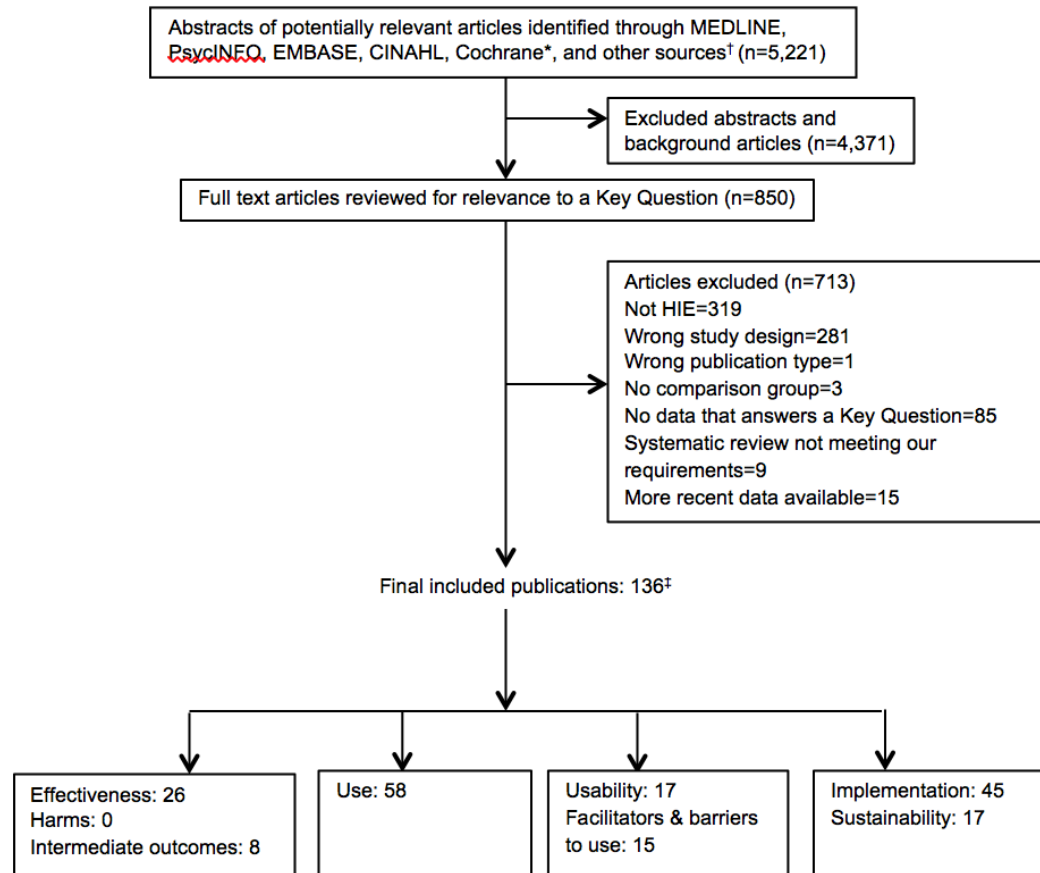
- A systematic review is a literature review focused on a research question that tries to identify, appraise, select, and synthesize all high-quality research evidence relevant to that question.
 - ▶ Cochrane Collaboration
 - ▶ www.cochrane.org
- A systematic review is only as good as the underlying studies reviewed.



Other Systematic Reviews of HIE

- Older
 - ▶ Hincapie A, Warholak T. The impact of health information exchange on health outcomes. *Appl Clin Inform* 2011;2: 499-507.
- Published while we were doing ours
 - ▶ Rudin RS, Motala A, et al. Usage and effect of health information exchange: a systematic review. *Ann Intern Med* 2014;161:803-11.
 - ▶ Rahrurkar S, Vest JR, et al. Despite the spread of health information exchange, there is little evidence of its impact on cost, use, and quality of care. *Health Aff* 2015;34:477-83.

Results of Literature Searching



*Cochrane databases include the Cochrane Database of Systematic Reviews, Cochrane Central Register of Controlled Trials, Database of Abstracts of Reviews of Effects, and National Health Sciences Economic Evaluation Database

†Identified from reference lists, hand searching, suggested by experts, and other sources

‡Publications may address more than one Key Question, studies may have multiple publications

Effectiveness of HIE

- 34 studies on outcomes
 - ▶ 26 studies reported clinical (intermediate), economic, or population outcomes. Study methods included—
 - Retrospective cohort – 18
 - Randomized controlled trials (RCTs) – 2 (3 papers)
 - Cross-sectional – 2
 - Case series – 2
 - ▶ 8 survey studies reported on perceptions of outcomes
- No studies evaluated primary clinical outcomes from HIE (e.g., mortality and morbidity) or explicitly assessed harms.



Categories of Outcomes (Number of Papers) Reported

- Laboratory testing (6)
- Radiology testing (9)
- Hospital admissions (8)
- Hospital readmissions (2)
- ED costs (2)
- Referrals and consultations (2)
- Quality of care in ambulatory settings (3)
- Public health reporting (3)
- Other aspects of HIE (3)



Laboratory and Radiology Testing

- Laboratory testing – 6 studies
 - ▶ 5 studies showed benefit for HIE in reducing overall tests, although estimates of impact on cost were mixed.
 - 4 took place in ED setting, all showing some aspect of reduced testing and cost savings.
 - ▶ 2 studies conducted in ambulatory settings, with one showing increase and other showing a reduction in increased overall rate of testing.
- Radiology testing – 9 studies
 - ▶ 7 studies in ED setting showed reduced testing.
 - ▶ 2 studies in ambulatory settings, with one showing decrease and other showing no change in rate of testing.



Hospital Admissions and Readmissions

- Hospital admissions – 8 studies
 - ▶ 2 found reduction in hospital admissions and lower costs.
 - ▶ 3 also measured some benefit for HIE use in reducing hospital admissions, although 3 found no such reduction.
- Hospital readmissions – 2 studies
 - ▶ For reducing hospital readmissions, 1 showed benefit for HIE but other did not



Costs, Referrals, and Quality

- Costs – 2 studies
 - ▶ Both found reduced overall ED costs per patient when HIE was available
 - Neither study reported overall ED expenditures, so unknown what proportion of overall ED spending was impacted by HIE
- Referrals – 2 studies
 - ▶ Both assessed HIE for reducing referrals and/or consultations, finding conflicting results.
- Quality – 3 studies
 - ▶ 2 retrospective studies found HIE associated with improved quality of care.
 - ▶ An RCT that focused on medication reconciliation found increased ability to detect medication adherence problems, but it was unable to show improvement in adherence after it was identified and addressed by providers.



Public Health and Other

- Public health – 3 studies
 - ▶ 3 studies that assessed HIE in public health settings, all in U.S., reported improved automated laboratory reporting, improved completeness of reporting for notifiable diseases, and improved identification of HIV patients for follow-up care.
- Other aspects of HIE – 3 studies
 - ▶ Reduction in time for processing of Social Security Disability claims
 - ▶ Increased ability to identify frequent ED users
 - ▶ HIE implementation associated with improved patient satisfaction scores in hospitals

Conclusions

- ▶ Most studies were limited by retrospective nature (potential confounders) and limited questions (ED costs focused on absolute and not relative costs).
- ▶ No patient-specific clinical outcomes studied.
- ▶ Many studies from a few HIE “leaders” (can results be generalized?).



Barriers and Facilitators to HIE





Evidence on Barriers to HIE

- We identified 10 cross-sectional studies, seven multiple-site case studies, two before-after studies.
- The data sources included surveys, interviews, focus groups, and observations from 292 health professionals (nonclinicians) and 402 clinicians in the U.S.
- We found additional evidence from European studies.
- The settings were diverse: Exchange between emergency departments, ambulatory clinics, and/or hospitals made stratification by setting difficult.

- Content analysis and qualitative synthesis was performed to identify concepts.
- Concepts were sorted into groupings related to barriers and facilitators to actual HIE use.
- Two investigators used an iterative, open coding approach to refine the grouping and themes until consensus was achieved.
- Themes were refined and then a third investigator reviewed final groupings.



Perceived Barriers/Facilitators

- 15 Barriers and 20 facilitators were identified and fell into three broad themes:
 - ▶ Completeness of information
 - ▶ Organization and workflow
 - ▶ Technology and user needs



Completeness of Information

- Privacy and security
- Clinicians concern about liability, malpractice
- Patients outside of the HIE catchment area
- Matching of patients
- Health system competition



Organization and Workflow

- Login process
- Proxy users
- Technical support
- Ongoing feedback and access



Technology and User Needs

- Integration
- Competition with hospital portal
- HIE reports
- Data standards



Challenges to Identifying Barriers

- Changing nature of HIE and workflow locally
- Lack of standard HIE classification and terminology
- Lack of a consistent or coherent theoretical framework underlying the implementations or evaluations of HIE

Future Work

- The evidence was inadequate to compare barriers to HIE use by type of function (query-based or pull vs. directed or pushed exchange) or by type of architecture (centralized or not).
- Understanding optimal functionality of HIE is challenged by the lack of consistent classification and terminology of HIE and the changing nature of the sociotechnical systems involved.

Conclusions

- While the evidence is currently incomplete, there were several facilitators that showed promise in promoting electronic health data exchange:
 - ▶ Obtaining more complete patient information
 - ▶ Thoughtful implementation and workflow
 - ▶ Including users in identifying key functions for HIE use and reporting



Future Research Needs

- More rigorous research methods
 - ▶ How to do because classic RCTs cannot be done?
- Prospective evaluation of care delivered in presence of HIE
 - ▶ Use of research data networks, such as PCORnet?



Funding

- AHRQ Contract No. 290-2012-00014-I, Task Order 11
- Dr. Kassakian's work was also supported by the National Library of Medicine of the National Institutes of Health under Award Number T15LM007088.



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Factors Contributing to the Use of HIE in Health Care Organizations – A Focus on Long Term & Post Acute Care

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Centers for Medicare & Medicaid Services

Liz Palena Hall, M.S.I.S., M.B.A., R.N., LTPAC Coordinator,
Office of the National Coordinator for Health IT

Larry Jessup, M.H.A., Program Director,
Office of the National Coordinator for Health IT

BACKGROUND

Jennie Harvell



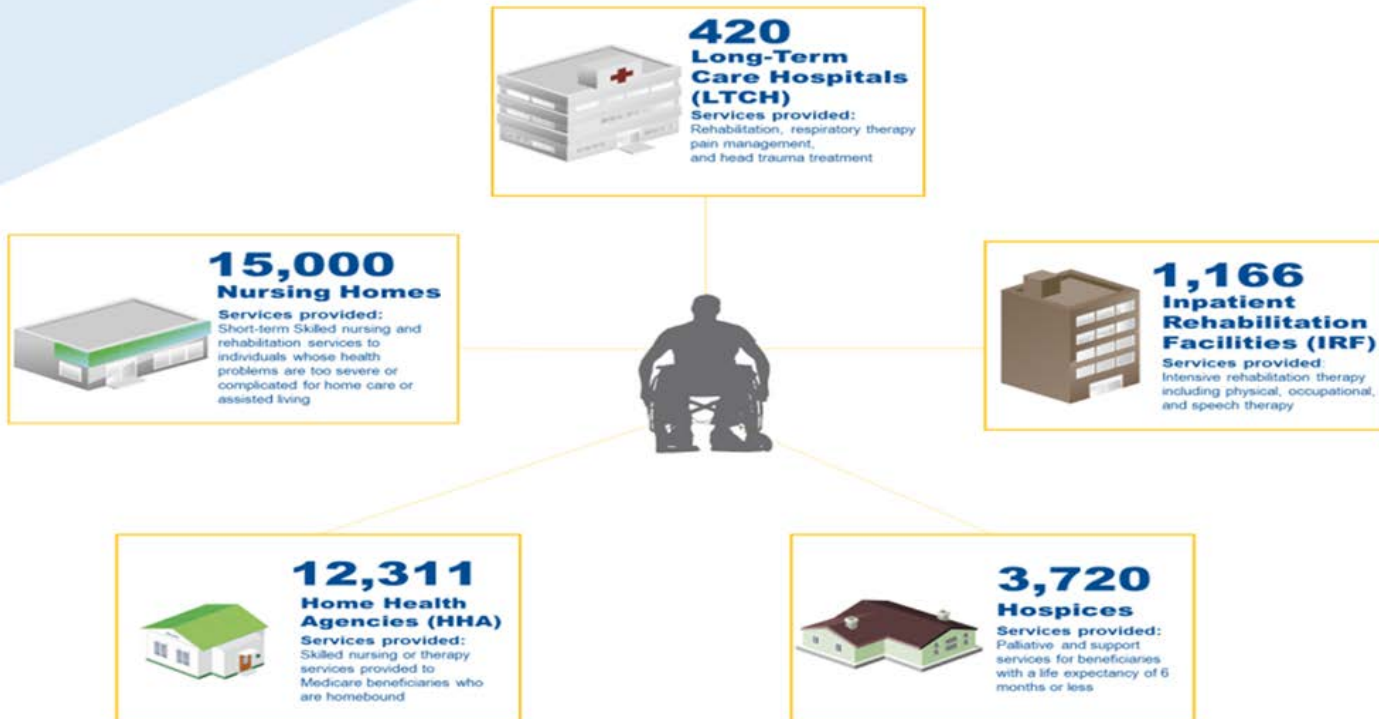
ARRA/HITECH

- ARRA/HITECH made available funds that supported—
 - ▶ Incentive payments for the meaningful use of certified EHR technology by eligible hospitals and professionals (aka “Eligible Providers” (EPs)) – an estimated \$15 Billion from 2014 – 2019 will be available; and
 - ▶ Development of a nationwide health IT infrastructure that allows for the electronic use and exchange of health information -- approximately \$2 billion was made available to the Office of the National Coordinator for Health Information Technology (ONC) to carry out HITECH activities.
 - These funds primarily targeted Eligible Providers.
- Although ONC made some HITECH funds (approximately \$7 million) available to support HIE by LTPAC providers, these funds/resources were not generally available to support the acquisition/use of health IT/EHRs by providers who were not eligible for the EHR Incentive Programs.



Achieving Better Care, Healthier People, & Smarter Spending

Why Post-Acute Care Matters:





e-HIE is Needed but Limited in LTPAC

- Transitions in care between providers eligible for incentives and providers who are not eligible are common. For example:
 - ▶ In 2008, almost 40 percent of all Medicare beneficiaries discharged from acute care hospitals received post-acute care; and of these beneficiaries, more than 15 percent were readmitted to the acute care hospital within 30 days of hospital discharge¹.
- Instances of shared care are also common between eligible and ineligible providers. For example:
 - ▶ Medicare requires that both the physician and HHA sign a home health plan of care².
- National data is limited regarding the use of health IT/EHRs by LTPAC providers²:
 - ▶ Surveys of LTPAC providers use of technology are typically not national in scope.
 - ▶ Data varies in their focus and definitions of technology.
 - Adoption rates vary from less than 10% to more than 40%.
 - Technology adoption rates for LTPAC providers cannot and should not be compared to adoption rates for EPs since they do not measure comparable EHR technology.

Nonetheless:

- ▶ Technology adoption rates are believed to be lower among LTPAC providers than among Eligible Providers.
- ▶ Electronic health information exchange by LTPAC providers is believed to be lower still
- ▶ Interoperable health information exchange by LTPAC providers is rare.

1. Gage, B. et al. "Post-Acute Care Episodes Expanded Analytic File. Final Report. April 2011." Prepared for the Office of the Assistant Secretary for Planning and Evaluation (OASPE). <http://aspe.hhs.gov/health/reports/2011/pacexpanded/index.shtml#ch1>

2. Devers, K. et al "Health Information Exchange in Long-Term and Post-Acute Care Settings." Prepared for the OASPE.



Factors Influencing HIE by LTPAC Providers

- The Office of the Assistant Secretary for Planning and Evaluation (ASPE) in the U.S. Department of Health and Human Services (HHS) sponsored research examining health information exchange on behalf of individuals who receive LTPAC services. Key findings include the following:
 - ▶ Drivers of HIE between LTPAC providers and their trading partners include—
 - Availability of ONC grant funds
 - Payment and service delivery reforms, such as ACOs, bundled payments, hospital readmission penalties, increasing use of integrated delivery networks, market consolidation
 - ▶ Barriers to HIE by LTPAC providers include—
 - Costs
 - Relatively limited requirements for Eligible Providers to exchange information with LTPAC providers in earlier stages of the meaningful use requirements
 - Technology challenges
 - Limited technical assistance

- Devers, K. et al "Health Information Exchange in Long-Term and Post-Acute Care Settings." Prepared for the Office of the Assistant Secretary for Planning and Evaluation.

- Byrnes, C. et al "Long-Term and Post-Acute Care Providers Engaged in Health Information Exchange: Final Report."

<https://aspe.hhs.gov/execsum/long-term-and-post-acute-care-providers-engaged-health-information-exchange-final-report>



Business and Policy Levers for Interoperability Across the Care Continuum

Jennie Harvell



IMPACT Act of 2014

- A bipartisan bill was introduced in March 2014. The U.S. House and Senate passed it on Sept. 18, 2014, and President Obama signed it into law Oct. 6, 2014.
- The Act requires the submission of standardized assessment data by:
 - Long-Term Care Hospitals (LTCHs): LTCH CARE Data Set (LCDS)
 - Skilled Nursing Facilities (SNFs): Minimum Data Set (MDS)
 - Home Health Agencies (HHAs): OASIS
 - Inpatient Rehabilitation Facilities (IRFs): IRF-Patient Assessment Instrument (IRF-PAI)
- The Act requires that CMS make interoperable standardized patient assessment and quality measures data to allow for the exchange of data among PAC and other providers to facilitate coordinated care and improved outcomes.



Why IMPACT? Why Now?

- The lack of comparable information across PAC settings undermines the ability to evaluate and differentiate between appropriate care settings for and by individuals and their caregivers.
- Standardized PAC assessment data will allow for continued beneficiary access to the most appropriate setting of care.
- Standardized PAC assessment data allows CMS to compare quality across PAC settings (longitudinal data).
- Standardized and interoperable PAC assessment data allows improvements in hospital and PAC discharge planning and the transfer of health information across the care continuum.
- Standardized PAC assessment data will allow for PAC payment reform (site neutral or bundled payments).
- Standardized and interoperable PAC assessment data supports service delivery reform.

CMS Quality Strategy



Foundational Principles

- Enable Innovation
- Foster learning organizations
- Eliminate disparities
- Strengthen infrastructure and data systems

Goals

- Make care safer
- Strengthen person and family centered care
- Promote effective communications and care coordination
- Promote effective prevention and treatment
- Promote best practices for healthy living
- Make care affordable



Data Element Standardization

- Achieving standardization (i.e., alignment/harmonization) of clinically relevant data elements improves care and communication for individuals across the continuum:
 - ▶ Enables shared understanding and use of clinical information
 - ▶ Enables the re-use of data elements (e.g., for transitions of care, care planning, referrals, decision support, quality measurement, payment reform, etc.)
 - ▶ Supports the exchange of patient assessment data across providers
 - ▶ Influences and supports CMS and industry efforts to advance interoperable health information exchange and care coordination
- While data element standardization is required for certain assessment domains/categories in the IMPACT Act, unique data elements specific to PAC settings will also persist.



IMPACT Act and Interoperability

- The IMPACT Act requires that CMS make post-acute care assessment data elements interoperable to—

“allow for the exchange of data among PAC providers and other providers and the use by such providers of such data that has been exchanged, including by using common standards and definitions, in order to provide access to longitudinal information for such providers to facilitate coordinated care and improved Medicare beneficiary outcomes.”



Opportunities to Re-Use Standardized and Interoperable Assessment Data Elements

- Leveraging and mapping PAC assessment data elements to nationally accepted Health IT standards supports:
 - ▶ Information exchange and re-use with and by—
 - Acute care hospitals and primary care providers
 - LTPAC providers
 - Home and community-based providers (HCBS)
 - Other providers
 - HIE Organizations
 - ▶ Use and re-use of assessment data in a variety of document types, including—
 - Transfer documents
 - Referral documents
 - Care plans
 - LTPAC assessment summary documents
- CMS will make available public reports of PAC Assessment Data Elements mapped to health IT standards.



Quality Measure: Transfer of Health Information and Care Preferences

- The IMPACT Act requires a quality measure on—
 - ▶ The transfer of individual health information and care preferences of an individual to the individual, family care caregivers, and service providers when the individual transitions from:
 - Hospital or critical access hospital (CAH) to another setting including Post-Acute Care (PAC) provider or home
 - PAC provider to another setting, including a different PAC provider, a hospital or CAH, or home



Business Drivers (cont'd) and ONC Activities to Advance Interoperability

Liz Palena-Hall



Delivery System Reform

- HHS Departmental Initiative
- **Goal:** Better Care, Smarter Spending, Healthier People

Historical state

Evolving future state

Public and Private sectors

Key characteristics

- Producer centered
- Incentives for volume
- Unsustainable
- Fragmented Care

Systems and Policies

- Fee-For-Service Payment Systems

Key characteristics

- Patient centered
- Incentives for outcomes
- Sustainable
- Coordinated care

Systems and Policies

- Value-based purchasing
- Accountable Care Organizations
- Episode-based payments
- Medical Homes
- Quality/cost transparency



HHS Goals for Medicare Value-Based Payments

Medicare Fee-for-Service

GOAL 1: **30%** 

Medicare payments are tied to quality or value through **alternative payment models (categories 3-4)** by the end of 2016, and 50% by the end of 2018

GOAL 2: **85%** 

Medicare fee-for-service payments are **tied to quality or value (categories 2-4)** by the end of 2016, and 90% by the end of 2018



STAKEHOLDERS:

Consumers | Businesses
Payers | Providers
State Partners



Set **internal goals** for HHS



Invite **private sector payers** to match or exceed HHS goals

NEXT STEPS:



Testing of new models and expansion of existing models will be critical to reaching incentive goals

Creation of a Health Care Payment **Learning and Action Network** to align incentives for payers



CMMI Models Align With Delivery System Reform

Pay Providers

Test and expand alternative payment models.

▪ **Accountable Care**

- Pioneer ACO Model
- Medicare Shared Savings Program (housed in Center for Medicare)
- Advance Payment ACO Model
- Comprehensive ERSD Care Initiative

▪ **Primary Care Transformation**

- Comprehensive Primary Care Initiative (CPC)
- Multi-Payer Advanced Primary Care Practice (MAPCP) Demonstration
- Federally Qualified Health Center (FQHC) Advanced Primary Care Practice Demonstration
- Independence at Home Demonstration
- Graduate Nurse Education Demonstration

▪ **Bundled Payment for Care Improvement**

- Model 1: Retrospective Acute Care
- Model 2: Retrospective Acute Care Episode & Post Acute
- Model 3: Retrospective Post Acute Care
- Model 4: Prospective Acute Care
- Oncology Care Model

▪ **Initiatives Focused on the Medicaid**

- Medicaid Emergency Psychiatric Demonstration
- Medicaid Incentives for Prevention of Chronic Diseases
- Strong Start Initiative
- Medicaid Innovation Accelerator Program

▪ **Dual Eligible (Medicare-Medicaid Enrollees)**

- Financial Alignment Initiative
- Reduce Hospitalizations among Nursing Facility Residents

Deliver Care

Support providers and states to improve the delivery of care.

▪ **Learning and Diffusion**

- Partnership for Patients
- Transforming Clinical Practice
- Community-Based Care Transitions

▪ **Health Care Innovation Awards**

▪ **State Innovation Models Initiative**

- SIM Round 1
- SIM Round 2
- Maryland All-Payer Model

▪ **Million Hearts Initiative**

Distribute Information

Increase information available for effective informed decision-making by consumers and providers.

- **Information to providers in CMMI models**
- **Certified health IT requirements or performance reward**

- **Shared decision-making required by many models**



State Medicaid Directors Letter 16-003

- The CMS Medicaid Data and Systems Group and ONC Office of Policy have partnered to update the guidance on how states may support health information exchange and interoperable systems to best support Medicaid providers in attesting to Meaningful Use Stages 2 and 3
- This updated guidance will allow Medicaid HITECH funds to support all Medicaid providers that Eligible Providers want to coordinate care with.
- Medicaid HITECH funds can now support HIE onboarding and systems for behavioral health providers, **long term care providers**, substance abuse treatment providers, **home health providers**, correctional health providers, social workers, and so on.
- It may also support the HIE on-boarding of laboratory, pharmacy or public health providers.
- For more information: <http://www.medicaid.gov/federal-policy-guidance/downloads/SMD16003.pdf>



Interoperability Vision for the Future

Federal Health IT Strategic Plan Goals

VISION

High-quality care, lower costs, healthy population, and engaged people

MISSION

Improve the health and well-being of individuals and communities through the use of technology and health information that is accessible when and where it matters most



Goal 4
Objective A:
Implement the Shared Nationwide Interoperability Roadmap





What is Interoperability? What are the Benefits?

Interoperability Defined: The ability of a system to exchange electronic health information with and use electronic health information from other systems without special effort on the part of the user.

What it should look like:

- ▶ All individuals, their families, and health care providers should be able to send, receive, find, and use electronic health information in a manner that is appropriate, secure, timely, and reliable to support the health and wellness of individuals through shared decisionmaking.

Benefits: The electronic exchange and re-use of information means that “individuals, their families, and their health care providers have appropriate access to health information that:

- ▶ Allows individuals and caregivers to be active partners and participants in their health and care; and
- ▶ Improves the overall health of the nation’s population.”



Overarching Interoperability Goals

2015-2017: Send, receive, find, and use priority data domains to improve health care quality and outcomes.

2018-2020: Expand data sources and users in the interoperable health IT ecosystem to improve health and lower costs.

2021-2024: Achieve nationwide interoperability to enable a learning health system, with the person at the center of a system that can continuously improve care, public health, and science through real-time data access.



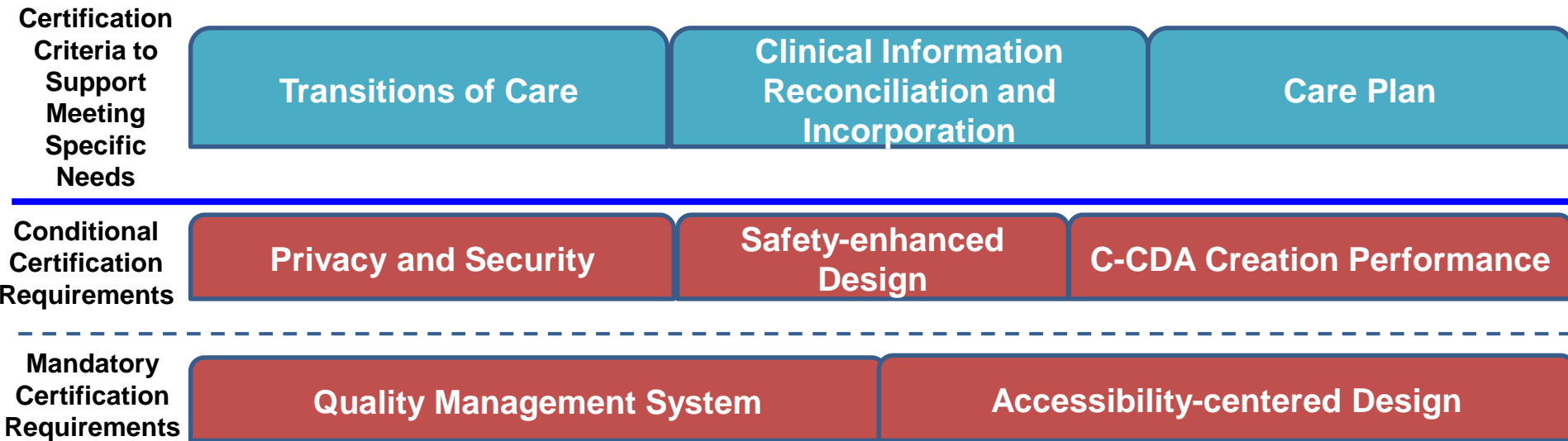
ONC 2015 Edition Health IT Certification

- Contains new and updated vocabulary, content, and transport standards for the structured recording and exchange of health information
- Establishes a Common Clinical Data Set to encourage the exchange of a core set of data across the care continuum
- **The ONC Health IT Certification Program is “agnostic” to settings and programs, but can support many different use cases and needs.**
- This allows the ONC Health IT Certification Program to support multiple program and setting needs, such as—
 - ▶ EHR Incentive Programs
 - ▶ **Long-term and post-acute care**
 - ▶ Chronic care management
 - ▶ Behavioral health
 - ▶ Other public and private programs



Certified Health IT Module(s) to Support Other Health Care Settings (LTPAC Example)

Long-Term and Post-Acute Care Certification (example only)



Use of the ONC Health IT Certification Program to Support the Care Continuum



Common Clinical Data Set

- Renamed the “Common MU Data Set.” This does not impact 2014 Edition certification.
- Includes key health data that should be accessible and available for exchange.
- Data must conform with specified vocabulary standards and code sets, as applicable.

| | |
|---------------------------|--|
| Patient name | Lab tests |
| Sex | Lab values/results |
| Date of birth | Vital signs (changed from proposed rule) |
| Race | Procedures |
| Ethnicity | Care team members |
| Preferred language | Immunizations |
| Problems | Unique device identifiers for implantable devices |
| Smoking Status | Assessment and plan of treatment |
| Medications | Goals |
| Medication allergies | Health concerns |

ONC Interoperability Roadmap Goal

2015-2017

Send, receive, find, and use priority data domains to improve health and health quality

Red = New data added to data set (+ standards for immunizations)

Blue = Only new standards for data



ONC 2016 Standards Advisory

The standards advisory represents an updated list of the best available standard(s) and implementation specification(s). The list is not exhaustive, but it is expected that future advisories will incrementally address a broader range of clinical health IT interoperability needs.

Purpose:

- To provide the industry with a **single, public list of the standards and implementation specifications** that can best be used to fulfill specific clinical health information interoperability needs
- To reflect the results of **ongoing dialogue, debate, and consensus among industry stakeholders** when more than one standard or implementation specification could be listed as the best available
- To **document known limitations, preconditions, and dependencies, as well as known security patterns**, among referenced standards and implementation specifications when they are used to fulfill a specific clinical health IT interoperability need



Collective Action to Achieve Interoperability Across the Care Continuum

- Need to leverage all knowledge, resources on an organizational, community, State, association, and Federal level to support health IT across LTPAC settings:
 - ▶ Determine successful models for implementation and replicate where appropriate
 - ▶ Providers explore new options for financing
 - ▶ Collaborative learning leveraging Federal, State, and association resources
 - ▶ Inform federal and state policy on health IT-enabled delivery system reform

Near-Term Success: An increase in the proportion of individuals, office-based physicians, hospitals and behavioral health, and **long-term care and post-acute care** providers that:

- ▶ Send, receive, find, and use electronic health information
- ▶ Have electronic health information available from outside sources and make electronic health information available to outside sources
- ▶ Use electronic health information to inform decision-making



Resource Links

- **Federal Health IT Strategic Plan 2015-2020:**
https://www.healthit.gov/sites/default/files/9-5-federalhealthitstratplanfinal_0.pdf
- **Connecting Health and Care for the Nation: 10 Year Vision to Achieve an Interoperable Health IT Infrastructure:**
<http://www.healthit.gov/sites/default/files/ONC10yearInteroperabilityConceptPaper.pdf>
- **Shared Nationwide Interoperability Roadmap Final Version 1.0:**
<https://www.healthit.gov/sites/default/files/hie-interoperability/nationwide-interoperability-roadmap-final-version-1.0.pdf>
- **ONC 2015 Edition Health IT Certification:**
<https://www.healthit.gov/policy-researchers-implementers/2015-edition-final-rule>
- **ONC 2016 Standards Advisory:**
<https://www.healthit.gov/standards-advisory/2016>



Advance Interoperable Health Information Exchange Program

Larry Jessup



Funding Amounts & Awards

| Award | Funding | Applications | Awards | Performance Period |
|------------------------------------|---------|--------------|--------|--------------------|
| Health Information Exchange | \$29.6M | 37* | 12 | 2 year |

Goal: Leverage successes from initial State HIE projects to increase the adoption and use of interoperable health IT to improve care coordination.

**All 37 HIE applications met said criteria & moved forward for objective review.*



Program Awards

Advance Interoperable HIE Program Awardees

1. Arkansas Office of Health Information Technology*
2. Colorado Department of Health Care Policy and Financing*
3. Delaware Health Information Network*
4. Illinois Health Information Exchange Authority*
5. Nebraska Department of Administrative Services*
6. New Hampshire Health Information Organization Corporation*
7. New Jersey Innovation Institute*
8. Oregon Health Authority
9. Rhode Island Quality Institute*
10. South Carolina Health Information Partners, Inc.*
11. State of California Emergency Medical Services Authority
12. Utah Health Information Network*

*Selected Long-Term Post-Acute Care as a Target Population



Community Interoperability and HIE Program

| Grant | Funding | Awards | Performance Period |
|---|---------|--------|--------------------|
| Community Interoperability and HIE Program | \$1M | 10 | 1 year |

Goal: *Create projects at the community level to increase HIE adoption and use among specific populations, which will help to address interoperability challenges.*

Program Awardees:

1. AltaMed Health Services Corporation (CA)*
2. Board of Regents of the University of Wisconsin System
3. Community Health Center Network, Inc. (CA)
4. Georgia Health Information Network
5. National Healthy Start Association (SC – based in DC)
6. Nevada Dept. of Health and Human Services (DHHS)
7. Peninsula Community Health Services
8. Rhode Island Quality Institute
9. Utah Department of Health
10. Washtenaw County - Community Support and Treatment Services (MI)

* Working with skilled nursing facilities and acute rehabilitation facilities



Target Populations

Eligible Professionals (EP)

- Safety Net Providers
- Primary Care Providers/Clinics

Eligible Hospitals

Long-Term Post-Acute Care (LTPAC)

- **Skilled Nursing Facilities (SNF)**
- **Rehabilitation Facilities**
- **Home Health Agencies**

Behavioral Health (BH)

- Mental Health
- Substance Abuse

Individuals (Consumers) + Caregivers

Pharmacies

Poison Control Center

Emergency Medical Services (EMS)

Public Health

- Public Health Immunization Registry Departments
- Public Health Disaster Response Providers
- Public Health Departments

Social Service Providers

- Aging
- Physical/Developmental Disabilities

Researchers



Alignment With Interoperability Roadmap

- Increase interoperable electronic health information exchange capability and expand the flow and use of essential electronic health information.
- Success will be defined and measured by—
 - ▶ **M1:** Increased adoption of critical health information exchange infrastructure, tools, and services
 - ▶ **M2:** Increased movement of electronic, secure, and standardized patient health information to improve care transitions
 - ▶ **M3:** Increased interoperability of health information from external data sources used by consumers and providers from unaffiliated organizations
- The near-term goals (2015-2017) of the draft ONC Interoperability Roadmap focuses measurement and exchange efforts on certain populations, such as office-based physicians, hospitals, individuals, and long-term care and behavioral health care providers.



Current Awardee Activity

- Delaware, Illinois, and Colorado are implementing use of the KeyHIE Transform tool to translate home health and SNF patient assessment data into standardized CCDA template.
- Rhode Island is sending HL7 ADT alerts via mobile phone or message to LTPACS, individuals, and family members.
- New Jersey (NJ) is sending ADT messages between NJ Transitions of Care Services to LTPACs.
- Several States are increasing adoption of HIE and exchange of TOC documents among LTPACs by implementing Direct mailboxes and query-based exchange.
- Utah is developing filters to push out discharge summaries from hospital to LTPAC in a timely manner.
- Measuring the extent to which providers are leveraging data exchanged by incorporating summary of care records into workflow.
- Reducing readmission from the LTPAC to the hospital.



Challenges for the LTPAC Setting

- Difficulty engaging with LTPAC Facilities
- Challenges with meeting facilities on differing levels of adoption spectrum (no adoption → high adoption)
- No agreed-upon content
- Unclear if the sending site has what the receiving site needs
- No compelling business case
- Limited or no financial support
- Identifying workflows and connections that inhibit patient information from flowing to the right place at the right time
- Many LTPACs are unable to contribute anything to the State or Local HIE, due to view-only capabilities.



LTPAC Community of Practice

To identify and promote the value of health information exchange for LTPAC providers by defining the value proposition, addressing common barriers, and developing mitigation strategies to expand the use of HIE with providers across the entire continuum of care.



LTPAC Community of Practice Objectives

1. Demonstrate the value proposition.
2. Make data usable.
3. Develop trust among partners.



LTPAC Community of Practice Deliverables

- Value propositions for LTPACs
- Workflow scenarios and use cases for the use of HIE in transitions of care
- List of strategies on how to gain buy-in and expand service adoption and utilization of HIE among LTPACs
- Documented knowledge of what other HIEs are doing with similar projects
- Lessons-learned documents that highlight workflow, adoption, and value statements



LTPAC Community of Practice Topics

- **December 15, 2015**

Discussed common barriers to health information exchange between LTPAC settings and providers across the care continuum.

- **January 5, 2016**

Two leading physicians led a discussion of how payment reform impacts the value proposition for LTPAC and HIE.

- **February 2, 2016**

Missouri Quality Initiative for Nursing Homes discussed proven strategies for engaging and communicating with LTPAC facilities.



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Participants

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- ▶ Panelists: 2
- ▶ Attendees:

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All (0)

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