

# HIT: Progress, Expectations, Resources

May 11, 2011



## Today's Topics

- Review progress of Health Information Technology (HIT) and e-Health initiatives
- Discuss use and expectations for HIT in your facilities
- Review resources



## Stratis Health's HIT Experience

- Supporting HIT adoption and use across the continuum of care:
  - Primary care, specialty, behavioral health clinics
  - Hospitals, including critical access hospitals
  - Nursing homes
  - Home health agencies
  - Communities
- Through a variety of services:
  - Technical assistance, training, and consultation in HIT adoption and implementation
  - HIT toolkits and resources
  - Surveys of HIT adoption and use



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## Consumer Experiences

### Percentage who say

- The coordination among their different health professionals is a problem – 69%
- They have seen a health care professional who did not have all of their medical information – 48%
- They had to wait or return for another appointment because the provider did not have all their medical information – 32%
- They or a family member have created their own set of medical records to ensure that they and all their health care providers had all of their medical information – 32%

Source: Kaiser Family Foundation / Agency for Healthcare Research and Quality / Harvard School of Public Health *National Survey on Consumers' Experiences with Patient Safety and Quality Information, November 2004* (Conducted July 7 – September 5, 2004).



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## What is e-Health? HIT?

- e-Health is the use of information technology to improve the health of communities and the delivery of health care. It is also known as health information technology.

It includes:

- Electronic health records (EHRs)
- Electronic prescribing (e-RX)
- Personal health records (PHRs)
- Electronic health information exchange (e-HIE)
- Telemonitoring
- Medication bar coding



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## Health Care and Technology: Have We Been Playing Catch Up?

- Most other industries have been more advanced in using technology over the past decades
- Institute of Medicine's (IOM) 1999 report *To Err is Human*
  - Medical errors are a leading cause of death and injury in hospitals
  - Sources of errors and safety systems needed
- President's Information Technology Advisory Committee
  - Potential of IT to improve care while reducing costs
  - "The most remarkable feature of 21<sup>st</sup> century medicine is that we hold it together with 19<sup>th</sup> century paperwork."



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## HIT Moves Forward

- 2003 – IOM recommendation that “the U.S. health care system make a commitment to the development of a health information infrastructure by 2010”
- 2004 – President Bush set goal that most Americans have an EHR by 2014
- 2004 – President Bush signed Executive Order 13335, establishing the Position of the National Health Information Technology Coordinator
- 2009 – The American Recovery and Reinvestment Act (ARRA) provided \$2 billion for implementing and/or evaluating HIT as part of a platform to improve health care quality



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## HIT in Nursing Homes

- 2003 – IOM identifies EHR system functions and timeframes
- 2006 – Long-term care stakeholders petition Certification Commission for Healthcare Information Technology (CCHIT) to identify EHR certification criteria for skilled nursing facilities, nursing facilities, home health agencies, long-term care hospitals, and inpatient rehabilitation facilities
- 2009 – ARRA funding includes billions of dollars in Medicare and Medicaid incentive payments to providers for the meaningful use of Certified Health IT products
- 2010/2011 – CCHIT to begin certifying LTC-NH EHRs



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## Standards and Certification

- Certification body CCHIT has been working on long-term and post-acute care standards for certification for more than a year.
- When certification is ready, nursing homes can be required to participate in ARRA program and incentives.



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## The ARRA EHR Meaningful Use Incentive and Penalty Program

- January 1, 2011 – Incentive Payment Program begins for hospitals to implement and meaningfully use certified EHR systems
  - Pays between 10% to 30% of average implementation costs.
  - Scales down over four years
- October 1, 2014 – Any hospital that cannot demonstrate meaningful use of certified EHR technology will receive less than 100% of the Medicare or Medicaid fee schedule
  - Scales up over time



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## What does ARRA EHR Meaningful Use Incentive Mean to Nursing Home Providers?

- Ability to earn Medicare and Medicaid incentive payments and avoid penalties
- Added value for Certification
  - Software performs to a standard level improving implementation outcomes and reducing variability in capabilities between systems
- Added value for participation in HIE
  - Software provides interoperability making patient information electronically available where it's needed, when it's needed, and by whom it's needed



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## Federal Mandate?

- ARRA requires a study to determine if and when nursing homes will be given incentives to participate
- The initial Health and Human Services long-term care study showed positive benefits for nursing homes, so there's a rising probability they will be required to participate in ARRA soon, with incentives
- Larger studies are planned



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## Minnesota's e-Health Vision

- The Minnesota e-Health Initiative vision is to accelerate the use of HIE to:
  - Improve health care quality
  - Increase patient safety
  - Reduce health care costs and
  - Enable individuals and communities to make the best possible health decisions



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## E-Health Elements of Minnesota Health Care Reform

- Establishment of uniform health data standards by 2009
- Have an electronic prescription drug program in place by January 2011
- State mandate that all health care providers have interoperable EHR by 2015
- Develop a statewide plan to meet the 2015 mandate



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## Minnesota Environment

- Strong support for e-Health
  - From both the legislature and governor's office
- Willing to use mandates to accelerate adoption of interoperable EHRs and standards
- Fairly strong EHR adoption rate
  - Noted in health care settings for which data are available
- Rich history of public-private collaboration
  - Minnesota e-Health Initiative



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## What are the Key Priorities?

- Leveraging existing programs and policies
- Certification of nursing home EHR vendor solutions
- Addressing lack of IT support
- Moving beyond implementation to meaningful use of EHRs
- Health information exchange
- Prioritization of transitions of care
- Focus on person-centered health and health care
  - Understanding the patient role in HIT
- E-Prescribing
- Ensuring privacy and security
- Strengthening HIT collaboration



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## HIT: WHERE ARE WE NOW?



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## EHRs in Minnesota Hospitals

- Basic or comprehensive EHR: 25 percent of Minnesota acute care hospitals
- Another 46 percent plan to achieve basic EHR status within the next year

\*Source annual MDH Hospital HIT Survey (2010)

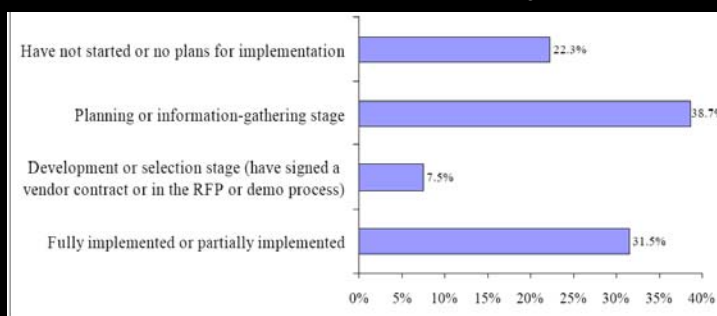


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## EHRs in Minnesota Nursing Homes

- In 2007, the Minnesota Legislature mandated that all Minnesota health care providers must have an interoperable EHR system in place by 2015
- By 2008, 40 percent of the state's nursing homes were well on their way, without incentives

EHR Implementation Status of Minnesota Nursing Homes (2008)



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## Current Level of Use of Automated Systems in Nursing Homes

- Advance Directives
- Medical History
- Clinical Notes: Attending MD
- Clinical Notes: Licensed Nurse
- Clinical Notes: CNA Observation, Notes
- Clinical Notes: Other Disciplines (social services, therapy, dietary, others)
- Problem List
- Allergy List
- Medication Administration Record
- Treatment Administration Record
- MDS Assessment/RAPS
- Assessments Other than MDS
- Care Plan
- Task List
- Medication Order Entry by Physician or Other Authorized Personnel
- Other Order Entry by Physician or Other Authorized Personnel
- Results Viewing--Labs
- Results Viewing--Radiology
- Results Viewing--Diagnostic Tests Other than Radiology or Labs
- Results Viewing--Consults



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## Clinical Decision Support

- Definition: Computer-based medical decision support system/program designed to help health professionals make clinical decisions
- Developed for various direct clinical functions
  - Clinical assessments
  - Prompts to remind care providers to assess immunization status
  - Red flags for vital signs exceeding pre-established parameters
  - Medication orders and medication administration record
  - Lab orders/results



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## Health Information Exchange HIE

- Definition: The transmission of health care related data among facilities, health information organizations and government agencies
  - In nursing homes, an HIE may include online access for referrals, laboratory data, radiology data, patient consults and history from other settings, physician and/or pharmacist access to EHR, pharmacy data, governmental access and/or HIE with patients/caregivers
- Requirement: HIE technology must enable reliable and secure transfer of data among diverse systems and facilitate access to and retrieval of data. The purpose of HIE is to improve health care delivery and information gathering



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## Quality Management Reports

- Generated from data entered into EHR
  - In some cases may be combined with information in administrative systems
- May include a variety of reports
  - Reports of all residents/patients who have received influenza vaccines
  - Occupancy reports
  - Dashboard reports
  - Automated summary reports
    - Discharge summary



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## Telehealth

- Definition: The use of electronic communication and information technologies to allow direct interaction between providers and patients/residents in different locations
- Uses:
  - Wound consultation by a physician at an off-site location
  - Using audiovisual equipment to perform a clinical assessment
  - Interpretation of a real-time EKG reading by an off-site physician



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## Organizational Goals

- Exceptional Quality
  - Clinical quality
  - Patient/resident safety
  - Patient/resident satisfaction
- Positive financial performance



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## How Do Organizations Achieve These Goals?

- Visionary and Talented Leadership
  - Leaders who have a clear vision for where they want their agency to go and the drive and skills to get there
- Exceptional Staff
  - Staff committed to the vision and who have the required skills, knowledge and commitment
- Best-Practices
  - The right practices, processes, structures, staffing ratios, etc. for delivering exceptional services
- Operational Tools
  - The technological tools that leaders and staff need to succeed



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## Benefits of EHR

- Improve patient/resident safety
  - Reduce medical errors
- Improve quality of care
- Improve patient/resident satisfaction
- Improve staff satisfaction
  - Conserve physician time
- Decrease costs and inefficiencies
  - Workflow efficiencies



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## Benefits of EHR (cont.)

- Sharing of patient information among health care practitioners
  - Communicate across the continuum of care
  - Accelerate diffusion of knowledge and reduce variability in access to care
- Strengthen privacy and data protection
- Promote public health and preparedness
- Engage individuals in their health maintenance and wellness efforts



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## Nursing Homes that Successfully Implemented EHRs Reported:

- Improved care quality
  - Reduction of pressure ulcers and use of restraints, and improved pain management
  - Targeted improvement in quality of care for individual residents
  - Enhanced coordination of care across the continuum
- Integrated orders and e-prescribing, full electronic charting, and remote access to improve communications with providers
- Increased employee satisfaction
  - Increased staff retention and consistent assignment of staff
- Heightened satisfaction by residents and their families



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## Nursing Homes that Successfully Implemented EHRs Reported:

- Automated services for privacy and security management
- Support for minimum data sets and resident assessment process documentation and triggers for interdisciplinary care planning
- Financial benefits in excess of system costs
- That they intend to continue using the technology
- That systems commercially available are able to meet most LTC facilities' needs for both clinical and administrative purposes
- That the EHRs in use were interoperable with state data repositories



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## Challenges/Barriers

- Misalignment of cost and benefits or financial reimbursement
- Technical issues such as system interoperability
- Lack of a well-trained clinician informatics workforce to lead the process
- Lack of health information data standards
  - Changing standards for interoperability
- Concerns about privacy and confidentiality
- Physician acceptance
- Training of hospital staff
- Number of vendors in the marketplace



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## What Is Your Role In...

- Achieving interoperability?
  - To get there, providers and community members will have to cooperate and collaborate in new and innovative ways
  - Some processes will need to be rebuilt
- Implementing and supporting health care homes?
  - This can only be good for patients and clients:
    - Consistency
    - Quality
    - Transitions of care



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**In a world of change...  
there is no standing still.**



## Resources

- Minnesota Health Care Reform  
<http://www.health.state.mn.us/healthreform>
- Minnesota e-Health Initiative  
<http://www.health.state.mn.us/e-health/>
- REACH: Regional Extension Center  
<http://www.khareach.org/>
- Stratis Health HIT Toolkits  
<http://www.stratishealth.org/>
  - Click on tools and resources



Thank You!

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Prepared by Stratis Health, the Medicare Quality Improvement Organization for Minnesota, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. 9SOW-MN-6.2-11-121 051111