MEDICAID EHR TEAM

ANALYSIS, TRAINING & TECHNICAL ASSISTANCE

Connectivity & Interoperability with HIE

CMS

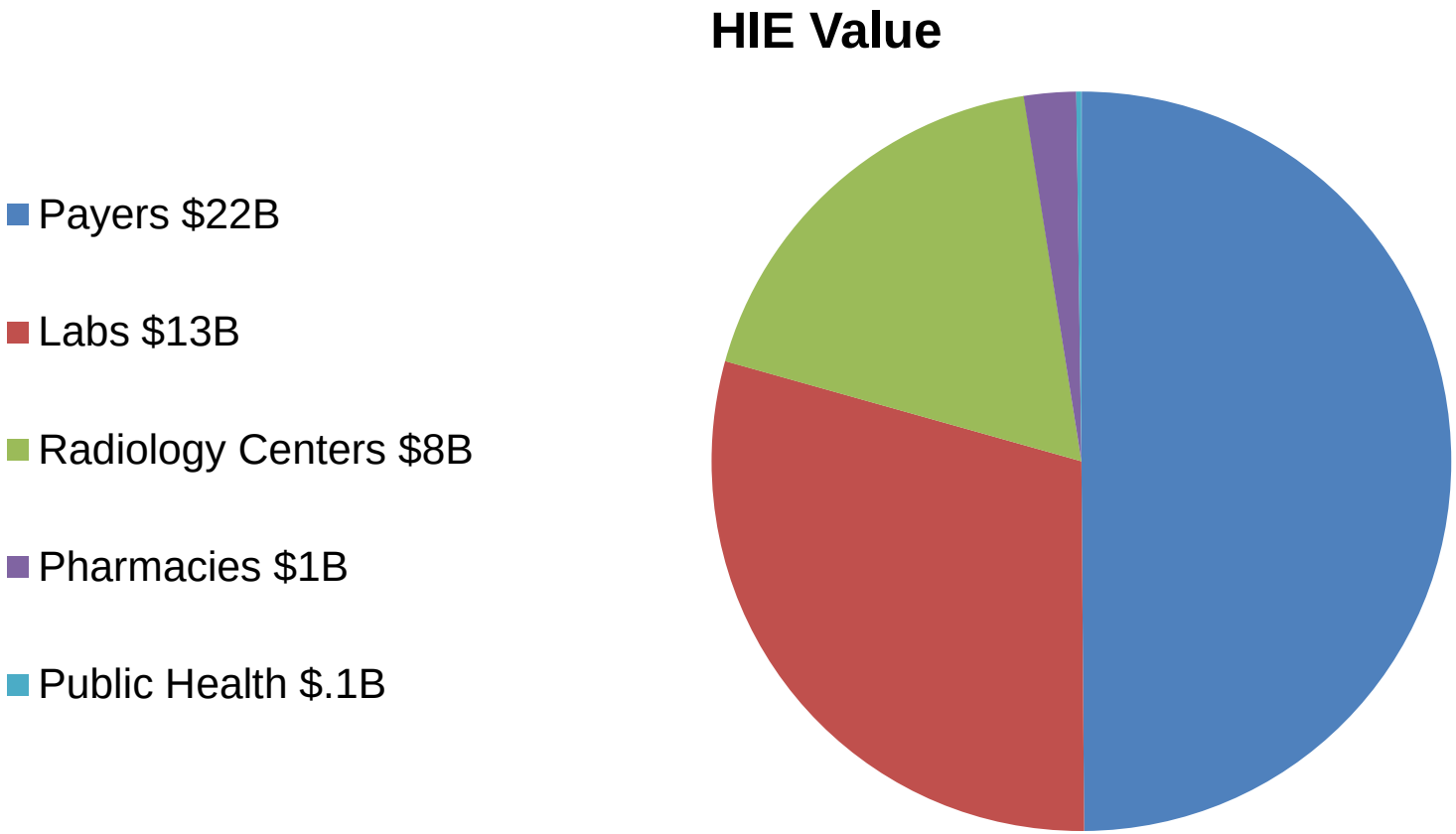
CENTERS for MEDICARE & MEDICAID SERVICES

Sandeep Kapoor

Connectivity & Interoperability with HIE

- Policy makers are moving forward with HIE
- Goals are to improve quality & efficiency within health reform
  - Some early, promising developments and results exist
- Challenges and barriers have been documented and likely remain
  - Policy Makers and Implementers are trying overcome these

HIE Value



Source: Jan Walker, Eric Pan, Douglas Johnston, Julia Adler-Milstein, David W. Bates and Blackford Middleton The Value Of Health Care Information Exchange and Interoperability Health Affairs, , no. (2005): doi:10.1377/hlthaff.w5.10

HIE Value

- **Medical error, patient safety, and quality issues**
  - 98,000 deaths related to medical error
  - 40% of outpatient prescriptions unnecessary
  - Patients receive only 54.9% of recommended care
- **Fractured healthcare delivery system**
  - Medicare beneficiaries see 1.3 –13.8 unique providers annually, on average 6.4 different providers/yr
  - Patient's multiple records do not interoperate
- **Providers have incomplete knowledge of their patients**
  - Patient data unavailable in 81% of cases in one clinic, with an average of 4 missing items per case.
  - 18% of medical errors are estimated to be due to inadequate availability of patient information.
- **An 'unwired' system**
  - 90% of the 30 billion healthcare transactions in the US every year are conducted via mail, fax, or phone

Source: Jan Walker, Eric Pan, Douglas Johnston, Julia Adler-Milstein, David W. Bates and Blackford Middleton
The Value Of Health Care Information Exchange and Interoperability Health Affairs, , no. (2005):
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Humana HIE Study

- Humana Emergency Department Study
  - Costs to a health plan decreased when clinicians utilized HIE in the care of patients who present to the emergency department
  - Likely that HIEs remove unnecessary service utilization through use of historical patient medical information (however, recent controversy exists around this)
  - Test group achieved an average savings of $29 per emergency department visit versus the control group
    - Decreased utilization of imaging procedures and diagnostic tests drove this cost-savings.

Source: The Business Case for Payer Support of a Community-Based Health Information Exchange: A Humana Pilot Evaluating Its Effectiveness in Cost Control for Plan Members Seeking Emergency Department Care July/August 2011 Albert Tzeel, MD, MHSA; Victor Lawnicki, PhD; Kim R. Pemble, MS

Humana HIE Study

- Use of the emergency department for non-emergent cases is prevalent
  - Results in diminished quality of care and increased expenditures to health plans
- HIEs can reduce duplicate testing in the emergency department and lower unnecessary expenses
- Preliminary study showed that HIE querying reduced the time spent gathering data and decision time
- Findings from the Humana Emergency Department study suggest:
  - Substantial change in outcomes that matter is clinically important, regardless of statistical significance
  - Improving provider performance has cost-saving implications for a health plan and the community at large

Source: The Business Case for Payer Support of a Community-Based Health Information Exchange: A Humana Pilot Evaluating Its Effectiveness in Cost Control for Plan Members Seeking Emergency Department Care July/August 2011 Albert Tzeel, MD, MHSA; Victor Lawnicki, PhD; Kim R. Pemble, MS

2012 National eHealth Collaborative Stakeholder Survey

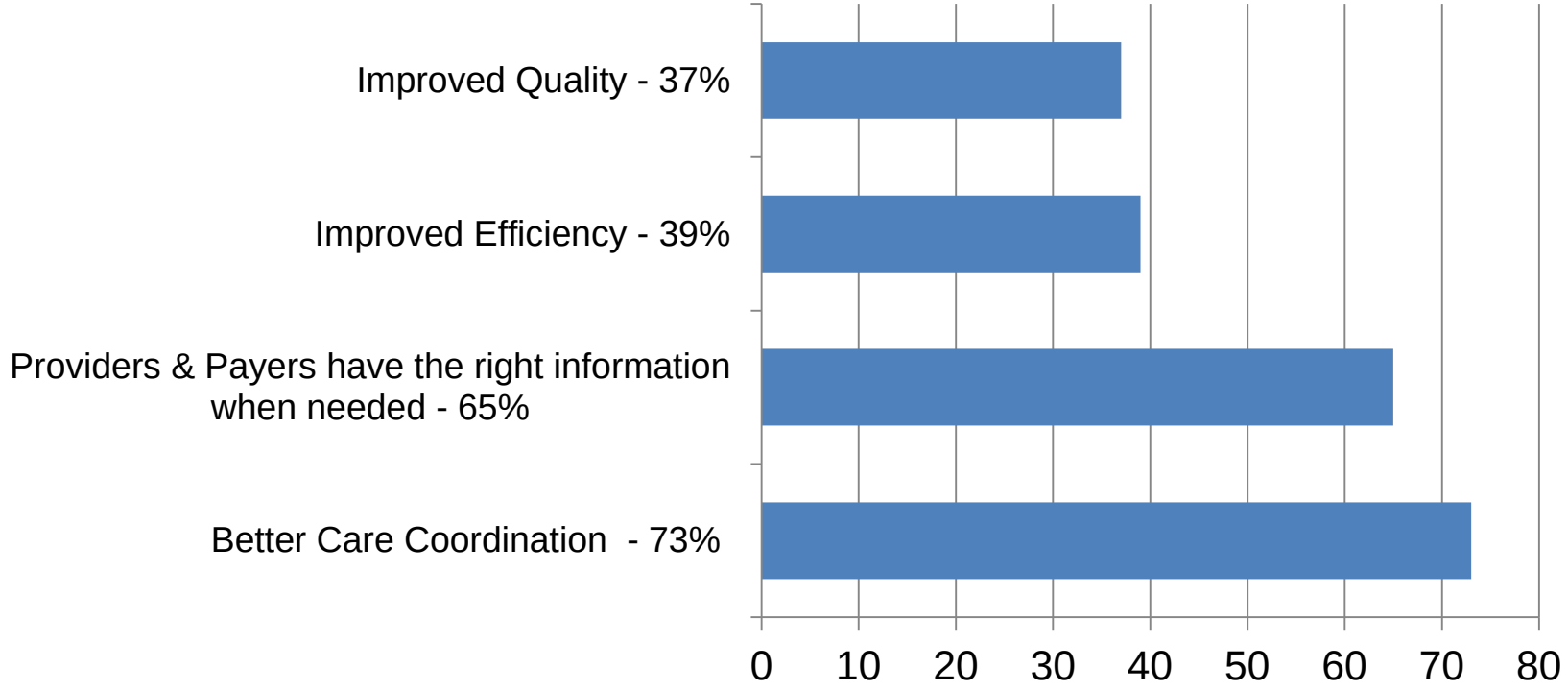
- In the 2012 National eHealth Collaborative (NeHC) Stakeholder Survey, stakeholders believe that the most important benefits of HIE include:
  - Care Coordination
  - Ensuring that patients and providers have the right information available when needed to support patient care
  - Improving quality and efficiency

- The stakeholders believe that consumer engagement will be very important or important to transforming healthcare and achieving better outcomes.
  - National eHealth Collaborative's stakeholders include government agencies, health systems, health professionals, academic medicine, patient and consumer advocates, major payers and employers, non-profits, technology providers and others.

Source: 2012 NeHC Stakeholder Survey February 2012

2012 NeHC Stakeholder Survey

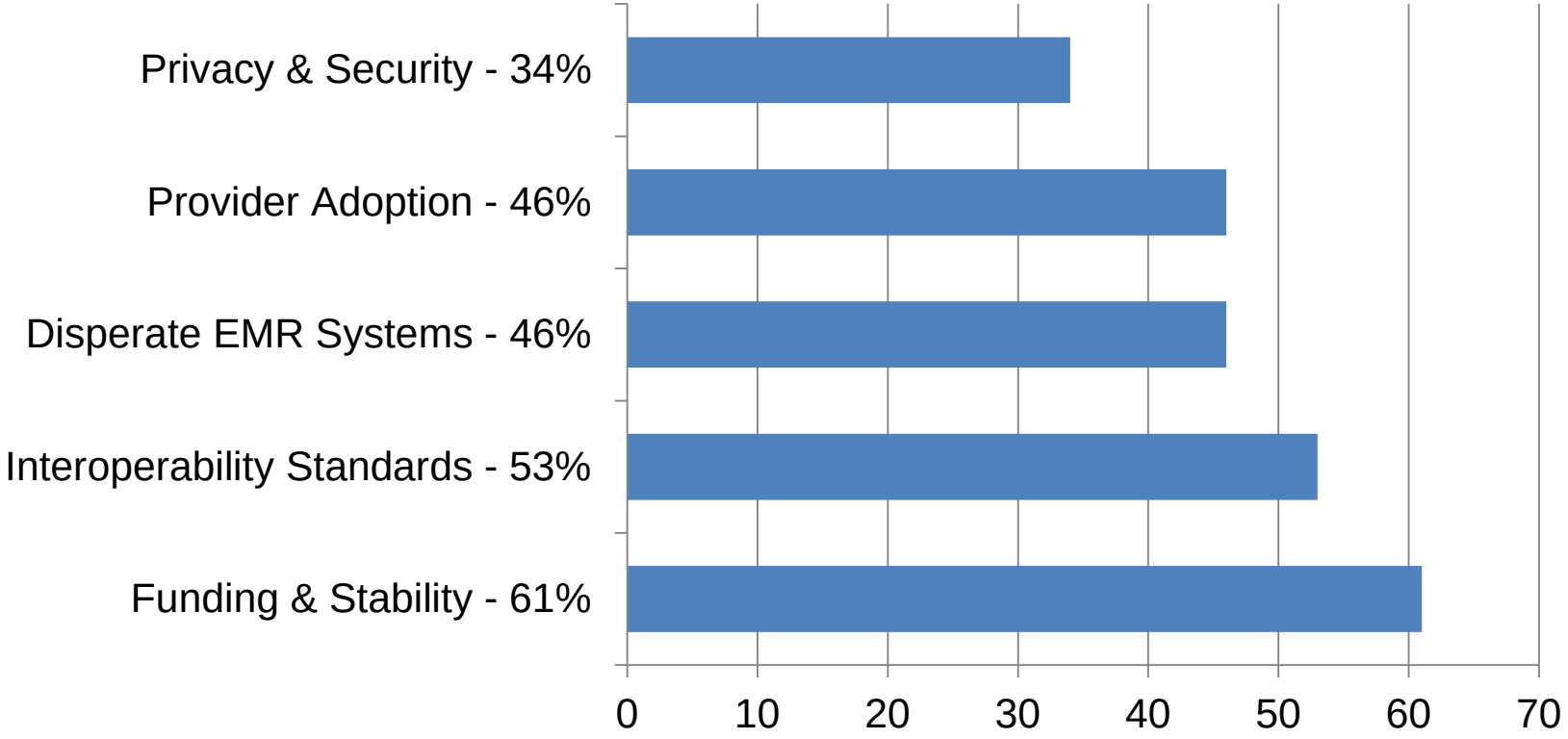
What are the most important benefits of health information exchange? Respondents were asked to pick 3



Source: 2012 NeHC Stakeholder Survey February 2012

2012 NeHC Stakeholder Survey

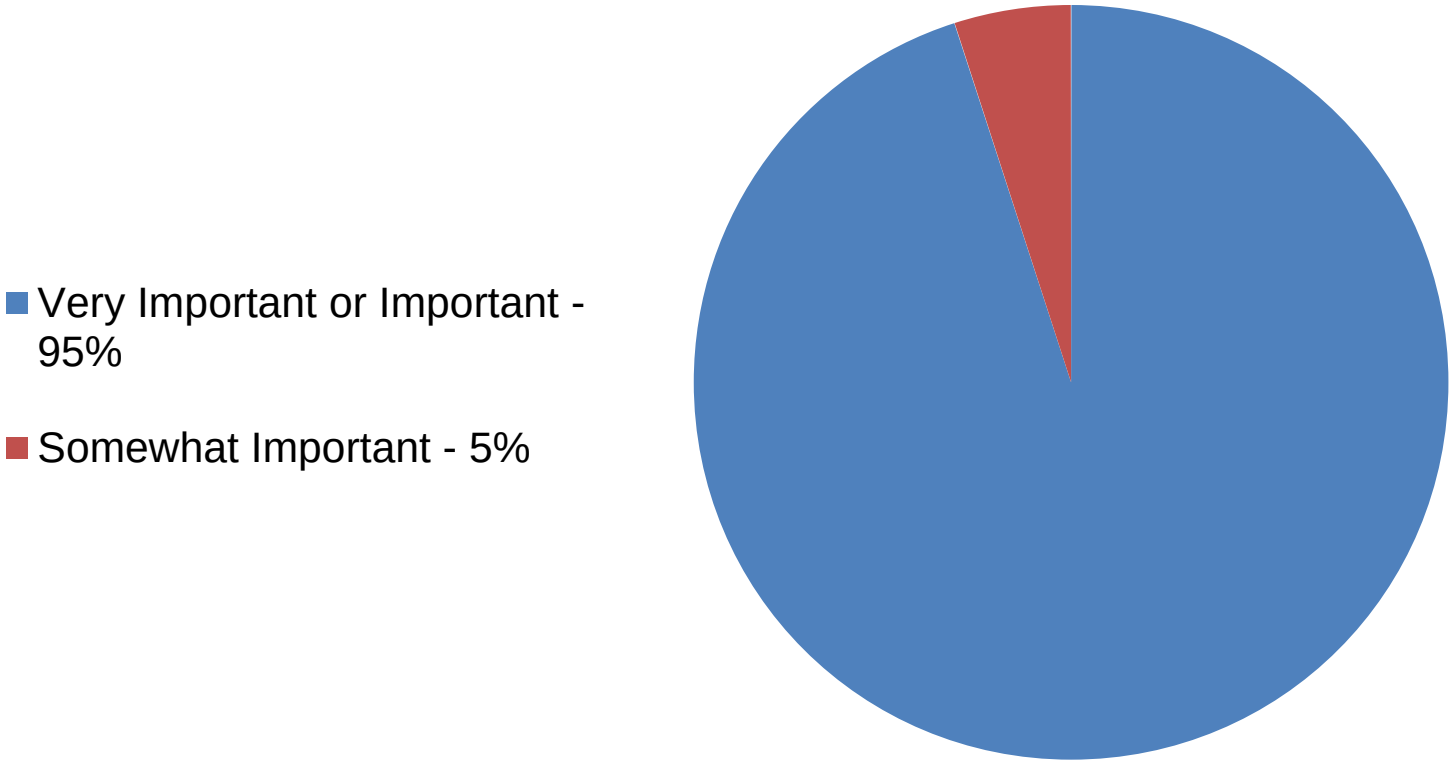
What are the biggest challenges to achieving widespread health information exchange? Respondents were asked to pick 3



Source: 2012 NeHC Stakeholder Survey February 2012

2012 NeHC Stakeholder Survey

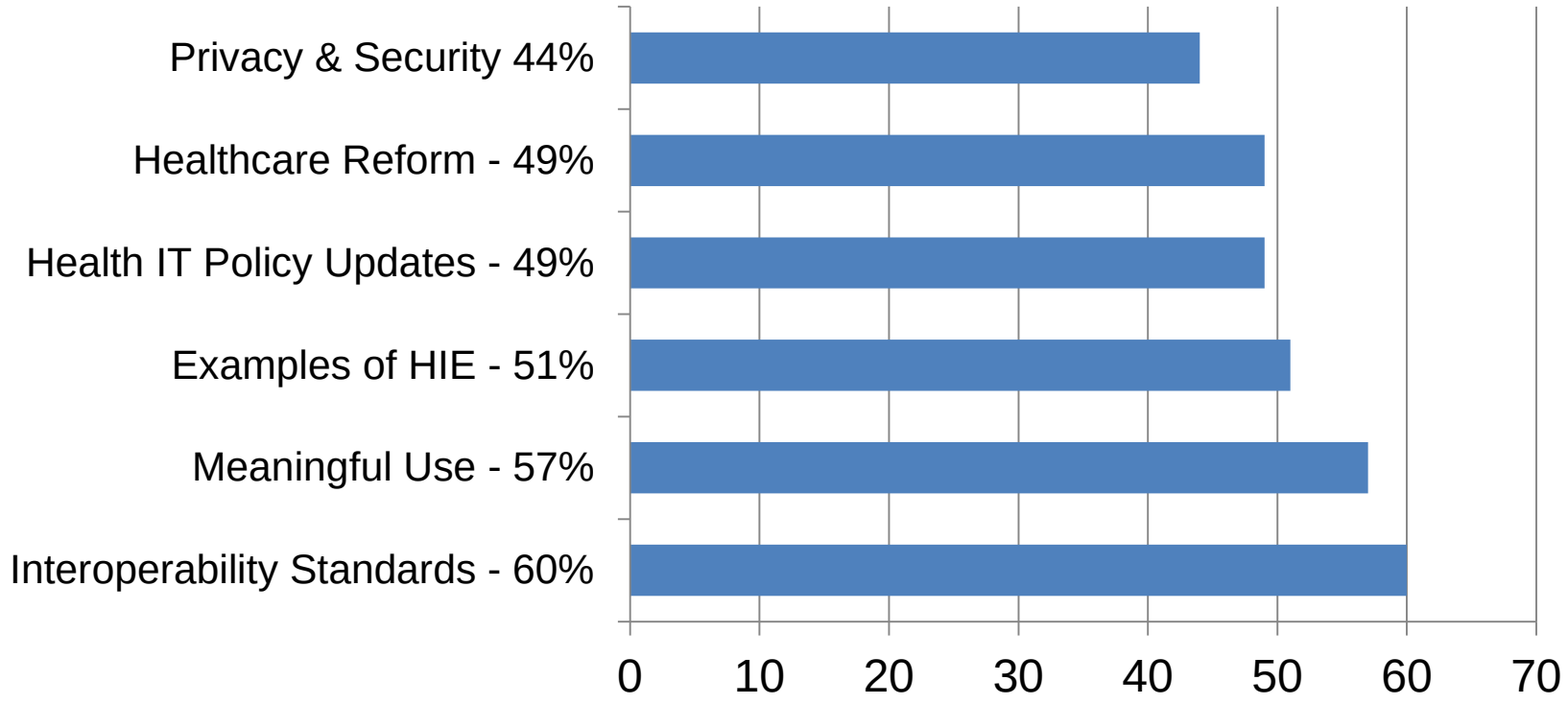
How important is patient/consumer engagement to transforming healthcare?



Source: 2012 NeHC Stakeholder Survey February 2012

2012 NeHC Stakeholder Survey

What Health IT topics are of greatest interest to you?
Respondents were asked to select all that apply



Source: 2012 NeHC Stakeholder Survey February 2012

Systemic Review of Health Information Exchange in Primary Care

HIEs long-term success depends on the ability to provide services within a sustainable business model.

Workflow Efficiency:

- Improves referral processes and claims processing
- Decreases staff time required for handling these processes
- Rapid electronic access to test results from outside the practice is a valued benefit of HIEs
  - 38% reported improved access to test results
  - 2 person specialty practice saved 1.5 hours of staff time per week by using an HIE to receive lab results

Source: Systemic Review of Health Information Exchange in Primary Care
Journal of the American Board of Family Medicine
Sept-Oct 2010 Patricia Fontaine, MD, MS Stephen E. Ross, MD, Therese Zink, MD, MPH Lisa M. Schilling, MD, MSPH

Systemic Review of Health Information Exchange in Primary Care

Cost Savings/Increased Revenue:

- Most clear-cut savings have been in reducing the cost of testing agencies that deliver test results.
- In the 2008 eHealth Initiative survey of fully operational HIE networks:
  - 69% reported a positive return on investment for their stakeholders in general
    - 21% of the physician practices reported a positive return on investment
  - 45% reported that their efforts had resulted in reduced staff time
  - 21% reported decreased number of support staff as a direct result of efficiencies gained through implementation of the HIE

Source: Systemic Review of Health Information Exchange in Primary Care Journal of the American Board of Family Medicine Sept-Oct 2010 Patricia Fontaine, MD, MS Stephen E. Ross, MD, Therese Zink, MD, MPH Lisa M. Schilling, MD, MSPH

Systemic Review of Health Information Exchange in Primary Care

Barriers:

- Cost
- Privacy & liability concerns
- Organizational characteristics
- Technical barriers

Positive ROI has not been documented.

Source: Systemic Review of Health Information Exchange in Primary Care Journal of the American Board of Family Medicine Sept-Oct 2010 Patricia Fontaine, MD, MS Stephen E. Ross, MD, Therese Zink, MD, MPH Lisa M. Schilling, MD, MSPH

HIEs and Medicaid

State HIEs working with State Medicaid Agencies:

- Supporting feeds for Meaningful Use
  - Lab Data
  - Immunization Registry feeds
  - Syndromic Surveillance feeds
  - Cancer Registry feeds
  - Verification of MU attestations
  - Electronic feed of measures

HIEs and Medicaid

State Medicaid Agencies:

- Care Management
- Case Management
- Administrative efficiencies

HIEs and Medicaid

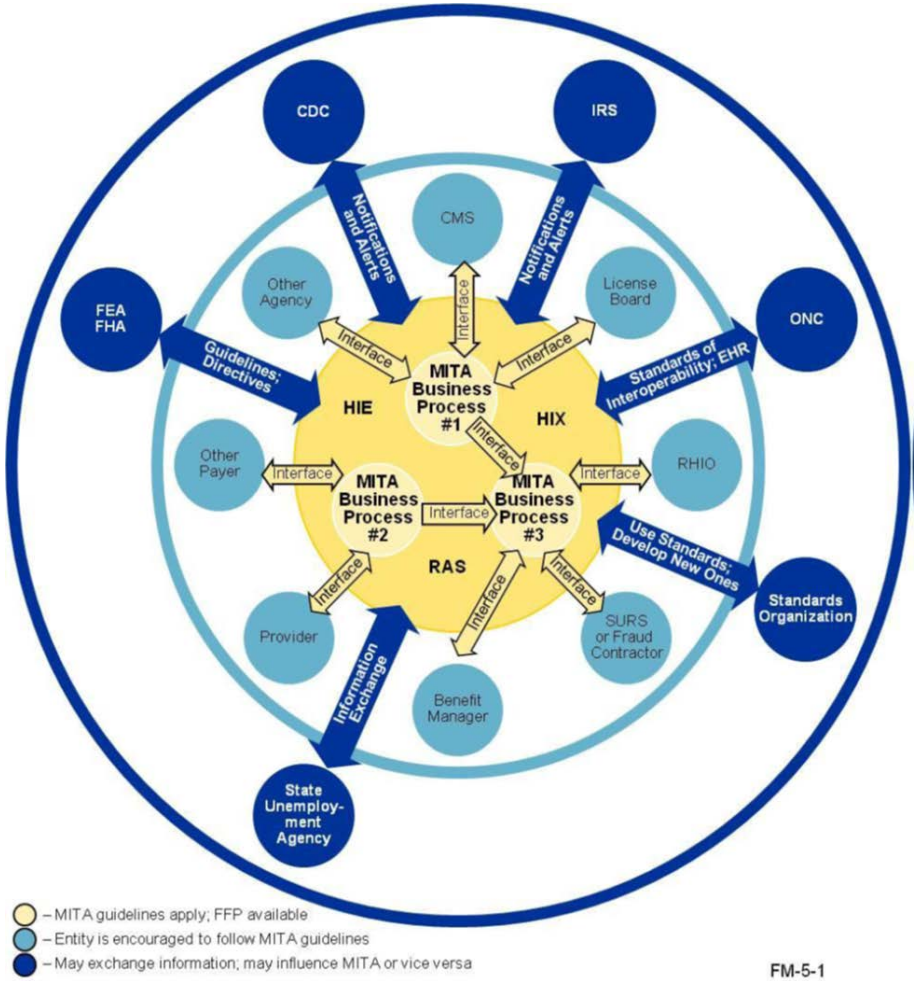
MMIS and HIEs:

- MMIS should provide clinical information services to HIEs
  - Provides data for upwards of 25% of a given state's population
  - Diagnosis, medications, etc.
- MMIS needs to collect medical record information in real-time from one or more HIE's in support of Care Management business processes under the MITA 3.0 framework
- Integrate MMIS with DIRECT to facilitate information exchange between SMA and the provider

HIEs and Medicaid

- MMIS vendors need to be prepared to do the following to support publishing Claims Data as Clinical Data to an HIE:
  - Support an aggregate CCD built from claims data on the fly and with the latest information, and deliver that via XDS functionality
  - Send feeds to all payer claims databases set up for this purpose
  - Support a process for vetting information to be shared
  - Support a medical record number that represents each individual in the MMIS
    - The Medicaid ID can be used for this purpose so long as it either survives MMIS merges, OR sends merge records to the HIE
  - Provide a patient identity feed outbound to the HIE

Medicaid Funding



Source: Draft MITA 3.0 Publication
November 2011

HIEs and Medicaid

- Care Management MITA Business Area Business Processes Explicitly Mentioning HIE Integration:
  - CM Establish Case
  - CM Manage Case Information
  - CM Perform Screening and Assessment
  - CM Manage Treatment Plan Outcomes
  - CM Authorize Referral
  - CM Authorize Service
  - CM Authorize Treatment Plan

Source: Draft MITA 3.0 Publication November 2011

Connectivity & Interoperability with HIE

Conclusion:

- All payers including Medicaid are important players in HIE sustainability
- SMA can now design programs which were not possible earlier due to lack of clinical data
- Benefits exist but still many challenges to overcome
- Valued services need to be offered
- Set realistic expectations
- HIE must meet the needs of your community
- ROI has to be realized over time
  - Involve Stakeholders early and often