

# ARRA “Meaningful Use” and the Role of HIE

A Work in Progress  
Key Issues and Options

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# The Framework of ARRA Meaningful Use derives directly from the National Quality Forum

- **Not a *tabula rasa* effort: “The Best work is built on the shoulders of others”**
- **Ultimate vision is to enable significant and measurable improvements in population health through a transformed health care delivery system.**
- **Key goals\*:**
  - **Improve quality, safety, & efficiency**
  - **Engage patients & their families**
  - **Improve care coordination**
  - **Improve population and public health; reduce disparities**
  - **Ensure privacy and security protections**
- **42 out of the original 94 MU criteria require HIE, equally distributed between inpatient and outpatient environments.**
- **\*Adapted from National Priorities Partnership. National Priorities and Goals: Aligning Our Efforts to Transform America’s Healthcare. Washington, DC: National Quality Forum; 2008 8**

# Technology is Only a Tool

- Achieving “meaningful use” should map to “Meaningful outcomes” anchored by EBM
- HIT is an extremely disruptive technology  
(as Sandra Shewry described earlier today)
- Care Models and Workflows have/must change dramatically to achieve meaningful outcomes
- Care delivery should drive design, with billing/admin as collateral benefit, NOT the reverse
- Building compliant workflows does not include paving a non-compliant cowpath
- Higher quality care does NOT correlate with the most costly care. Real evidence-basis
  - Breast cancer screening (quality/savings/care model)
  - Colorectal cancer screening next
- Nations with 100% EHR adoption envy the decision support at KP

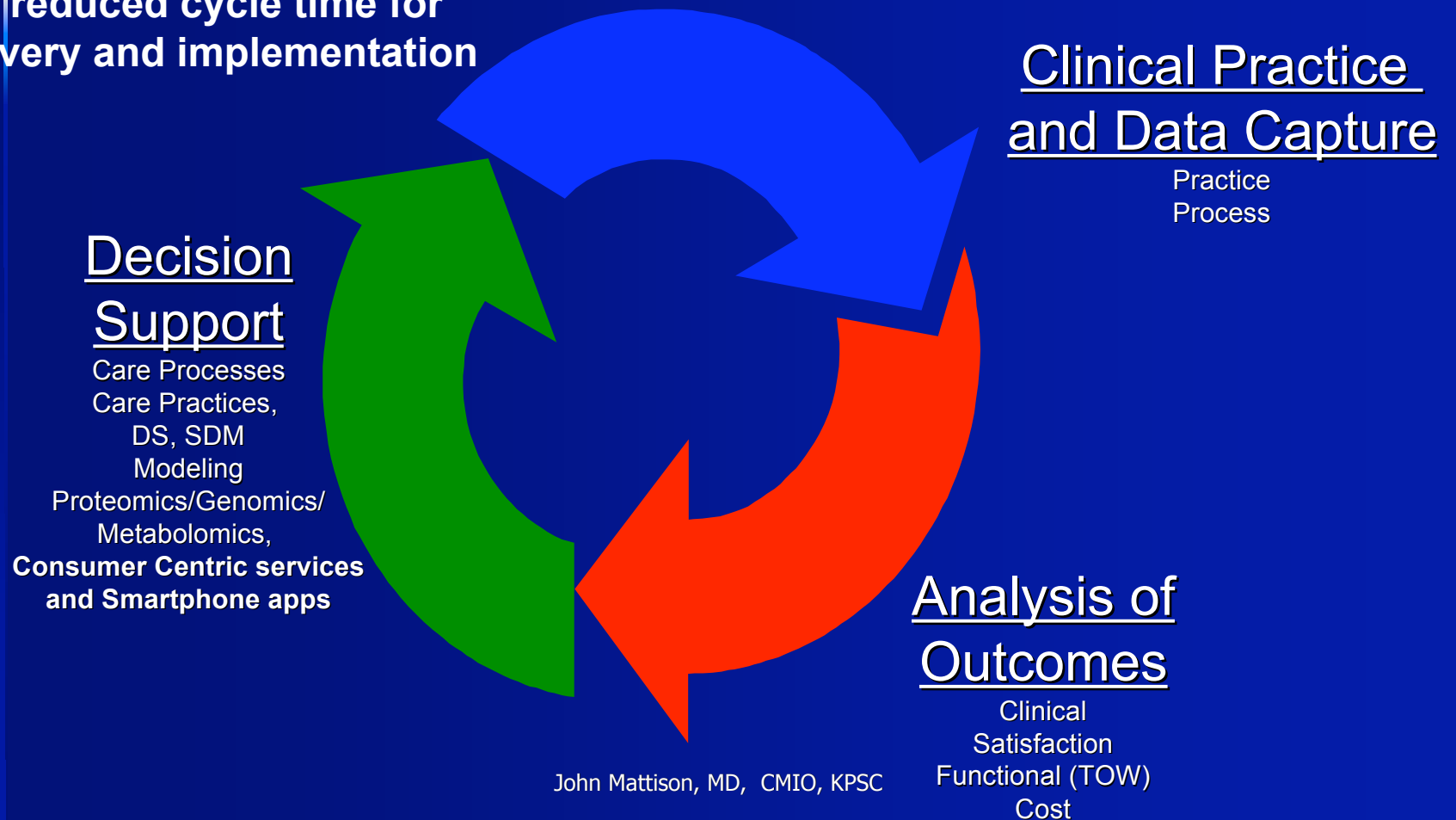
# Innovation is the easy part

- Adoption and diffusion is the hard part.
- Making it easy to do the right thing for the right person at the right time is the holy grail for decision support and rapid adoption and diffusion
- Registries will soon be obsolete

# Meaningful Use = Meaningful Outcomes:

## Quality Improvement Cycle: Creation, Implementation, Refinement

ROI = reduced cycle time for discovery and implementation



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# Public Comments on MU

- **Hundreds of formal written responses**
- **Several themes:**
  - **Too much too soon**
  - **MU metrics not clearly defined, very fuzzy**
  - **Thresholds not defined for specific metrics, e.g. 90% of diabetics need control with HbA1c <7.5**
  - **Some provider systems rely more heavily on non-physician providers, so is there a way to differentiate standards for non-physician vs. physician care? Especially true for some Medicaid and Safety net providers**
  - **Most metrics based on a primary care model, so how do specialists participate fully? ?two track system ?More complexity?**
  - **Specialty-specific EHR systems have not even been certified yet as qualifying through existing criteria**

# **“Too Much Too Soon”**

**No surprise here.**

- “Too much too soon”**
  - especially CPOE in hospitals**
  - alternative solutions may require e.g.**
    - any X% of inpatient orders to be entered into the EMR by 2011, but still 100% of ambulatory e.g. labs, meds, rads, referrals**
  - “CPOE” may not necessarily require electronic transmission of the order e.g. to the lab, but electronic entry into the system where it can be tracked, thus enabling CDS, etc.**
- Key Business requirements to exploit MU opportunity:**
  - 1) organizational readiness**
  - 2) capacity**
  - 3) funding**
  - 4) consulting resources**

# By Statute There Will be Two Regulatory Rules:

 **Rules defining MU objectives  
and measures  
(Policy Committee)**

 **Rules defining standards and  
certification criteria that must  
be used to achieve MU  
(Standards Committee)**

# Key Policy Issues for How HIE Must Underpin Meaningful Use

1. What policy and technical requirements are needed to fully enable meaningful use?
2. What kind of monitoring, and enforcement processes are needed?
3. Must individual physicians routinely use HIE to qualify for MU funds?
4. If so, what level of certification of HIEs will be appropriate.
5. Where do we adjudicate the "states rights" issue of variations, ?federal floor with open ceiling?
6. How can we facilitate market innovation and free enterprise while promoting convergence on simple implementable solutions?
7. How do we adjudicate inter-state conflicts around privacy concerns?
8. How do we fund fixed vs. marginal costs of HIE?

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# The Minimalist Option for HIE Requirements for Meaningful Use

- **KISS principle**
- **Require adherence to three immutable floors:**
  - 1) **content standards**
  - 2) **Communication standards**
  - 3) **Privacy/security standards**
- **NB: NO specific platform or software requirements.**
- **Allow state and regional implementations to exceed these floors at their discretion/peril.**
- **All these requirements must foot to meaningful outcomes.**



Health Outcomes Policy Priorities	Care Goals	2011 Objectives <i>Goal is to electronically capture in coded format and to report health information and to use that information to track key clinical conditions</i>	2011 Measures	2013 Objectives <i>Goal is to guide and support care processes and care coordination</i>	2013 Measures	2015 Objectives <i>Goal is to achieve and improve performance and support care processes and on key health system outcomes</i>	2015 Measures
<b>Improve quality, safety, efficiency, and reduce health disparities</b>	<ul style="list-style-type: none"> <li>• Provide access to comprehensive patient health data for patient's health care team</li> <li>• Use evidence-based order sets and CPOE</li> <li>• Apply clinical decision support at the point of care</li> <li>• Generate lists of patients who need care and use them to reach out to patients (e.g., reminders, care instructions, etc)</li> <li>• Report to patient registries for quality improvement, public reporting, etc</li> </ul>	<ul style="list-style-type: none"> <li>• Use CPOE for all order types including medications [OP, IP]</li> <li>• Implement drug-drug, drug-allergy, drug-formulary checks [OP, IP]</li> <li>• Maintain an up-to-date problem list [OP, IP]</li> <li>• Generate and transmit permissible prescriptions electronically (eRx) [OP]</li> <li>• Maintain active medication list [OP, IP]</li> <li>• Maintain active medication allergy list [OP, IP]</li> <li>• Record primary language, insurance type, gender, race, ethnicity [OP, IP]</li> <li>• Record vital signs including height, weight, blood pressure [OP, IP]</li> <li>• Incorporate lab-test results into EHR [OP, IP]</li> <li>• Generate lists of patients by specific condition to use for quality improvement, reduction of disparities, and outreach [OP]</li> <li>• Send reminders to patients per patient preference for</li> </ul>	<ul style="list-style-type: none"> <li>• Report quality measures, including: <ul style="list-style-type: none"> <li>- % diabetics with A1c under control [OP]</li> <li>- % hypertensive patients with BP under control [OP]</li> <li>- % of patients with LDL under control [OP]</li> <li>- % of smokers offered smoking cessation counseling [OP, IP]</li> </ul> </li> <li>• % of patients with recorded BMI [OP]</li> <li>• % eligible surgical patients who received VTE prophylaxis [IP]</li> <li>• % of orders entered directly by physicians through CPOE</li> <li>• Use of high-risk medications in the elderly [OP, IP]</li> <li>• % of patients over 50 with annual colorectal cancer screenings [OP]</li> </ul>	<ul style="list-style-type: none"> <li>• Use evidence-based order sets [OP, IP]</li> <li>• Record clinical documentation in EHR [IP]</li> <li>• Generate and transmit permissible prescriptions electronically [IP]</li> <li>• Manage chronic conditions using patient lists and decision support [OP, IP]</li> <li>• Provide clinical decision support at the point of care (e.g., reminders, alerts) [OP, IP]</li> <li>• Report to external disease (e.g., cancer) or device registries [OP (esp. specialists) [IP]</li> <li>• Conduct medication administration using bar coding [IP]</li> </ul>	<ul style="list-style-type: none"> <li>• Additional quality reports using HIT-enabled NQF-endorsed quality measures [OP, IP]</li> <li>• % of all orders entered by physicians through CPOE [OP, IP]</li> <li>• Potentially preventable Emergency Department Visits and Hospitalizations [IP]</li> <li>• Inappropriate use of imaging (e.g. MRI for acute low back pain) [OP, IP]</li> <li>• Other efficiency measure (TBD) [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>• Achieve minimal levels of performance on quality, safety, and efficiency measures</li> <li>• Implement clinical decision support for national high priority conditions [OP, IP]</li> <li>• Medical device interoperability [OP, IP]</li> <li>• Multimedia support (e.g. x-rays) [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>• Clinical outcome measures (TBD) [OP, IP]</li> <li>• Efficiency measures (TBD) [OP, IP]</li> <li>• Safety measures (TBD) [OP, IP]</li> </ul>
		<ul style="list-style-type: none"> <li>• Document a progress note for each encounter [OP]</li> </ul>	<ul style="list-style-type: none"> <li>• % of females over 50 receiving annual mammogram [OP]</li> <li>• % patients at high-risk for cardiac events on aspirin prophylaxis [OP]</li> <li>• % of patients with current pneumovax [OP]</li> <li>• % eligible patients who received flu vaccine [OP]</li> <li>• % lab results incorporated into EHR in coded format [OP,IP]</li> <li>• Stratify reports by gender, insurance type, primary language, race, ethnicity [OP, IP]</li> </ul>				

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Engage patients and families	<ul style="list-style-type: none"> <li>Provide patients and families with access to data, knowledge, and tools to make informed decisions and to manage their health</li> </ul>	<ul style="list-style-type: none"> <li>Provide patients with electronic copy of- or electronic access to- clinical information (including lab results, problem list, medication lists, allergies) per patient preference (e.g., through PHR) [OP, IP]</li> <li>Provide access to patient-specific educational resources [OP, IP]</li> <li>Provide clinical summaries for patients for each encounter [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>% of all patients with access to personal health information electronically [OP, IP]</li> <li>% of all patients with access to patient-specific educational resources [OP, IP]</li> <li>% of encounters for which clinical summaries were provided [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>Offer secure patient-provider messaging capability [OP]</li> <li>Provide access to patient-specific educational resources in common primary languages [OP, IP]</li> <li>Record patient preferences (e.g., preferred communication media, advance directive, health care proxies, treatment options) [OP, IP]</li> <li>Documentation of family medical history [OP, IP]</li> <li>Upload data from home monitoring devices [OP]</li> </ul>	<ul style="list-style-type: none"> <li>Additional patient access and experience reports using NQF-endorsed HIT-enabled quality measures [OP, IP]</li> <li>% of patients with access to secure patient messaging [OP]</li> <li>% of educational content in common primary languages [OP, IP]</li> <li>% of all patients with preferences recorded [OP]</li> <li>% of transitions where summary care record is shared [OP, IP]</li> <li>Implemented</li> </ul>	<ul style="list-style-type: none"> <li>Access for all patients to PHR populated in real time with data from EHR [OP, IP]</li> <li>Patients have access to self-management tools [OP]</li> <li>Electronic reporting on experience of care [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>NPP quality measures related to patient and family engagement [OP, IP]</li> <li>% of patients with full access to PHR populated in real time with EHR data [OP, IP]</li> </ul>
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Improve care coordination	<ul style="list-style-type: none"> <li>Exchange meaningful clinical information among professional health care team</li> </ul>	<ul style="list-style-type: none"> <li>Exchange key clinical information among providers of care (e.g., problems, medications, allergies, test results) [OP, IP]</li> <li>Perform medication reconciliation at relevant encounters [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>Report 30-day readmission rate [IP]</li> <li>% of encounters where med reconciliation was performed [OP, IP]</li> <li>Implemented ability to exchange health information with external clinical entity (specifically labs, care summary and medication lists) [OP, IP]</li> <li>% of transitions in care for which summary care record is shared (e.g., electronic, paper, eFax) [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>Retrieve and act on electronic prescription fill data [OP, IP]</li> <li>Produce and share an electronic summary care record for every transition in care (place of service, consults, discharge) [OP, IP]</li> <li>Perform medication reconciliation at each transition of care from one health care setting to another [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>Additional public reports using NQF-endorsed HIT-enabled quality measures [OP, IP]</li> <li>% of transitions where med reconciliation was performed [OP, IP]</li> <li>% of encounters where fill data accessed [OP]</li> <li>% of encounters where clinical information is shared with external clinical entities [OP, IP]</li> </ul>	<ul style="list-style-type: none"> <li>Access comprehensive patient data from all available sources</li> </ul>	<ul style="list-style-type: none"> <li>Aggregated clinical summaries from multiple sources available to authorized users [OP, IP]</li> <li>NQF-endorsed Care Coordination Measures (TBD)</li> </ul>

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