The HITECH Act: A Grand Experiment In HIT Implementation and Sustainability

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Kim Dunn, MD, Ph.D.

Agenda

• Historical Context for Reform
• Overview of ARRA Funded Programs
• Implications for Texas
• Overview Gulf Coast Regional Extension Center
• Sustainability strategies
Historical Perspective

• 1960
• 1970-1980
• 1980-2000
• 2000-2010
• Current status

Goals of “Healthcare System”

• High quality
• Easy access for all
• Affordable price
• Information available

• BUT, the system is a by product of a healthcare industry.
Healthcare Industry and Organizations

<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>DELIVERY / DISTRIBUTION</th>
<th>PAYERS</th>
<th>CONSUMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharma</td>
<td>Hospitals: Community, Specialty, Academic</td>
<td>Public Sector</td>
<td>Higher costs</td>
</tr>
<tr>
<td>Med Devices</td>
<td>Physicians</td>
<td>Hospital districts</td>
<td>Uneven quality</td>
</tr>
<tr>
<td>Med Supplies</td>
<td>Nurses</td>
<td>Medicaid, Medicare</td>
<td>Variable access</td>
</tr>
<tr>
<td>Biotechnology</td>
<td>Allied Professionals</td>
<td>Socialized: VA,Military</td>
<td>Fragmented service</td>
</tr>
<tr>
<td>Online Services</td>
<td>Home Health Long Term Care</td>
<td>Private Sector</td>
<td>Poor health, high costs for disadvantaged</td>
</tr>
<tr>
<td>Alternative Care</td>
<td>Regulatory agencies</td>
<td>Managed Care Organizations</td>
<td></td>
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<tr>
<td></td>
<td>New models</td>
<td>Self-insured employers and patients</td>
<td></td>
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</tbody>
</table>

What Does An Accountable Health Care System Look Like?

**Quality First**
- Patient centered
- Accessible
- Understandable
- Outcomes driven

**Then Cost**
- Affordable
- Transparent

**Information Management**
- Real-time availability
- Information available when, where needed
- Patients and doctor roles and responsibilities defined
Texas Health Services Authority (THSA) Plan

Texas Integration Strategy

- Texas Health Services Authority (THSA)
- Data elements
- HIPAA standards
- Security/privacy policy
- Image and NFC services
- Radiology
- Other services coverage

Health & Human Services (HHS)
- Medicaid health IT
- Regulatory issues
- Population health
- e-health coordination

Health Information Exchange (HIE)
- Federations
- Users
- Community records
- Medicaid HIE

Regional Extension Centers (RECs)
- Coordinated efforts
- Technical consulting
- Vendor selection
- Provider interface

Provider Support

Work Force Development/Research Programs

Texas Geography

Service Areas
- North Texas Regional Extension Center
- Texas Tech University Health Science Center
- CentrEast Regional Extension Center
- Gulf Coast Regional Extension Center
GCREC

Mission
The mission of the Gulf Coast Regional Extension Center (GCREC) is to facilitate the meaningful use of health information technology by eligible practitioners and their network.

Vision
To create a safe and secure electronic environment for the input, storage, retrieval, and exchange of comprehensive health information for consumers, clinicians, payors, and governmental health agencies.

http://www.txre cs.org/
U.T. Informatics Leverages Other Funding

- **PI: Kim Dunn, MD, PhD**
  - Identify and enroll eligible PCPs
  - Advise about EHRs
  - Facilitate / measure meaningful use of EHRs
  - Inform about privacy and security
  - Conduct practice process workflow analysis and process redesign
  - Deliver workforce training

- **PI: Jiawei Zhang, PhD**
  - Work-Centered Design of Care Process Improvements in HIT
  - Cognitive Foundations for Decision Making
  - Cognitive Information Design and Visualization
  - Modeling of Setting-Specific Factors in EHRs
  - Automated Model-based Clinical Summarization of Key Patient Data

- **PI: James Turley, PhD, RN**
  - Master of Science in Applied Informatics
  - 36 semester hours / 12 courses / online
  - Gain knowledge and skills to assess, implement, maintain and evaluate EHRs
  - Full and part-time enrollment
  - Didactic and laboratory coursework

**GCREC Services**

**Enhance Practice Experience**
- 20 hours of CME
- Technical Consulting Services

**Consulting**
- Eligible Practitioners and Specialists
- Rural Hospitals

**Workforce Training**
- Work-Study
- Applied Masters

**Technology Improvement (SHARP-C)**
- Test EMRs for Usability, Interoperability, “Medical Homeness”
- Develop Field Usability Models
Consulting Components

- Assessment / Workflow Analysis
- Planning
- Selection of an EMR
- Implementation of an EMR
- Evaluation of EMR
- Meaningful USE (Medicaid/ Medicare)
- Meaningful CARE (All)

Sustainability Strategy

Preparedness
- Emergency Planning:
  - Meaningful Use Case for Health Information Exchange with Primary Care Practitioners for Medical Special Needs (MSN) patients

Medical Home
- Expand private payers for “meaningful care”
- “Network of Networks” as a clinical roadmap for community HIE
- Leverage NIH grant: Evaluation of Your Doctor Program Medical Home Service as a Model for Comparative Effectiveness
## Current Status

<table>
<thead>
<tr>
<th>Payer Issues</th>
<th>NCQA Med Home Issues</th>
<th>Comparative Effectiveness Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Payment based on episodes of care with ROS/PE documentation but interest in medical home for care coordination</td>
<td>• Laborious process</td>
<td>• Lack processes to embed into real world setting</td>
</tr>
<tr>
<td>• Quality reporting, med home variation among payers</td>
<td>• Ongoing standards not verifiable</td>
<td>• Divorced from data to overcome physician barriers to adoption</td>
</tr>
<tr>
<td>• Lack clinical quality data</td>
<td>• Does not leverage medical home beyond access and care coordination</td>
<td></td>
</tr>
<tr>
<td>• Disease management / case management divorced from care delivery</td>
<td>• No ongoing technical infrastructure</td>
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## Concept: Three Key People for Accountable System

1. The patient
2. The personal physician
3. The medical assistant in physician office

Standards and Technology Aligned with Financial Incentives
**Need for the Quality Health Record (QHR)**

- Open source framework: care plan/messaging
- New model of documentation
- Limitations of EMR: silo’d, does not collect outcomes, risk factors for adjustment
- Limitations of Personal Health Record
- Supports new models for care delivery
- Basis for comparative effectiveness research in real world settings

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**NIH Pilot Project in Partnership with Your Doctor Program, L.P.**

- NCQA Level 1 Criteria in one day of training and rapid practice implementation and support
- Quality Management Program
- Integrate the Quality Health Record / e-Health into EMRs through partnership with SHARP-C
Medical Home Enables Electronic Coordination of Care

**Quality Health Record**
- Patient goals based on current knowledge guidelines and physician preferences
- Reconciliation of treatment plans and medications among treating physicians
- Treatment outcomes, satisfaction and risk factor linked to each condition in the Careplan
- Outcomes follow-up with patient and their understanding of treatment plan

<table>
<thead>
<tr>
<th>Personal Protocol</th>
<th>Diagnosis</th>
<th>Status</th>
<th>Risk</th>
<th>Interventions</th>
<th>Medications</th>
<th>Goals</th>
<th>Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>295.22</td>
<td>Active</td>
<td>Mild</td>
<td>Consult</td>
<td>Prozac 100mg</td>
<td>Goals</td>
<td>Value Spec</td>
</tr>
</tbody>
</table>

**Teleaccess with Specialists and Patient**

**Outcomes, Surveys and Reports**
- Peer review
- Quality improvement plans
- Avoidable ER visits / hospitalizations
- Adverse events evaluation

**Physician Quality Barriers and YDP methodology**

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<th>Physician barrier</th>
<th>YDP-MIIS method to overcome the barrier</th>
</tr>
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<tr>
<td>“I practice differently”</td>
<td>Physicians document their treatment preferences and use telespecialists.</td>
</tr>
<tr>
<td>“My patients are sicker”</td>
<td>Physicians collect risk factors as part of the care reconciliation process.</td>
</tr>
<tr>
<td>“I don’t believe the data”</td>
<td>Physicians and their staff collect the data.</td>
</tr>
<tr>
<td>“It takes too for an outcome”</td>
<td>We collect patient understanding and adherence data.</td>
</tr>
<tr>
<td>“No one pays me to do this”</td>
<td>We have a business model for financial incentives to drive adoption.</td>
</tr>
</tbody>
</table>
Quality Management Program

Communication / Data Mart
1. Integrate with systems
2. Goals defined, risk modifiers collected, patient educated about treatment plan / goals
3. Outcomes collected
4. Telemedicine training
5. Secure messaging

Credential / CME
1. Baseline Survey
2. On-line training
3. Customize protocols

Outcomes Analysis
1. Risk adjusted outcomes analysis
2. Physician specific

Institutional Quarterly peer review
1. Guides physician continuing education
2. Reports online
3. For Public Reporting

eHealth:
Secure Messaging, VOIP, Video, Health Information Exchange
Feedback