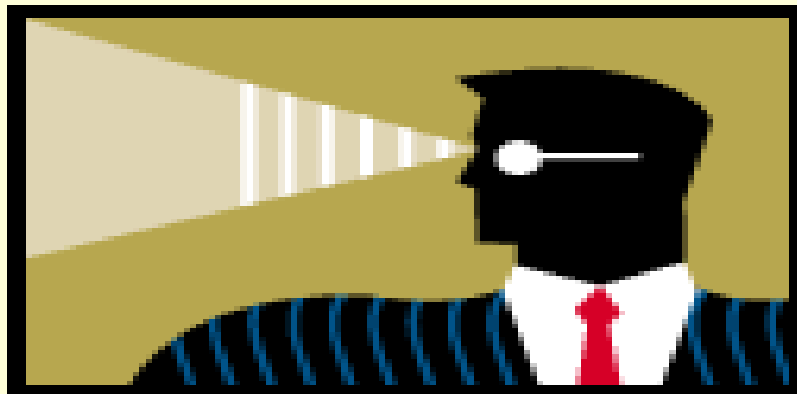


States "HITting" Back at Health
Care Cost and Quality
***The Science and Art of Health
Information Technology
Deployment and Adoption***

Anthony Rodgers

What is the Scope of Your
State's HIT Vision



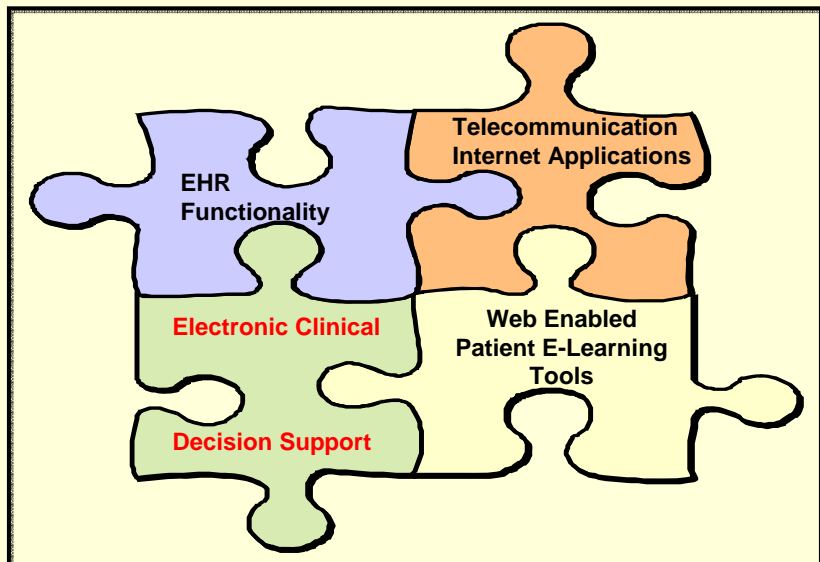
Science and Art of Large Scale HIT Initiatives

Science of HIT

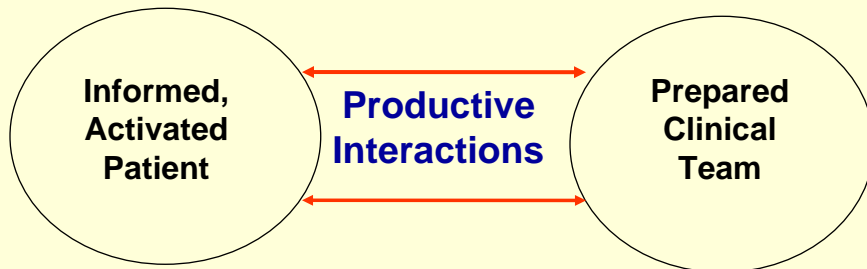
ART of HIT

<p>Know What to Do</p> <p>Common Vision and Understanding Goals, Objectives, Timing, Budgets Strategic Planning and Business Plan</p>	<p>Broad Based Engagement</p> <p>Level of Commitment Level of Accountability Level of Involvement Level of Confidence</p>
<p>Skills and Competency</p> <p>Leadership Technical Implementation Process Reengineering</p>	<p>Collaboration</p> <p>Stakeholder Trust Influence Equity Contribution Energy and Urgency</p>

Pieces to the Puzzle for a 21st Century Health Care System



Molecular Elements for Transforming Quality Patient Care Management



Return on Investment From HIT

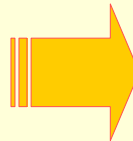


Wide Spread Adoption of Electronic Health Information Is a **Tool** to Achieve Improve Outcomes and Lower Cost

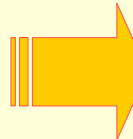
Improving Health care Quality and
Cost Performance

ROI of EHI at Point of Care:

- Improved Patient Safety
- Reduced Complications Rates
- Reduced Cost per Episode of Care
- Improved Quality Performance
- Reduce Administrative Cost
- Reduce Health Disparities



Better
Outcomes

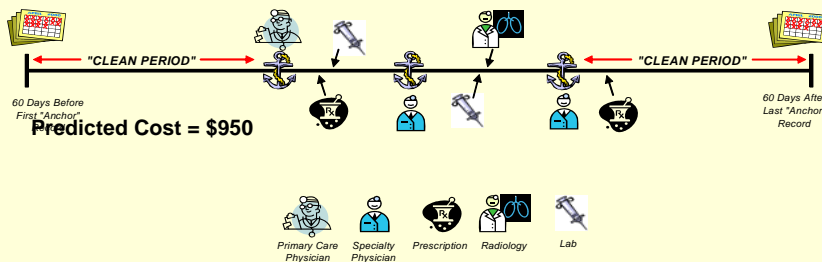


Lower
Costs

Managing both the Cost and Quality of an Episode of Care

THE LIFE OF A CHRONIC SINUSITIS (w/o SURGERY) EPISODE

Outcome Cost = \$1,020



First Anchor: You visit your Primary Care Physician for sinusitis. He gives you a prescription and orders blood work. He is concerned that you have a history of sinus infections, so he refers you to an ENT. The PCP visit becomes the first anchor and, because it has been more than 60 days since you have visited him for sinusitis, it begins the episode. The PCP visit, prescription and lab work together form a cluster within the episode.

Second Anchor: You visit the ENT. She orders a sinus X-ray and more blood work. You schedule a follow-up appointment. The ENT visit, X-ray and lab work form another cluster within the same episode.

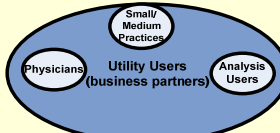
Third Anchor: You visit the ENT for your follow-up appointment. She tells you that the results of the tests came back negative. She prescribes a preventative medication to help reduce the occurrence of sinusitis. The ENT visit and prescription form another cluster within the same episode.

Conclusion: The medication worked and you have not been back to either doctor within 60 days from your last visit for this illness. Since it has been 60 days since the last anchor record for this illness, the episode is now considered concluded.

The Relationships Development for The Structural Phase

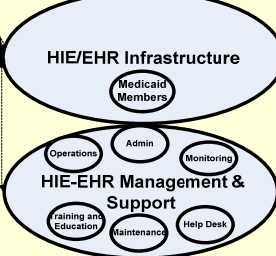
Data Partners are organizations that share or exchange data through the HIE-EHR Infrastructure e.g.

- Health Plans
- Hospitals
- Physicians
- Labs
- Imaging Labs
- Other HIEs
- Dept of Health Services Public Health
- Medicare
- Indian Health Services (IHS)
- etc.



Business Partners are organizations that expose web content and applications through the Utility web portal, for gain or mutual benefit, in other words, transact business through the Utility.

- e.g.
- Laboratories
 - Imaging
 - Suppliers
 - Durable Medical Equipment
 - Pharmacies
 - SureScripts
 - RX Hub
 - Other HIEs
 - etc

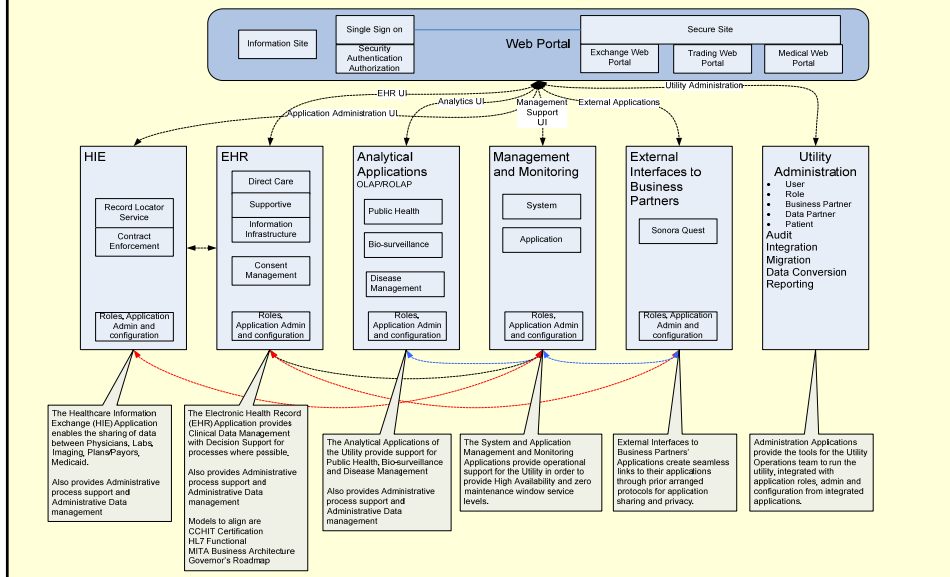


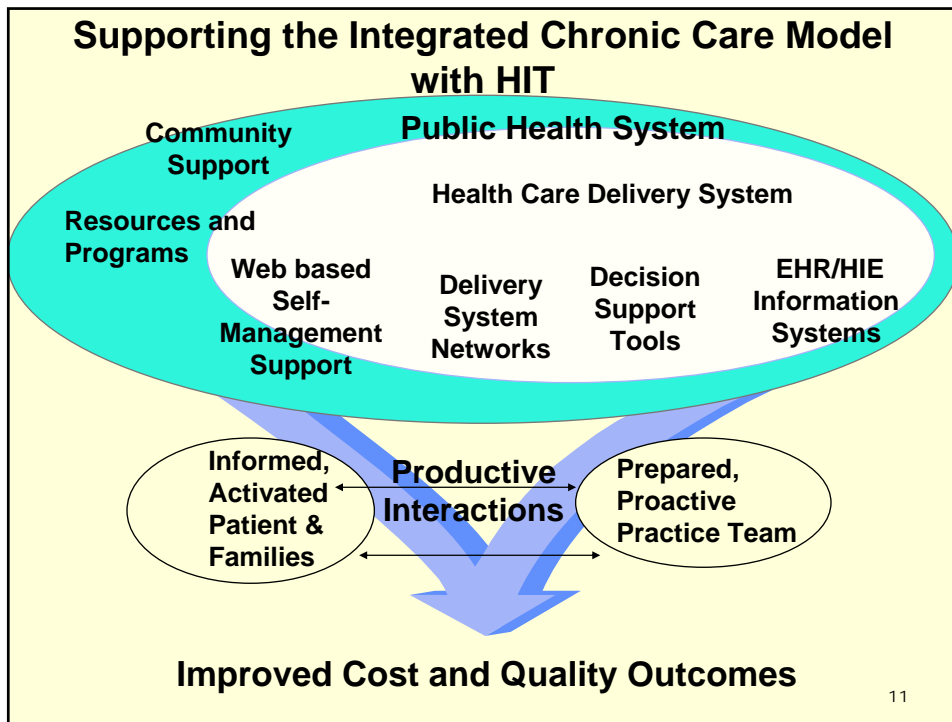
Utility Users are persons who use the functionality of the portal e.g.

- Physicians
- Small/Medium Practices
- Analysis users (TBD)
- Emergency Depts
- Dept of Public Safety
- Department of Health Services
- etc

Administrative and management users use the portal to access administrative and management applications supported by the portal.

e-Health Information Technology Environment





Minimum Requirements for “Meaningful Use” to Maximize the Value of EHR in Transforming Health Care System

Meaningful use of electronic health information by a health care provider requires:

1. The consistent viewing and updating of a patient’s relevant electronic health information as part of the normal tasks of a patient examination or visit using a certified electronic health record.
2. An authorized provider must be capable of viewing and exchanging health information with other health system providers involved in the patient’s care management.
3. Requires the exchange, display, and storage of medical, dental, and/or behavioral health information, patient histories, problems list, allergies, medication list, lab and diagnostic test results, and images, progress notes for the purpose of patient evaluation, diagnosis, treatment, and referral.
4. Utilization of E-prescribing and computerized order entry and results reporting functionality to maximize efficiency
5. Utilization of basic clinical alerts, messaging, and clinical decision support to assure consistent medical management.

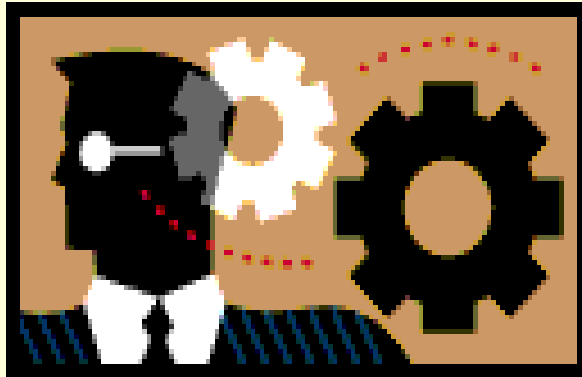
Meaningful Use of EHR to Improve Quality and Reduce Cost

- The ultimate VALUE of “Meaningful Use” is determined by the patient, payer, and society.
- The actual functionality and application configuration of the provider’s EHRs will be determine whether optimal “Meaningful Use” can be achieve.
- Organizing and training providers to achieve optimal “Meaningful Use” prerequisite to success.

EHR Functional Specifications Summary

- **E-prescribing** (med list, allergies, interactions, formularies, refills)
- **Clinical documentation** (medical history, problem list, SOAP notes)
- **E-referrals** (Continuity of Care Record (CCR) export, attachments, tracking)
- **Bi-directional core interfaces** (lab, radiology, hospital, other key service providers and practice management systems and health information exchange (HIE))
- **Clinical decision support** (EPSDT, chronic illness)
- **Eligibility verification** (Medicaid and others)
- **Practice management modules** (scheduling and charge entry, financial and administrative modules)
- **Patient portal** (secure messaging, scheduling, education, PHR)
- **Standard Reports and Delivery** (Medical Home, EPSDT, HEDIS and ad-hoc reporting tools)
- **Case Management, Dental, Behavioral Health, LTC**

Discussion and Dialogue



New Solutions for Old Problems

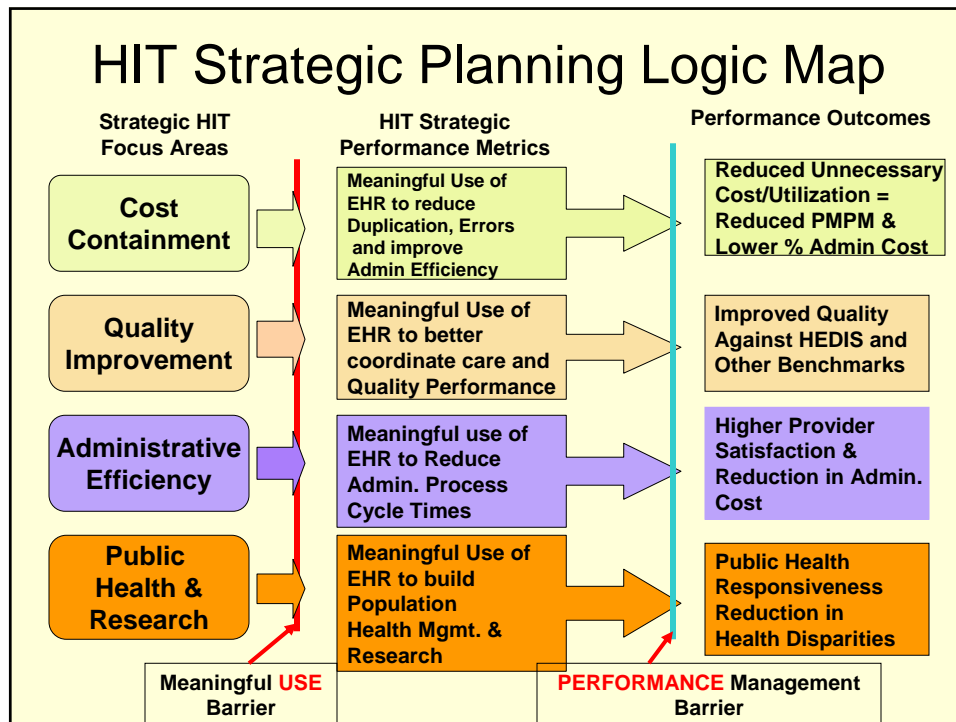
- Health Care Cost
- Access to Care
- Quality of Care
- Patient Safety
- Health Disparities
- Health Status Indicators

How to Approach State Level Strategic Planning for HIT to Maximize Meaningful Use

- Step 1: Establish Vision and Goals for HIT adoption
- Step 2: Perform an environmental assessment of the of the “as is” status of the adoption of electronic health records and the capacity to exchange relevant clinical records and document.
- Step 3: Develop a strategic plan and gap analysis, describing the “to be state” for deployment of Health Information Exchange Infrastructure and adoption of Electronic Health Records with the goal driving of health system transformation.
 - Widespread stakeholder involvement
 - Focus on the goals of health system transformation (Cost, Quality, Transparency, Accountability, Care Coordination)
 - Coordinate public and private sector initiatives
- Step 4: Establish the key leadership and HIT financing roles for statewide E-Initiatives.
- Step 5: Leverage existing infrastructure
- Step 6: Create the policy and legislative framework for Health Information Exchange and to encourage adoption of EHRs
 - Security, Patient Notification, and Confidentiality
 - Authority for state to lead or participate in E-health initiatives and Incentive programs
- Step 7: Secure public and private financial resources (grants, loan program, incentive programs, fees, or cost allocations).
- Step 8: Assist providers with technology implementation and practice process reengineering to maximize meaningful use.

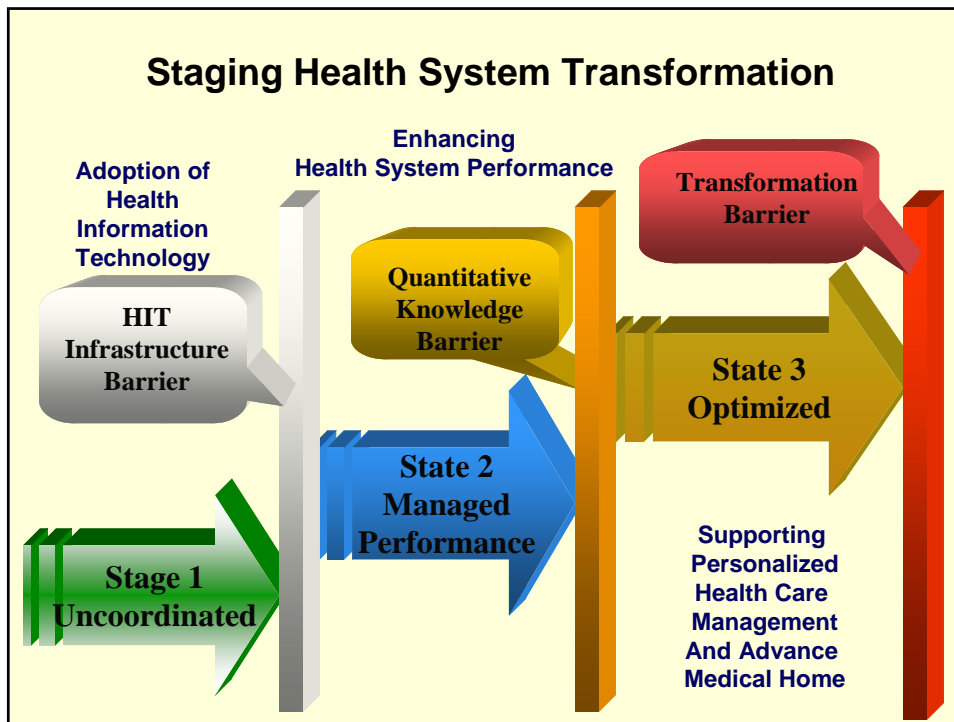
What are Your Goals for Health System Transformation

- Reduce Medical Cost Inflation
 - Eliminate duplication of service
 - Reduce patient errors
 - Assure cost effective care
 - Reduce fraud and abuse
- Improve Quality of Care
 - Assure evidence based best practices
 - Enhance prevention and early intervention
- Improved health system efficiency by reducing cycle time and improving patient care and business processes
- Reduce administrative burden and overhead cost for hospitals and medical practices
- Enhance integration and coordination of care
- Reduce cycle time between research discoveries and translation into clinical practice
- Improve patient self care management competency, health literacy, and engagement in wellness



Staging E- Health Development for Health System Transformation

- Infrastructure Development Stage
- The Meaningful Use stage
- The Meaningful Results Stage



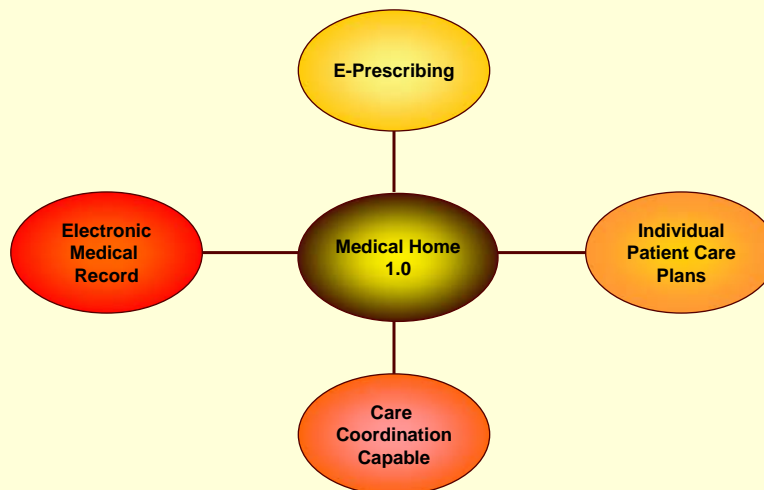
Infrastructure Development Stage

- Statewide in Scope
- Requires a broad based planning and strategy
- Driven by a common vision
- There must be a sense of urgency and accountability
- Must have a capital investment plan that involves both the public and private sector capital

Achieving Meaningful Use Stage

- Accounting for initial loss of provider productivity
- Practice reengineering and “system burn” in
- Using monetary and non-monetary incentives to drive up meaningful use
- Getting beyond health data entry to using health information Meaningful Use
- Getting “meaningful use” electronic health information beyond the provider office
 - Public Health
 - Patient Wellness and Self Management
 - Case managers and community resources
 - Payers, employers, policy makers

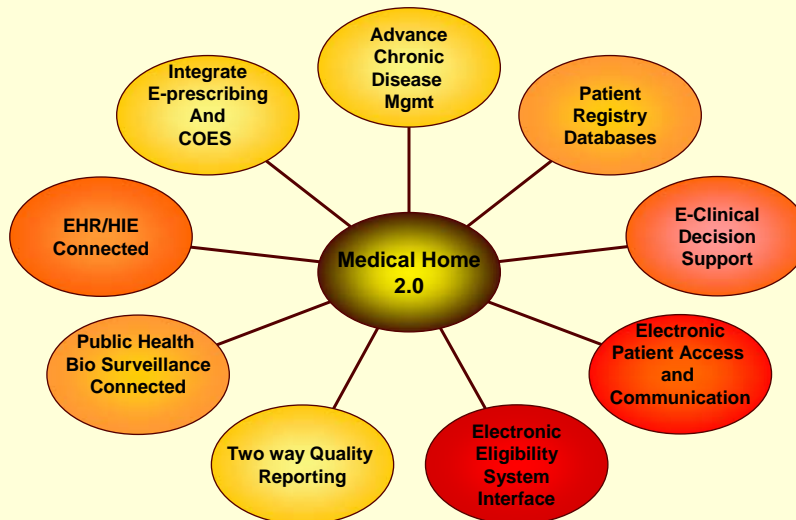
Basic Medical Home 1.0



EHR Managed Performance Phase

- Participation in quality networks for comparable performance analysis and improvement
- Medicaid specific configuration and effective use of clinical decision support
- Web connectivity with patients for compliance management (electronic reminders, messaging, and telehealth)
- Use of health e-learning tools for patient health literacy and compliance
- Electronic performance reporting
- Disease registries

Performance Management Medical Home 2.0

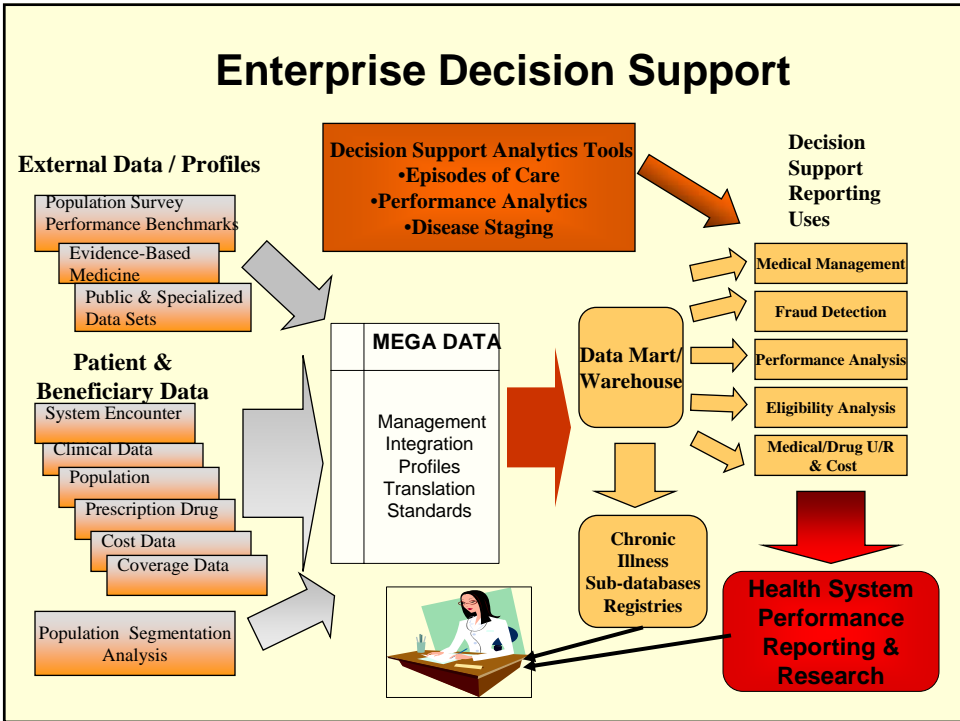
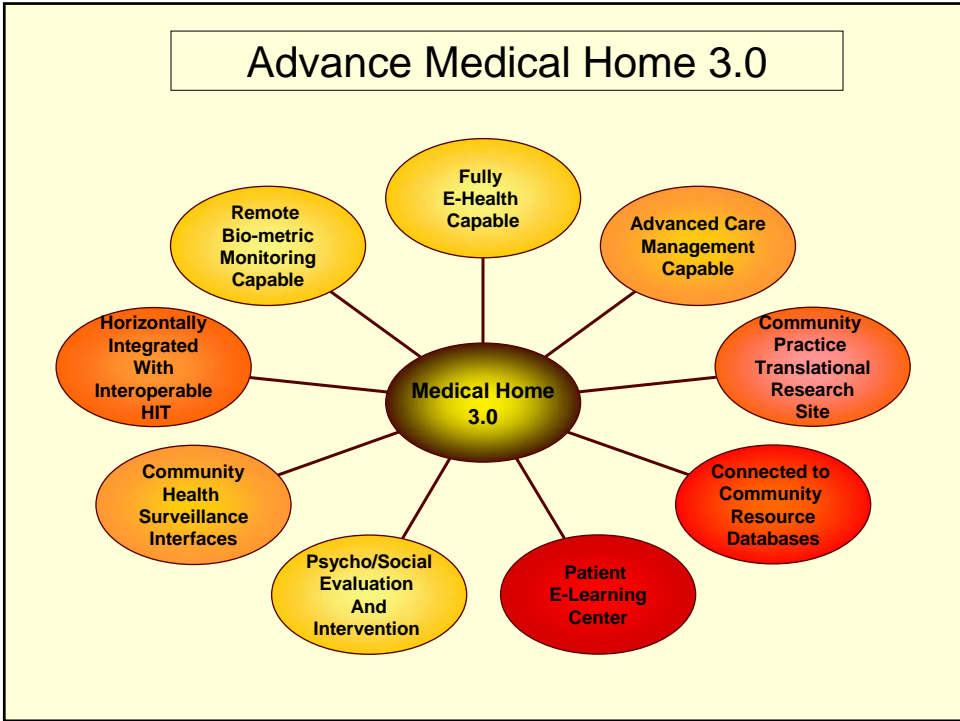


Optimizing EHRs Meaningful Results Stage

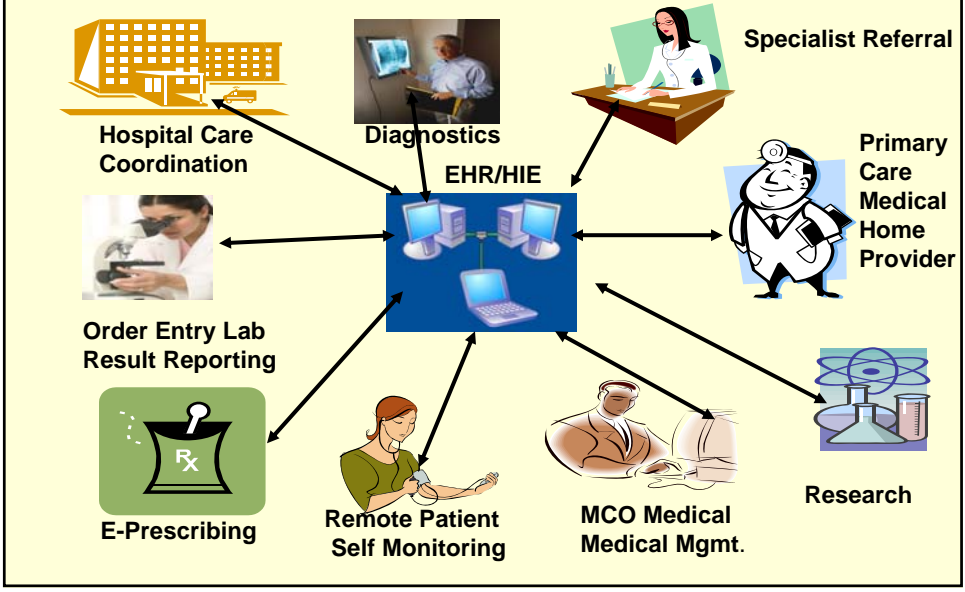
- Modeling and developing quality improvement “quantum leap” strategies.
- Developing and configuring new EHR/PHR applications and patient care support tools
- Extending the impact of EHR beyond the provider practice to community health and psycho/social domains
- The “advanced” Medical Home deployment

EHR “Optimized Use” Phase

- System configuration for optimization of patient management
 - Optimization analysis and system configuration
 - Training and support
 - Best practice
- Personal Electronic Health Record Extensions from the EHR
- Advanced messaging and alerts
- Integration of Web 2.0 functionality for patient support and care management
- Integration of remote monitoring tools, telemedicine, telehealth and health e-learning functionality and tools
- Integrated with health plan care management systems
- Translational research participation and quality network infrastructure



The E-Health Connected Medicaid Health System



Discussion and Dialogue

