How Information Technology Can Be Used to Improve Costs and Quality

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Objectives

- The Problem
- Evidence of Clinical IT Benefits
- The Business Case for Clinical IT
- Challenges to Overcome
Problems Needing Solutions

The Quality Chasm

- Inability to transfer knowledge into practice
- Highly variable performance
- Avoidable medical errors
- Unnecessary duplication & overuse of services
- Care delays
- Highly fragmented care
The Traditional Medical Paradigm is not Well Suited for the 21st Century

- Our cottage industry leads to poor coordination of care and quality and cost problems
- The paper-based system is increasingly non-viable
- Human memory-based medicine is increasingly unreliable
- Clinical data capture has become a business imperative
- Consumer expectations for improved care and service are rising
Clinical IT
Can deliver

- Approaches to advanced care planning (simple registries, reminder systems, protocols)
- Coordination across sites of care (patient is identified throughout system, locations)
- Shared decision-making technologies
- Multiple points of contact (email, web, phone)
- Chronic disease management models
- Support for patient self-care
The Call for Action

- Institute of Medicine
  - To Err is Human (1999)
  - Crossing the Quality Chasm (2001)
  - Fostering Rapid Advances in Health Care: Learning from Systems Demonstrations (2002)
  - Leadership by Example: Coordinating the Government Roles in Improving Health Care (2002)
Clinical IT Benefits

The published evidence regarding clinical IT benefits fall into 3 broad categories

- Improved quality, outcomes & safety
- Improved efficiency, productivity & cost reduction
- Improved service & satisfaction
Clinical IT Benefits

Peer reviewed literature & unpublished findings

- Reduction in medication errors
- Reduction in errors of omission
- Improved data capture & display
- Inpatient & outpatient utilization reduction
- Reduction of unnecessary diagnostic tests
- Better use of formulary & generic drugs

Citations available at www.kpihp.org

“Issue Brief: Summary of the Evidence of Clinical IT Benefits

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The Business Case

Returns on clinical IT investment include:

Financial or Quantifiable Benefits
- Reduction in operating cost
- Increased revenue
- Reductions in capital expenditure

Non-Quantifiable Benefits
- Quality of care
- Patient safety
- Patient care experience
The Business Case
Examples of financial benefits:

- Increased staff efficiency
- Decreased outpatient visit utilization
- Average length of stay reduction
- Reduction in forms and paper records
- Increased preferred Rx compliance/reduction in errors
- Improved billing
- Legacy system retirement
The Business Case
Why it continues to be elusive?

- Return-on-investment is a long-term proposition
- Costs are “front-loaded” – while benefits are “back-loaded”
- Benefits often accrue to others than those making the investment
- The business case hinges on several contingent success factors:
  - leadership commitment
  - timely implementation
  - coding compliance
  - workflow redesign
The Digital Divide

- A small minority of care delivery systems are positioned to overcome the barriers to clinical IT.
- But the vast majority of providers and institutions are not well positioned financially or organizationally to implement clinical IT.
- Public policy is needed to shrink this divide.
- Health care payer incentives can help.
Barriers to Implementation

- Costs
- Competing priorities
- The elusive business case for clinical IT
- Data standards need further development
- Data security and privacy issues
- Integrating legacy systems
- Many physicians practice signally or in small groups
- Resistance to change
Federal leadership

A federal strategic plan for health information technology over the next 10 years creates new momentum

- HHS purchase of SNOMED-CT for public use
- David Brailer, National Health Information Technology Coordinator
- Support standards development and adoption and interoperability
- Demonstration projects -- $100 million
Conclusion

- Information technology can bring substantial benefits
- At the same time, it is important to recognize that IT is not a cure-all - it does not assure that the right thing is done.
- Progress is being made but there is still much more to accomplish:
  - Complete work on standards
  - Create incentives for adoption
  - Remove barriers
- Governmental and private policy can help.