

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
 - Computer-based Patient Record (1991, 1997)
 - To Err is Human (1999)
 - Crossing the Quality Chasm (2001)
 - The Future of the Public's Health in the 21st Century(2002)
 - Fostering Rapid Advances in Health Care: Learning form Systems Demonstrations(2002)
 - Leadership by Example: Coordinating the Government Roles in Improving Health Care (2002)
 - Patient Safety: Achieving a New Standard of Care (2003)



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Peer reviewed literature & unpublished findings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

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 singly 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 - does not assure 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