OPTIMIZATION: MAKING INNOVATION THE NEW NORMAL

Rajendra Singh, Ph.D.
Arnold School of Public Health

Elizabeth A. Regan, Ph.D.
Department Chair, Integrated Information Technology
Assoc. Professor, Health Information Technology
THE VALUE IMPERATIVE

• Growing concern that many healthcare organizations are not realizing the value from their EHRs.
• Research indicates wide disparities in results and benefits of EHRs.
• Realizing value is about using technology to innovate, NOT about the technology itself.
Challenge of Realizing Value from EHRs

• How to engage your institution in meaningful change and improvements in day-to-day clinical practice that can achieve the Triple Aim?
  1. Improving patient experience
  2. Improving population health through higher quality
  3. Decreasing the cost of care.
INNOVATION IS A JOURNEY

• U.S. journey to EHRs started in early 1960’s with early innovators such as Beth Israel Deaconess (Boston), Kaiser Permanente, Mayo Clinic, Intermountain Healthcare and others.

• Issue: We can’t wait another 50 years to solve today’s problems!
DIFFERENT RESULTS REQUIRE DIFFERENT BEHAVIOR

• U.S. Healthcare System is perfectly aligned to get the results we are getting.
  ▫ the best healthcare in the world for those who can afford it, BUT with the highest cost in the world and 100,000+ deaths annually from medical errors, long waits, lack of access for many. Basically, we are on a trajectory that is not sustainable—or, many would suggest, desirable.

• Implication → If we want different results, we need to do things differently; we need to change the system
THE PATH FROM TECHNOLOGY TO VALUE IS NOT A DIRECT OR STRAIGHT LINE

EHRs → VALUE
**EHR Implementation: On Which Side of the Equation Are You is Your Organization?**

<table>
<thead>
<tr>
<th>EHR Results</th>
<th>EHR Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Adds work</td>
<td>• Saves time</td>
</tr>
<tr>
<td>• Slows things down</td>
<td>• More face-to-face time</td>
</tr>
<tr>
<td>• Decreases fact-to-face time</td>
<td>• Empowers patients</td>
</tr>
<tr>
<td>• Interferes with provider/patient relationships</td>
<td>• Improves care outcomes</td>
</tr>
<tr>
<td>• Doctors doing clerical work</td>
<td>• Reduces costs</td>
</tr>
<tr>
<td>• Usability issues</td>
<td>• Reduces errors</td>
</tr>
<tr>
<td>• New errors</td>
<td>• Allows seeing more patients</td>
</tr>
<tr>
<td></td>
<td>• Better management of patient treatment plans</td>
</tr>
<tr>
<td></td>
<td>• Better addresses patient issues</td>
</tr>
</tbody>
</table>

OR
CALL FOR INNOVATION

• Today’s healthcare system is out of step with current patient needs: an episodic care model trying to meet chronic care needs.
• Growing momentum for change.

• Challenge:
  ▫ How to make sense out of the growing clamor for change?
  ▫ How to determine the right direction for ourselves and our institutions?
Growing Momentum for Change
**Two Key Questions**

- **What goes wrong?**
  - Why is innovation such a rocky road?
  - Why aren’t we yet seeing the value of our $35 billion investment in health IT?

- **What to do about it?**
  - What accounts for the disparity in results?
  - How do we make sure we get it right this time? (Optimize EHRs to realize value from IT investments)
WHAT GOES WRONG?
Focusing on the Wrong Things for Achieving Value

- Value does NOT come from capturing information digitally
  - Value comes from how we use and share patient information at the point of care

- It turns out that the transition to electronic health information is just the FOUNDATION for building value—NOT the goal.
FOCUSING ON TECHNOLOGY INSTEAD OF CLINICAL PRACTICE

• Value does NOT come from customizing technology to fit how we have always done things.
  ▫ Value comes from using the technology to improve the way we do things and discovering new opportunities.
FOCUSING ON REIMBURSEMENT VERSUS MEANINGFUL USE

• Changes in Thinking do **NOT** lead to changes in behavior
  ▫ Changes in behavior **LEAD TO** changes in thinking.

• The purpose of Meaningful Use is **NOT** to pay for technology
  ▫ The purpose of Meaningful Use is to **incentivize** behavior change.
ENGAGING PHYSICIANS, NURSES, AND OTHER CLINICAL STAFF

- Buy-in does NOT lead to engagement
  - Engagement LEADS to buy-in
THE MATH OF INNOVATION

- Cost cutting does **NOT** lead to streamlined processes or better care;
  - Streamlining processes (integrating workflows & improving outcomes) **LEADS TO** lower cost.
Making Technology Investments Add Up

- Individual projects do **NOT** necessarily add up to improved outcomes or reduced cost. Silo projects are difficult, if not impossible, to sustain.

  - Value comes from **changing the entire SYSTEM** —not from changing isolated pieces.
Layering on Top Instead of Transforming

- Adding technology to existing process ONLY makes for expensive old practices.
- Using technology to integrate workflows and improve the continuity of care reduces cost and improves outcomes.
Turning HIPPA into a Road Block Instead of a Facilitator

- Patients are **NOT** concerned about the appropriate *USE* of information by clinicians.
  - Patients are concerned about potential *ABUSE* of their health information
- Tradeoffs of Patient preferences versus privacy and security of PHI.
MYTH OF RESISTANCE TO CHANGE

• People do NOT naturally resist change: Change is a natural process.
  ▫ People RESIST having changes—especially those they don’t understand—forced upon them.
WHAT DO SUCCESSFUL INNOVATORS DO DIFFERENTLY?

• Key question: Do organizations that achieve significant improvements in healthcare delivery and outcomes approach the use of health IT differently than those that fall short?

• To Answer That Question: We systematically studied research reports, case studies, award winners, and successful innovation in other industries as well.
WHAT TO DO ABOUT IT?
10 Critical Success Factors for Optimization

- 10 themes consistently reported by the most successful innovators.
- NOT just isolated factors, however.
- Studies of health IT outcomes frequently ignore people, process, and other dynamics that also affect outcomes
- Complex organizational interdependencies must also be addressed to align desired changes with institutional priorities, policies, practices, and reward systems. (Systems perspective)
#1: Active CEO Commitment and Leadership

- Visible leadership
- Sets a clear vision for future direction
- Builds strong buy-in
- Creates a compelling case for change aligned with organizational mission and direction.
- Aligns change initiatives with clinical improvement goals and individual self-interest.
- Views their organization as a complex interdependent system
- Walks the talk – connects the dots.
#2: Patient-Centered Care and Patient Engagement

- Put patient safety first
- Views IT as an opportunity to improve interaction between patients and clinicians
- Focus on two-way interaction rather than information push.
- Views health holistically rather than as episodic treatment of problems.
- Transition from task-focused, provider centric processes to an integrated team approach to care.
#3: Quality Focus with Clinical Benchmarks for Monitoring Success

- A culture of quality that started at the top
- Policies and benchmarks aligned with goals
- Focus on process improvement rather than cost cutting
- Clinical improvement goals collaboratively developed, explicitly defined, widely shared.
- Transparent tracking against benchmarks for success.
#4: **Workflow (Process) Integration**

- Workflow redesign focused on improving continuity of care, increasing efficiency, better outcomes.
- Workflow design—not technology—seen as key to achieving value.
- Leadership resided with physicians and nurses.
- Projects well planned, *orchestrated*, and resourced.
- Workflow redesign ongoing from Go Live.
- Focus on integrating old silos to provide better continuity of patient care.
- Innovation viewed as an iterative, learning process.
#5: Strong Leadership of Clinical Professionals (Physicians & Nurses)

- Strong, visible physician leaders with clear vision for how IT could help transform care.
- Effective “missionaries” in enlisting buy-in of peers.
- Strong nurse leadership equally as vital.
- Closer partnership between physicians and nurses in delivering care (team-based care).
#6: Engagement, Training, On-Going Support

- Clinician buy-in and engagement critical
- Training both initial and ongoing
- Training viewed as a means of engaging staff members in implementation
- Training used as an opportunity to reinforce best practices
#7: **Supportive Organizational Climate for Innovation**

- Support culture (or climate) for innovation cascaded from the top and clearly aligned with institutional mission
- Technology and organization transform each other
- Flexibility essential
- Innovation is **iterative**—feedback, dialog, interventions, activities
- Tolerance for failure
#8: Collaborative Culture (Teamness)

- Buy-in to change comes through engagement
- Teamwork is a major pillar
- Broad consensus about importance of effective and efficient care
- Bridging the many silos of care to reintegrate care for patients
- Collaboration essential to get a 360 degree look
#9: **Systems Perspective on Change**

- Achieving Value from IT is directly related to the breadth of integration it provides across all parts of the healthcare delivery system.
- Strategic focus on improving the healthcare SYSTEM rather than implementing isolated projects.
- Realignment of clinical practice from perspective of continuity of patient experience
- Eliminating gaps in care
- Employed multidisciplinary approaches that recognized the interdependencies among units and functions
#10: Technology Reliability, Responsiveness and Interoperability

- Usability
- Reliability
- Security and Privacy
- Local technical support
- Importance of fitting system capabilities with institutional practice and priorities
- Inadequate training often misdiagnosed as a usability issue.
- Interoperability—essential for information sharing within systems, across systems, and among institutions.
**Summary: 10 Factors that Differentiate Success from Failure**

1. Visible CEO commitment and leadership
2. Patient-centered care and patient engagement
3. Quality focus with clinical benchmarks for monitoring success
4. Workflow (process) integration
5. Strong physician leadership
6. Training and involvement
7. Supportive organizational climate for innovation
8. Collaborative culture (teamness)
9. Systems perspective on change
10. Technology reliability, responsiveness and interoperability
**Take Aways**

- To a certain extent, patients will drive change as they embrace innovations that better meet their needs and expectations for:
  - Immediacy
  - Choice
  - Personalization
- IT and the Internet have transformed almost every industry.
- The Winners of the technology-enabled transition have been those who have turned the challenges into opportunities.
- The status quo is not a viable option: Changing the U.S. healthcare system is essential if we expect to achieve different results, and achieve more than marginal improvements.
- The 10 critical success factors give us insight into navigating the complex process of realizing the value from the transition to digital information.
THANKS FOR THE OPPORTUNITY TO SHARE THIS RESEARCH AND PERSPECTIVE ON SUCCESSFUL INNOVATION.

• Questions?

“There is always a market for doing the right things well.”