

McCombs Knowledge To Go



October 12, 2010

Innovation and Information in Health Care Delivery



by Professor Reuben McDaniel

- **My research goal, and the goal of those I have been working with over the past twenty years, has been to find ways to improve the delivery of health care.**
- **Not finding a cure for cancer – MD Anderson Cancer Center**
- **Not eradicating Polio – Gates Foundation**

- **Our goal is to help make the delivery of care more effective and efficient.**
- **We are studying a wide variety of institutions that deliver care.**
 - Hospitals
 - Nursing homes
 - Primary care clinics

Innovation and Information in Health Care Delivery

- I am not going to be reporting the results of research completed. This work had been published and can easily be accessed through the public record.
- I am going to be sharing the latest work that I have been doing. This work is built on previous work but is at the very edge of my thinking.
- This is where I am going at the present time and I hold these ideas very gently because they are all in the process of development. Any feedback or comments that you might have will be very welcome.

- **Also, this work is the product of the efforts of a number of people with whom I work and although I may sound as though I own these ideas, I don't. Almost every day, I am discussing these notions with my colleagues from around the country and I owe them much more thanks than will be apparent from my remarks today.**

Where am I going with this presentation?

- 1. The Problem**
- 2. Five Factors**
- 3. Critical Activities**
- 4. Struggle for Innovation**
- 5. New Roles for Health Information Technology**
- 6. Conclusions**

The Problem

- **We are convinced that we often work on the wrong problem.**
- **Why? Because the insights we think we have about the health care delivery system are inconsistent with our observations of the world.**

Mistakes that We Make

- **Doctors are smart but we treat them as though they are dumb.**
- **We treat nurses as commodities.**
- **People want to live forever without any troubles and die painlessly.**
- **Neither providers nor patients think like “economic man” when engaging with each other around an illness.**

Confusion

- **No one seems to be sure what either the dependent or the independent variables are.**
- **We have figured out that context really matters but we don't know how.**
- **The interdependencies among the critical variables are most certainly nonlinear but we have no way to calculate the magnitude of the effects.**

Examples of our Confusion

- **When is it true that more care is less?**
- **When is more expensive care better?**
- **Under what conditions can I let my patients die?**

Models We have been using to Understand the Health Care System

- **Control model**
 - Laws
 - Regulations
- **Economic model**
 - Markets
 - Competition
- **Process model**
 - Production
 - Decision making or problem solving
 - Learning

- **In a very real sense the health care system is all of the above but each model leaves out some very crucial variables and crucial information about the interdependencies among key variables.**
- **The “solutions” generated can sometimes be very helpful but they can also lead to great distortions.**

Electronic Health Records

- MD sees EHR as system for getting paid
- Medical record as a record of transactions
- Medical record as a record of an investigation
- Paper record as a record of a process
- Electronic record as a record of events
- EHR as a way to achieve homogeneity
- EHR as a platform for learning

Failures

We often fail to recognize a critical point, namely the fundamental uncertainties in health care.

And

We often fail to recognize that the goals of health care systems should be framed in terms of the human aspects of care; we cannot simply look at the system as a place where we do something to someone for a price.

Factor One

Client influence over outcomes

- a. Xxx
- b. Xxx
- c. Xxx
- d. Xxx

Factor Two

Variable and indeterminate technologies with nonlinear interdependencies among the technologies

- a. Xxx
- b. Xxx
- c. Xxx
- d. Xxx

Factor Three

Highly variable time horizons

- a. Xxx
- b. Xxx
- c. Xxx
- d. Xxx

Factor Four

Difficulty of cost-benefit analysis

- a. Xxx
- b. Xxx
- c. Xxx
- d. Xxx

Factor Five

Direct participation of professionals and other knowledge workers in care delivery

- a. Xxx
- b. Xxx
- c. Xxx
- d. Xxx

Critical Activities

- We used to believe that success in health care delivery was a function of knowing what to do and then doing it.
- Present efforts to improve the effectiveness and efficiency of health care systems are predicated on this belief
 - Guidelines
 - Evidence-based medicine
 - Alignment of incentives
- Recent research has shown that this is not enough; not nearly enough

Critical Activities

- **The effective and efficient delivery of health care requires that we pay attention to:**
 - Sensemaking
 - Learning
 - Improvisation
 - Knowing
 - Doing

We have been Studying

- **Relationships**
 - Participation
 - Practice Jazz
 - Trust
- **Conversation**
- **Reflection**
- **Mental Models**
- **Organizational Climate**
- **Surprise**

Struggle for Innovation

- **Innovation is a change in the thought process for doing something, or the useful application of new inventions or discoveries. It may refer to incremental emergent or radical and revolutionary changes in thinking, products, processes, or organizations.**

Struggle for Innovation

■ Thinking

- Shifts in roles and relationships
- New conceptions of value and performance

■ Products

- Self-monitoring equipment
- Decision support systems

■ Processes

- Continuum of care
- Health neighborhoods (process not a place)

■ Organizations

- Retail medicine
- Nationwide care

New Roles for Health Information Technology

- **Sensemaking**
 - Conversations
 - Reflection
- **Learning**
 - Feedback
 - Modeling
- **Improvisation**
 - Surprises
 - New lens
- **Knowing**
 - Wikipedia
 - Experts
- **Doing**
 - Audit Trails
 - Individualized

Conclusions

- ✓ **Access**
- ✓ **Quality**
- ✓ **Cost**

- **We are at the very edge of where we can go without radical changes in the way we think about health care delivery**

Conclusions

- **Five Factors**
- **Critical Activities**
- **Innovation**
- **Roles for HIT**

Please Give Back to McCombs!

This webinar has been brought to you by the McCombs MBA Alumni Advisory Board, coordinated by alumni for the benefit of the Alumni Network.

Please get involved with the Alumni Network!
All alumni benefit when we work together to build the quality and value of the Alumni Network and the McCombs brand.

Time: Get involved in your local club
Talent: Mentor another alumni or speak at a future webinar

Treasure: Make a donation to McCombs

www.mcombs.utexas.edu/alumni

Give Now

Suggested fund: *MBA Alumni Excellence Fund*

Please use response code **KTG**

Send me your feedback -- jmbock@gmail.com