

**A National Web Conference on the Socio-technical Aspects of Health IT:
Index of Questions and Comments**

Presented by the Agency for Healthcare Research and Quality (AHRQ) and its
National Resource Center for Health IT
March 28, 2007

Panelists

Pascale Carayon, University of Wisconsin-Madison
Ben-Tzion Karsh, University of Wisconsin-Madison
Ross Koppel, University of Pennsylvania

Moderator

Michael Harrison, AHRQ

Q: Do you have suggestions for convincing an organization that evaluating workflow, environment, etc, is important?

Q: Do you have a recommended reference list for planning tools and analysis?

Q: Can a small practice HIT project succeed when physician leadership in that practice does not see the need to perform retro or prospective analyses? Yet, they have bought in, from a monetary perspective - only.

Q: How important is addressing the culture of an organization as a fundamental element of a successful change effort in adopting technology?

Q: There are historic and recent examples showing the importance of this analysis before implementation. General Motors lost billions of dollars and a decade to Japanese auto manufacturers because GM implemented IT top down. See Thomas Kochan of MIT's account. A hospital in Vancouver only a few years ago had hundreds of medical errors for the same reason, according to news accounts there.

Q: Would like panel at some point to discuss socio-technical issues in physician offices as well as the hospital focus. Successful adoption in ambulatory care is in fact a very large issue for RHIOs and other initiatives.

Q: Dr. Koppel - could you please mention again the journal for the recent study you mentioned, that described "successful" CPOE systems as those that are homegrown.
Thank you.

A: Chaudhry B, Wang W, Wu S, et al. Systematic review: Impact of health information technology on quality, efficiency, and costs of medical care. *Annals Int Med.* 2006;144:742-752.

The Chaudry article was funded by AHRQ's HIT program. The articles as synthesized by RAND can be found, in searchable form, on AHRQ's health IT website:

<http://healthit.ahrq.gov>. It's the "Costs and Benefits Database." [thanks to Carol Cain for this information]

Q: There are historic and recent examples showing the importance of this analysis before implementation. General Motors lost billions of dollars and a decade to Japanese auto manufacturers because GM implemented IT top down. See Thomas Kochan of MIT's account. A hospital in Vancouver only a few years ago had hundreds of medical errors for the same reason, according to news accounts there. The VA system hosts an annual conference to test pilots with the "people who touch the patients" - doctors and nurses, plus pharmacists - a team of three from each facility. It does so because its experiences when it didn't were so dire.

Q: I wonder why you all have not discussed the software development life cycle process in the discussion of S-T aspects of HIT? Even in the implementation of COTs products, proper SDLC indicates that these issues are to be considered prior to installation?

Q: Please elaborate on how organizational justice affects HIT implementation success?

Q: Is there a version of the presentation that focus on the EHR implementations in a Payer organization?

Q: I am interested to know more of the timing and pacing of involving specific users (the last point made)

Q: As a leader on a project to implement an off-the-shelf EHR in 3 systems of ambulatory care clinics, I find the model and all of the factors to be very relevant to our experience.

Q: Just a comment, never underestimate that if you do not consider all variables for easy of use, time effectiveness, etc the staff will find a work around. I was recently told of a facility that the nurses had short cut the new technology for med adm, by making copies of the pt's ID bracelets thus saving them a few steps and what they saw as having to waste time however totally defeating the risk management functionality!

Q: What kinds of theories or empirical evidence from behavioral and social science have you found helpful, if any

Q: Typically who owns the "reengineering" process in a hospital environment? Using CPOE as an example we know that implementation is 10% technology and 90% reorganization of workflow. Who should really own the implementation process?

Q: Is there a bibliography of the articles and books referenced in today's call...it would be helpful for follow-up learning after the call.

A: The NRC has compiled such a bibliography. It is available at http://healthit.ahrq.gov/portal/server.pt/gateway/PTARGS_0_1248_227342_0_0_18/SocioTechnical_Resources.doc

Q: We as a society are enamored of technology. The software vendors market their stuff like cars. Look at the ads. Technology is sexy, workflow is not sexy. Plus, there is no "value" for a vendor to sell workflow. What are they selling? So until organizational culture completely changes to recognize the primary importance of what you are discussing, we will continue to have millions spent on disruptive and even useless software. So the question is, how do we change the organizational culture, or maybe our own culture to take the focus off technology and put it back on people.

Q: Can you discuss the difference between super users (years of experience) vs the average user? Is this consider "user input"?

Q: You have discussed these issues primarily as they apply to the hospital setting. Are there different dynamics or considerations that apply to an HIT implementation across a network of physician practices?

Q: From the experience of a home-grown system, how is technology determine to be the tool? We have found that folks immediately jump to the computer for the solution.

Q: Often, HIT is implemented across organizations to provide for improved public health system operations i.e. immunization registries. How are implementation strategies different when technology is not specific to an organization, but requires cooperation amongst multiple agencies?

Q: Today's presentations focused on HIT implentations in hospitals or physcian offices. I wanted to know if there was any presentations available to suite HIT implementations in a Payer organization (health insurance)?

Q: vendors, particularly in ambulatory, make considerable revenues (hourly consulting) from implementation -- no incentive to see this become more efficient

Q: one comment on sharing - there is research to show that many people when faced with problems, often think that their problem is unique and hence solutions from other context may not be applicable to them. A warped kind of not-invented-here syndrome.

Q: How do these concepts apply when you are using HIT to help the health care provider to identify new work flows and processes to improve their quality and productivity, such as EHR systems

Q: In other sectors, such as public health care, there are learning networks that are forming to discuss critical issues, problems that they have faced in a "learning/problem solving" atmosphere. The results have been published by the Robert Wood Johnson

Foundation.

Q: I'm interested in the effects of robust audit trails on work flows, regulatory oversight, liability and even reimbursement.

Q: Consultants are exploring methodologies to shorten the timeframes for implementation. Are you working with any firms to incorporate the human factor elements into their methods?

Q: The Oklahoma Department of Mental Health and Substance Abuse seconds the motion of a need for a resource center for HIT issues and usability issues with HIT.

Q: Technology cannot drive solution, it can only support it

Q: Re the need to share information, this should be user driven. We could set up a blog to share this type of information and experiences. There is no need to spend millions setting up a system for this.

Q: the DOQ-IT project that QIOs all over the country are participating in is reaching at least 5% of primary care practices across the US.

Q: I have to disagree with your comments regarding the physicians. It was my experience that after 4 weeks of use the ED docs refused to use the EMR. Our team wanted to talk with the group - address their needs to come up with solutions. Of course that is the way to go and they are your way to measure the effectiveness of the system (where do/can improvements be made for them) We were eager to address. No opportunity was afforded the implementation team or vendor to meet with the doctors. The physicians had final say - after only 4 weeks. My point, yes we must improve through communicating with staff but the hospital administration must also support the implementation to the fullest.

Q: DOQ-IT has a number of accessible websites--doq-it and medqic--that are variants of the national database. CMS thus has access to the work products of all of these QIOs that have developed all kinds of tools for HIT implementation. CMS and AHRQ need to work together.