ADOPTION

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Let Curiosity Cross the Chasm

Reducing Physician Resistance

N A RESEARCH PAPER presented at the Institute of Electrical and Electronics Engineers (IEEE) 2013 46th Hawaii International Conference on System Sciences, Anol Bhattacherjee, Christopher Davis, and Neset Hikmet1 confront a problem all of us in health information technology (health IT) face at one time or another: physician resistance to or non-acceptance of the health IT we all hope will help to solve many of healthcare's current dilemmas. This crucial human element is a very real impediment to realizing the myriad benefits of health IT, including reducing costs, eliminating inefficiencies and errors reducing patient safety, not to mention complying with very specific regulations to demonstrate progress toward these goals.

CAUSES AND CONFLICTS

The authors suggest that both non-acceptance, i.e., non-use resulting from lack of awareness or incomplete evaluation, and resistance, i.e., consideration and rejection, stem from a variety of causes. While difficult to predict for all potential users, these causes include five kinds of conflict: object conflict—purpose of electronic documentation; tool conflict—technology used to document; community conflict—definition of different peer groups sharing information; role conflict—traditional versus modern division of labor; and rule conflict—norms, conventions, and social relations defining how we perform work.

Some of our change management colleagues believe factors like physician demographics play an important role. For example, they predict that as older physicians less familiar with computer technology retire and younger providers steeped in the use of the Internet and smart devices, whose training is in fact driven by these new means of communication begin practices, we will reduce or eliminate many of the above conflicts. There is some research to support this theory. A *Health Affairs* study found that in 2011, 30.8 percent of physicians older than age 55 were using a basic electronic health record (EHR) system, compared with 40 percent of doctors younger than age 40 and 35.5 percent of doctors aged 40 to 55.2

Certainly, non-familiarity with the tools of health IT is a justifiable concern. However, physicians for the most part, possess an innate curiosity. Many are quick to embrace technology that directly affects diagnosis and treatment: advances in radiology and surgery, for example, often involve highly complex technology, and their adoption does not face the same kind of resistance as health IT, as example, computerized physician order entry (CPOE). In addition, these kinds of innovation seem to cross provider demographics, suggesting age is not necessarily the primary cause of tool conflict. In fact, the study previously referenced found that while we could draw an age-related conclusion regarding EHR use, it was not necessarily physician age, but the nature and size of older physicians' practices, that was a distinguishing factor.2 In addition, applying effective change management techniques regardless of provider age, such as one-on-one training and personalized attention during cutover, can help reduce tool-related anxiety.

The benefits of increased, more timely and accurate information, ultimately resulting in improved patient safety and care, seem more than sufficiently documented to overcome most if ,not all object conflicts. Likewise, the ability to share information with a larger, more diverse group of peers, implicit in a "big data" sharing environment, merely expands the community of providers rather than changing it in any significant way. Effectively exploring and communicating these benefits as part of a comprehensive change management plan can help reduce these kinds of com-

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munity conflicts. Including physicians in the requirements definition, acquisition, configuration, testing, and cutover to a new system also ensures they have a vested interest and a voice in the future of an organization's health IT.

Common sense and our own experience tell us to also look at the velocity of current changes brought about by required compliance with MU and other standards. In any industry, the sheer volume of change would be overwhelming – some level of resistance is a natural response. As we cited in the past, over 80 percent of multi-million dollar IT projects in ALL industries fail – it's not just a healthcare problem. However, a 2013 article in the *Interactive Journal of Medical Research*[3] seems to suggest that 80 percent failure rate is unique to healthcare. That is simply not the case. We have always maintained that applying best practices that work outside healthcare, like proven project management, technology management, and change management methodologies, is critical to improving both project success and physician acceptance. In particular, an effective change management strategy breaks down the large amount of required change into manageable segments, measuring organizational and individual capacity for change and responding with appropriate tools and techniques.

But we still have not addressed role and rule conflicts, which may be a place to look for new answers.

Many believe that problems related to who is responsible for what information, i.e., the roles conflict, originate with CPOE, which transfers the bulk of responsibility for data entry to the physician or point-of-care provider. However, Bhattacherjee, Davis, and Hikmet[1] find the conflict is "caused by a general shift toward managed care in the USA, rather than by the CPOE system." In other words, it is again not so much a tools issue.

As far as rule conflicts, "some physicians felt that the ... system was changing the way they always practiced medicine, by forcing them to abandon practices that were consistent with the professional norms of their community and adopt practices that were not sanctioned by their professional community."[1] This is not an insignificant hurdle. However, we can mitigate it through the use of effective change management practices so that the changes are more gradual and at a pace suitable for individual caregivers—particularly if they use their input as the basis for designing standard order sets and other key templates.

So we see that effective change management should significantly improve the likelihood of health IT project success, reducing physician resistance and non-acceptance by addressing object, tool, community, role, and rule conflicts.

But chances are even after resolving all these roadblocks, we are still likely to encounter either resistance or non-acceptance or both. So what is the real problem that physicians appear to have with adopting health IT, if it is not the physicians themselves or the technology that everyone hopes will improve healthcare?

Perhaps we are managing the wrong change, and in the process, overlooking a critical aspect of providing healthcare.

Yes – implementing an EHR definitely shifts recordkeeping responsibility and can impose an uncomfortable or unfamiliar standard in order to maintain consistency and meaningful data sharing. Yes – much of the new responsibility falls on physicians as more and more information is being recorded at the point of care. But the truth is that the physical act of documentation itself has *always* been problematic and often the least liked part of the physician role. Adding the conflicts previously identified only amplifies an already tedious necessary evil. No matter how strong a caregiver's curiosity about any new means for collecting, analyzing, and applying patient, illness, and treatment information, it may not be strong enough to overcome resistance to already disliked, and now even more time-consuming, activity.

After some additional research, we may find that a key to physician resistance to health IT is not health IT itself. If so, we need to rethink how we approach the problem.

Applying effective change management tools, such as personalized training, one-on-one meetings, hands-on demonstra-

tions, and clearly defining and demonstrating the benefits resulting from new documentation practices will help to reduce both resistance and non-acceptance. But we need to make sure our change arsenal emphasizes ways to pique physician curiosity, to present historically unpleasant tasks in such a way that we harness that positive energy to overcome hesitation and potential rejection. **JHIM**

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REFERENCES

1. Bhattacherjee A, Davis C, Hikmet N. Physician Reactions to Healthcare IT: An Activity-Theoretic Analysis. System Sciences (HICSS); 2013 46th Hawaii International Conference; January 7-10, 2013: 2545, 2554.

2. Ackerman K. Age is just a number: does it hold true for EHR adoption? *iHealth Beat*. July 23, 2012. Available at: www.ihealthbeat.org/features/2012/age-is-just-a-number-does-it-hold-true-for-ehr-adoption.aspx. Accessed April 9, 2013.

3. Nambisan P, Kreps GL, Polit S. Understanding electronic medical record adoption in the United States: communication and sociocultural perspectives. *Interact J Med Res*. 2013;2(1):e5

Available at: http://www.i-jmr.org/2013/1/e5/, doi:10.2196/ijmr.2437, PMID. Accessed July 10, 2014.