North Coast Physician
March 2013

Medical Fragmentation

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Medical practice, over the past 35 years, has undergone changes that have been little short of revolutionary. We, who trained in the 1970's and 80's wouldn't recognize the training of today's physicians. When we were in training we had a panel of hospitalized patients that we saw for their entire illness. Our attendings rotated with us for a month, and, at least from our viewpoint, there was a lot of stability in the composition of our medical teams. And while we worked long, inhuman hours we were able to keep on top of what was going on, and what needed to be done.

Today's physicians in training have a completely different work environment. Because of new safety regulations, no one works more than 18 hours, there are more hand-offs from physician to physician, attendings are present for only a week or so, rather than the full month. Because of EMR, we're all being drawn toward the computer, and answering to its demands, rather than that of the patient. (See "Deal with the Patient, not The Computer" *NCP* April 2011). The available number of medications, diagnostic tests, imaging technologies, and other interventions have increased astronomically. While this enables us to "do more" for the patient, it also increases the number of people involved in the patient's care. With the addition of each new team member, the patient's complexity of care increases exponentially.

The changes that have occurred during medical training have also been replicated in "the real world." Very few, if any of us, now take care of hospitalized patients. Inpatient care has now been delegated to hospitalist physicians, who like today's residents, rotate in 12 to 24 hour shifts. As the number of people involved in patient care increases, the likelihood of medical error increases proportionately[1].

The increased number of new communications technologies threatens to drown us all in a sea of information overload. Cell phoning, texting, tweeting, face-booking, e-mailing, and faxing hammer us with a constant data stream. Ironically, as we all become more "interconnected" we become more atomized. We become less able to actually communicate and talk to someone. When a patient now enters the hospital, he is going into a big black box. It is seemingly hard, if

not almost impossible, for the inpatient doc and the patient's outside physician to talk to one another. In other words, medical care is becoming increasingly fragmented. This is no one's fault. It's an unintended consequence of the increased volume of communications stemming from all the new technologies. Who has the time to wade thru phone menu systems, or check their tweets on their cell phone in the middle of meeting with a patient? Either the patient or the caller gets shortchanged. Vital information ofttimes does not get transmitted.

These changes are not unique to medical practice. It's happening in all spheres. But since medicine is so intensely personal, these changes are especially acute. As automation increases, we interact less with one another. Now this may not be that big a deal if one deals with an ATM rather than a bank teller, but it is a huge deal if one is communicating critical information.

While it is possible for the hospitalist physician to have "Read Only" access to a patient's outpatient medical record, it still isn't common, and I wonder how often physicians actually take advantage of that availability. Having access to a medical record, while important, cannot take the place of the two involved physicians actually talking to one another.

With inpatient docs changing every 12 hours it's difficult, if not impossible for the patient's personal physician to actually speak with the hospitalist. People are proposing centralized "Health Information Exchanges" (HIE), but so far results are quite discouraging[2]. As it is now, just in the interchange between St Joseph's or Mad River's EHR's and what we have in our files are often in disagreement, and sometimes just flat out wrong. It may take me weeks to figure out just what transpired when one of my patients was admitted. For many of my complex patients there have been major changes in medications and therapies, and it takes quite a while to "get up to speed," once the patient comes back to my care. This could potentially result in something extremely important not getting done in a timely or appropriate manner.

In our office we are in the process of adopting a "pod" structure of the workspaces of providers and other members of the team. This allows us to informally talk to one another, share tips and generally brainstorm. This is also mirrored in private industry as Google and other IT giants are designing there office spaces around open "bullpens," that allow employees to interact informally[3]. Obviously, we can't "bullpen" with hospitalist docs, but I see no reason that it couldn't be done electronically: a secure patient oriented chat room. It isn't as good as a conversation, but it's better than nothing.

We went into medicine to deal with people, not communications systems and electronic checkboxes. We're losing an important human element that may ultimately hurt patients. As we are drowning in information overload and fragmentation we should keep in mind the words of TS Eliot from 1934:

"Where is the wisdom we have lost in knowledge

Where is the knowledge we have lost in information"– *Choruses from "The Rock"*

NOTES:

1. Hardeep Singh,; Eric J. Thomas,; Laura A. Petersen,; David M. Studdert, "Medical Errors Involving Trainees: A Study of Closed Malpractice Claims From 5 Insurers" *Arch Intern Med*. 2007;167(19):2030-2036.

2. Yasnoff, W, Sweeney, L & Shortlife, E "Putting Health IT on the Path to Success" *JAMA* 309:10 pp 989-990 March 13, 2013

3. Surowiecki, James "Face Time" *The New Yorker* March 18, 2013 p 26

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