



Pittsburgh Regional Healthcare Initiative

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Monongahela Valley Hospital on Medication Safety

Confessions of a doctor with bad handwriting

“It would be a good thing for the world at large, how ever unprofessional it might be, if medical men were required by law to write out in full the ingredients named in their prescriptions. Let them adhere to the Latin, or Feejee, if they choose, but discard abbreviations, and form their letters as if they had been to school one day in their lives, so as to avoid the possibility of mistakes on that account.”

-- *Mark Twain*
San Francisco Morning Call
October 1, 1864

What happens in a community hospital that’s unlikely to have the latest high-tech physician order entry tool any time soon? Is there some other way to help make patients safer? And when is patience not a virtue?

Survey as epiphany

A simple hospital survey became the source of an epiphany for one physician at Monongahela Valley Hospital (MVH). The results led Dr. William Kilpatrick to act on his long-held belief in patient safety.

Diane Cooper, Director of Quality Improvement at the hospital, sent MVH staff a questionnaire asking them to rank the best and worst hand-writers among the staff’s 120 physicians. When the results were published, Dr. Kilpatrick was chagrined to find himself among the top five least legible writers in the hospital. Being a member of the Patient Safety Committee deepened his embarrassment, but also added to his understanding that perhaps this pointed more to a system problem than a personal failing.

Right tool for the job

A college-era shoulder injury makes writing painful for

Dr. Kilpatrick, although he freely admits, “I’m also just a bad writer. But after 25 years of trying to block print, trying to go slowly, trying to be neat—to find myself on that list was sobering. It wasn’t malice or arrogance. I just didn’t have what I needed to submit perfect orders.”

Dr. Kilpatrick decided immediately to do something about it. When he saw a dietitian typing on a computer using wireless printing, the light went off. A three-year-old laptop with a wireless card sat unused at his house, a dinosaur by computer standards. He brought it to MVH where IT technicians quickly configured it to work within the hospital. They created a perfect MVH order template in MS Word—“It took 30 minutes to do the whole thing”—and Dr. Kilpatrick was armed with a new tool.



One physician decided not to wait until technology came to him. Armed with an old laptop, he has foresworn hand writing and now submits only perfectly typed orders.

“Unconditional love”

The first day, Dr. Kilpatrick began carrying the laptop everywhere, typing complete and perfect orders and printing them at locations convenient for the nurses. The response from the staff, according to Dr. Kilpatrick, was “unconditional love.” Could he really

have gone from worst to first in one day? The short answer was yes.

But it wasn't only the nurses and pharmacists who noticed. Something changed for Dr. Kilpatrick, too, a shift in thinking.

"You can't imagine how great it is, with the interruptions that *don't happen*. No more nurses or pharmacists calling five times a day to clarify an order (and maybe guessing on others). My patients get better care, get their meds on time. And that's a huge payoff for the tiny amount of time it takes to type the order."

Dr. Kilpatrick noted that the nurses' expectations began to rise once they knew that it was possible to create perfect orders every time. They began to ask when the other physicians in his group would buy laptops and start typing. What about discharge instruction sheets? How about progress notes?

Pens kill

Yet several things conspire to make this prototype unlikely to spread. Three main barriers exist: laptops cost \$1,000 apiece; they must be dedicated solely to hospital orders—no Internet or e-mail for fear of virus contamination of the hospital's computer system. The third barrier is more subtle. Many physicians would rather wait for the solution to come to them in the form of an expensive computerized physician order entry (CPOE) system purchased by the hospital.

With his new outlook on the problem of illegibility, Dr. Kilpatrick bristles at the latter. Why wait?

"You can kill people with a pen," he says.

He recalls one day since his epiphany when he heard a snippet of conversation he might not have noticed before. One nurse, trying to decipher a physician's order, asked the nurse sitting next to her, "What do you think *this* is?" Dr. Kilpatrick believes "*this*" is a matter of life and death.

Office EMR? Just say yes.

The zeal for improvement expresses itself in his

practice as well. Dr. Kilpatrick invested in an electronic medical record (EMR) system and had all his patient records scanned into it. Noting that he's a slow typist, he installed voice recognition software to add speed and accuracy to things like progress notes and prescriptions.

He sees irony in the fact that most physician practices have computerized billing, but not computerized patient records.* His system interfaces between the two functions, and he says that now he is able to do more for patients during their appointments.

Again, there are more reasons to wait than to go ahead with office EMR. Absent national standards, he may find that his system one day doesn't "talk" to other systems, or is in some other way insufficient. But again, it's an area where Dr. Kilpatrick becomes impatient. The immediate benefits, he believes, far outweigh the cost.

"I don't do that any more"

"I used to take Rubbermaid bins full of charts home every night to review. I don't do that any more. And running around looking for pro-times? I don't do that any more, either."

Dr. Kilpatrick summarizes what he's learned this way: "CPOE and electronic medical records are on the way. But we don't have to wait! There are steps we can take right now to make sure our patients get better, safer care—while we and our staffs save time and money. Once you see it, you can



No more pencils, no more charts.
It's a big expense, amortized over several years. Is office EMR worth it? Unequivocally yes, says MVH's Dr. William Kilpatrick.

* (Reported in the Post-Gazette March 22, 2005; a CDC report indicates that while 73 percent of doctors' offices use computer technology for billing, just 17 percent use it to maintain medical records, and only 8 percent to order prescriptions electronically.)

