
# EMRs and the "Last Mile" of Clinical Communications

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## Executive Summary

Hospitals' efforts to adopt and integrate electronic medical records (EMRs) into their clinical practices will surely accelerate now that the Centers for Medicare and Medicaid Services (CMS) have set data standards and certification criteria for EMRs' "meaningful use." These initiatives, however, should not be about qualifying for incentive payments. Hospital executives should view EMR systems as the backbone for integrated clinical communications necessary to reduce costs, eliminate inefficiencies and improve quality, patient safety and the coordination of care. They also should be aware of other fast ways to facilitate the sharing of information among physicians, nurses and other clinicians that do not require the "heavy lifting" of an EMR implementation. Such solutions will not only help hospitals begin to create a more integrated communications infrastructure, but also give them an early "win" in connectivity among their clinicians.

This white paper examines EMRs within this broader context. It focuses on a long-standing problem—the deficiencies in the "last mile" of the communications continuum when clinicians need to quickly connect with each other to determine the best course for patient treatment. According to a Cisco Systems report, the financial cost of communication inefficiencies to U.S. hospitals exceeds $10 billion annually.

This paper concludes by offering a simple, cost-effective strategy that hospitals can implement today to address this challenge. Since this solution will increase physicians' satisfaction by eliminating "last mile" communication breakdowns, it can be a hospital's first step toward gaining their cooperation and support for other EMR initiatives.

## Carrots, Sticks and Wagging the Dog

The American Recovery and Reinvestment Act (ARRA) of 2009 has made hospitals and other health care providers a carrot-and-stick offer they can't afford to refuse. Beginning in 2011, ARRA will dole out more than $20.8 billion in incentives through the Medicare and Medicaid reimbursement systems to assist providers in adopting EMRs. The stick comes out in 2016, when the subsidies disappear and those still using paper records risk sanctions, including reduced Medicare fees.

Hospital CEOs, CIOs and other executives are understandably anxious about meeting the government's EMR standards for "meaningful use," especially since health care's adoption of EMRs thus far has been sporadic. A survey published on April 16, 2009, in the *New England Journal of Medicine*, found that out of nearly 3,000 hospitals, less than two percent use comprehensive EMRs, and only about eight percent use a basic EMR in at least one care unit.

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>
> **Dr. John Frownfelter,**
> CMIO, Henry Ford Health System

As hospitals ramp up efforts to meet "meaningful use" criteria, they shouldn't lose sight of the fact that EMRs are a means to an end—better patient care—and only one of several components necessary to create a solid health information infrastructure.

"Too many people believe that adopting EMRs will work miracles, but we have to be careful that we don't let the technology tail wag the dog," said Pam Arlotto, president and CEO of Maestro Strategies and the former national president of the Healthcare Information and Management Systems Society (HIMSS). "The intent of meaningful use is for care providers to focus on performance and quality. Technology becomes an 'accelerator' of improvement rather than an end to a means."

Dr. John Frownfelter, chief medical information officer – inpatient services, for Henry Ford Health System in Detroit, Mich., expressed a similar view in a recent story published in the June 2010 issue of *Hospitals & Health Networks.*

"We know electronic health records are the right thing to do, but we don't have the data to predict how this will improve clinical processes or outcomes," said Dr. Frownfelter. He added that hospitals generally don't prove either the business or clinical case well for clinical applications, though both are inextricably linked. "We should measure clinical ROI in terms of measurable impact on patient care," he said.

## A Communication Tool for Patient Handoffs

EMRs have various uses, including support for quality management and outcomes reporting. Their primary function is to give clinicians a longitudinal record of patients' health information based on their interaction in various delivery settings. Essentially, they are "one-stop" repositories of evidence-based patient information—easily accessible to multiple clinicians as the patient moves across care settings.

As hospitals continue to develop their EMR adoption strategies, several factors need to be considered. First, an EMR should be viewed as one component of a comprehensive clinical integration strategy for linking the ambulatory care, acute care and sub-acute care environments. A key to making this work is gaining the cooperation of physicians. According to a 2008 *New England Journal of Medicine* article, three out of four Americans receive their medical care from doctors in small practices. A recent survey by the Centers for Disease Control and Prevention (CDC) found that only 20 percent of office-based physicians had what the CDC termed "a basic EMR system," i.e., one that included patient demographic information, patient problem lists, clinical notes, medication lists and lab and imaging results.

"Payment reform is putting tremendous pressure on hospitals to establish more interdependent relationships with physicians," said health care consultant Dr. Michael Guthrie, an expert on physician engagement and the former CEO of the Good Samaritan Health System in San Jose, Ca. "This cultural shift is threatening to many physicians who need to feel that hospitals are cognizant of their needs and will help them adapt."

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In addition, hospitals must recognize that only an advanced EMR (e.g., one that allows device feeds) can deliver nearly real-time information such as vital signs and perceived pain levels. But even these cannot take the place of the probing, back-and-forth discussions among clinicians about the patient's current condition and complaints, which are often necessary for optimal treatment decisions.

"The template-driven EMRs often limit a provider's ability to communicate specifics for patients with complex problems and multiple co-morbidities," said Arlotto. "In these situations, physicians and nurses usually need to communicate to get a clearer picture of what's going on."

Hospital administrators and CIOs realize that EMR adoption will be an intensive process that can take years to complete. Most, however, are unaware that they can do something now to help their clinicians share patient information more easily and efficiently, plus increase their satisfaction and gain their support for EMR initiatives.

### A General's Marching Orders for "Last Mile" Health Care Connectivity

After leading the largest U.S. and multinational battlefield health system during the Iraq War, retired Major General Elder Granger, M.D., is now helping health care providers prepare for EMRs.

"Whether in the armed forces or in a hospital, success takes leadership, command of the situation and a concerted effort to stick to a plan you know will work," says MG Granger. "The model for achieving health care connectivity is no different than the one we used to plan, budget and execute an $18 billion health program for the Department of Defense."

According to MG Granger, hospitals should focus on addressing communication inefficiencies and gaps at the point of care. Here are some of his recommendations for achieving connectivity.

- **People.** The human element is always the most challenging. Communication solutions for the "last mile" should enable hospitals to bring together the right people with the capabilities, expertise and knowledge to provide the best possible care.
- **Process.** Paper-based methods for contacting physicians are hopelessly inefficient. A standardized process will reduce variability and ensure consistent, timely and accurate communications.
- **Prevention.** The key is to eliminate communication outliers (e.g., excessive delays in finding the right clinician), which, although relatively infrequent, can have a devastating impact on both outcomes and patient safety.
- **Productivity.** Nurses and physicians can spend hours each day just trying to connect with each other. Communication solutions should make it easier and faster for them to have these conversations, whether in person, by phone or online.
- **Price.** Communication solutions that address the first four "Ps" (i.e., people, process, prevention and productivity) will be cost-effective because they help hospitals improve efficiency, reduce errors and enhance clinician productivity.

*Major General Elder Granger, M.D., FACP, FACPE, FACHE, CMQ, MG, USA (Retired), is the president and CEO of The 5Ps, LLC, a healthcare thought leadership and education consulting company, and the chief medical informatics officer at CTIS Inc., a health informatics company. He has served as Commander, Task Force 44th Medical Command and Command Surgeon for the Multinational Corps–Iraq, and as deputy director and program executive officer of TRICARE Management Activity, Office of the Assistant Secretary of Defense for Health Affairs.*

How? By tackling a long-standing problem—the difficulty clinicians have trying to reach each other to collaborate on a patient's care. (For more on this topic, see "Connecting with Physicians: the Hospital Problem No One Talks About.")

## Repairing the "Last Mile" in Physician Connectivity

If EMRs are the future infrastructure for hospitals' health information highway, then processes for contacting physicians are the "last mile" in the communications continuum. These antiquated, paper-based methods are in desperate need of repair. Consider this excerpt from a Cisco Systems report "Challenges in Healthcare Communications":

> "In clinical care, we often discuss the critical need to have information about the right patient delivered to the right clinician at the right time. What is not discussed is the critical need for clinicians to connect and communicate with the right person about the right patient at the right time. The inability to do so results in countless wasted hours and untold delays in the delivery of patient care. *The financial cost of communication inefficiencies to U.S. hospitals alone exceeds $10 billion annually*, and likely contributes to personnel shortages, staff and patient dissatisfaction and medical errors."

The primary cause of inefficiencies in "last mile" communications is readily apparent. Many hospital departments still have multiple binders and Rolodexes full of physician names; phone, pager, office and answering service numbers; preferred contact methods; call schedules; alternative physicians to contact; etc. Nurses and clinicians must find this information, then interpret what it means for each and every communication event.

A 300-bed hospital might, on average, contact such physicians 180,000 times each year. If only three percent of these events break down because of process errors, which create delays, this hospital would have more than 5,000 incidents that may jeopardize patient safety and quality.

Most hospital executives, however, are unaware of the extent and impact of this problem and fail to realize they can resolve it with a simple, cost-effective solution—the clinician-to-clinician communication system from PerfectServe, which reduces risk and eliminates communication breakdowns associated with contacting on-call physicians.

PerfectServe facilitates fast, accurate and reliable communications because workflow rules, call schedules and contact preferences for every physician are built into the system. Hospitals can use its single network platform and directory to connect every medical staff member with easy access via voice, Web and mobile interfaces. See two-minute video "How PerfectServe Works."

More than 14,000 physicians in 30 hospitals and 2,500 practices nationwide are using the PerfectServe system, which processes more than 30 million clinical communication interactions each year. It is especially useful in time-critical situations, since nurses and physicians don't have to waste minutes or hours trying to reach a physician, arrange for a consult or gather various members of caregiving teams.

For example, several hospitals use PerfectServe to reduce their response times for mobilizing ICU, code stroke or catheterization teams. In the recent *Hospitals & Health Networks* article, Dr. Frownfelter reports that since his hospital implemented PerfectServe, 38 percent of emergency department calls to on-call physicians are answered in real time—a four-fold increase.

## A "Quick Win" with Physicians Can Pave the Way for EMRs

The prospect of technological change can be daunting, especially to reluctant physicians who see no reason to alter their practices. Yet for EMR initiatives to succeed, hospitals need their buy-in and cooperation. One strategy for gaining this support is to eliminate the frustrations they experience when "last mile" communications break down, which result in unnecessary interruptions, lost or delayed messages, missed consult opportunities and endless rounds of phone tag.

"Even in the best of circumstances, an EMR implementation is very challenging for a health care organization," said Dr. Mark Radlauer, an emergency physician and health care IT consultant. "But clinicians will always appreciate the value of saving time, being more efficient and having better information about their patients. Implementing the PerfectServe system can give hospitals a quick win with their medical staffs, which should help their other clinical integration efforts."

For physicians, one of the major benefits of PerfectServe is having control over their inbound communications. The system allows physicians to filter and prioritize their interactions by who is sending the message (doctor, nurse, other clinicians or patient), hospital facility and department and the time, day, clinical situation and urgency. Not surprisingly, 93 percent of physicians surveyed who use PerfectServe would recommend it to their colleagues.

"With text messaging from PerfectServe I can quickly find the person who was looking for me and have a heads up on what the call is about," said Dr. Nathan Bennett, a family physician and IT physician liaison at Jefferson Regional Medical Center in Pittsburgh, Pa. "Since we use EMRs, I can then go into the patient's charts from home before calling back. I have everything I need, including medication lists, before our conversation."

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> Health Care IT Consultant

Unlike with EMRs, which can take months or even years to implement, hospitals that take action now on addressing communication issues between clinicians can achieve immediate results. A clinician-to-clinician communication system such as PerfectServe can help hospitals begin to more closely integrate community, as well as hospital-based physicians, into acute care clinical practices. It will also increase both physicians' satisfaction and their willingness to participate in other EMR initiatives.

## Eye on the Prize: Integrated Clinical Communications

Financial incentives are spurring the adoption of EMRs, which will provide the necessary foundation for sharing patient information across the continuum of care. It will take years, however, for hospitals and other providers to knit together all of the disparate components needed for truly integrated health care delivery. In developing their EMR strategies, organizations should keep in mind that the goal is not just to digitize patient information, but to facilitate integrated clinical communications so that clinicians can better coordinate care.

To work effectively as a cohesive, well-informed team, physicians, nurses and other clinicians must be able to quickly communicate information with each other, whether in person, by phone or by text message. In practical terms, an EMR won't help the patient if a nurse can't reach the doctor who needs to review it in order to determine the best course of action.

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