



Three ways collaborative communications can revolutionize patient care

Helping nurses improve patient outcomes, patient care productivity and hospital profitability

Despite the recession, the United States still has a shortage of skilled nurses. This is only projected to get worse: researchers expect that by 2025 there will be 260,000 more registered nurse (RN) positions than there are nurses to fill them.¹ To put this figure in context, that number of unfilled RN positions would be almost double today's total membership of the Canadian Nurses Association.² Precisely because nurses' time is such a precious resource, hospitals need to make sure they are using it wisely to take better care of patients and drive better medical outcomes.

Hospitals have made significant investments in recent years in diagnostics and treatment capabilities, resulting in vastly improved medical outcomes and patient care processes. More recently, investments in electronic health record (EHR) platforms and workflow systems have aimed to address regulatory compliance and increase the accuracy and availability of patient information to authorized personnel, resulting in improved efficiency across the patient care continuum.

A next logical step for hospitals, especially given the shortage of nurses, is to address human latency within and between steps of the patient care continuum. Collaborative communications technologies can provide that answer, greatly improving the efficiency with which nurses provide care for patients in hospitals, as well as how they work with each other, physicians and other hospital staff (see "Addressing each phase of the patient care continuum").

¹"The Recent Surge In Nurse Employment: Causes and Implications," *Health Affairs*, July/August 2009, <http://content.healthaffairs.org/cgi/content/abstract/hlthaff.28.4.w657>.

²http://www.cna-nurses.ca/CNA/about/members/default_e.aspx.

The latest generation of collaborative communications tools can give nurses the right information at the right time in the right place so they spend more time providing hands-on care to patients and less time on “care coordination.” The result is improvement in the overall efficiency with which nurses perform both types of work.

Moreover, hospitals don’t need to scrap their existing technology investments to take advantage of these new capabilities. New collaborative communications technologies complement rather than replace existing technology, extending return on investment (ROI), enhancing overall productivity of the nursing staff, helping nurses improve patient outcomes and increasing the value of EHR deployments.

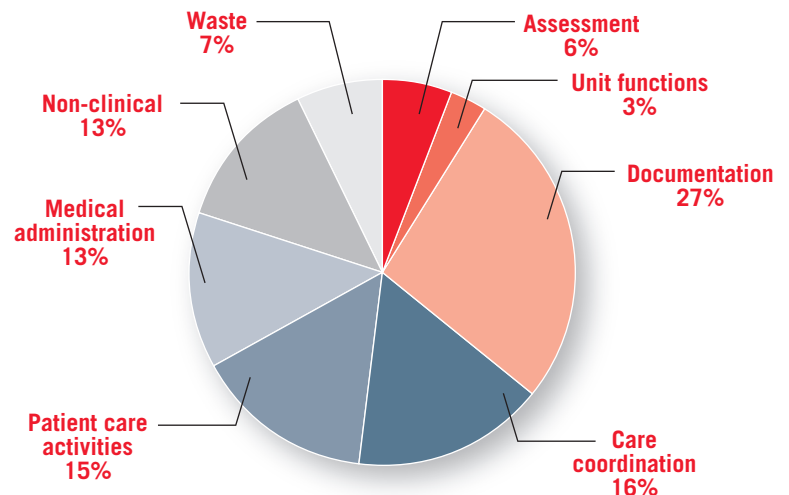
Reality trumps idealism, reducing productivity and causing burnout

The desire to “care for others,” “help people” and “make a difference” is what nurses tell researchers when asked why they chose their profession.³ Yet many young nurses very quickly become disillusioned with their jobs. A study found that 13 percent of newly licensed RNs change principal jobs after one year.

Even more significantly, 37 percent of those RNs said they felt *ready* to change jobs.⁴ Other statistics suggest that as many as 61 percent of recent nursing school graduates intend to leave the profession within one year of practicing.⁵ Studies also indicate that nurses’ idealism about nursing gets challenged when they enter the “real world”—especially idealism associated with the notion of nursing being a “caring” profession.⁶

Small wonder. Only 15 percent of a nurse’s day is spent on actual patient care (Figure 1).⁷ This dismal number is actually worse than it looks, as another 16 percent of nurses’ time is spent in “care coordination”—industry-speak for managing more mundane aspects of patient care, such as making calls to drive process, coordinate tasks and activities, deal with no-shows and wrong-shows, and rework schedules as a result.

Figure 1. How nurses spend their time



Source: “A 36 Hospital Time and Motion Study: How Do Medical-Surgical Nurses Spend Their Time?,” *The Permanente Journal*, Summer 2008, Vol 12 No 3.

³Mackintosh, C., “Caring: the socialization of pre-registration student nurses: a longitudinal qualitative descriptive study,” *International Journal of Nursing Studies*, 2006, 43(8), 953–962.

⁴“Newly Licensed RNs’ Characteristics, Work Attitudes, and Intentions to Work,” *American Journal of Nursing*, September 2007.

⁵Boychuk Duchscher, J., and Cowin, L., “Multigenerational nurses in the workplace,” *Journal of Nursing Administration*, 2004, 34(11), 493–501.

⁶Mackintosh, 2006.

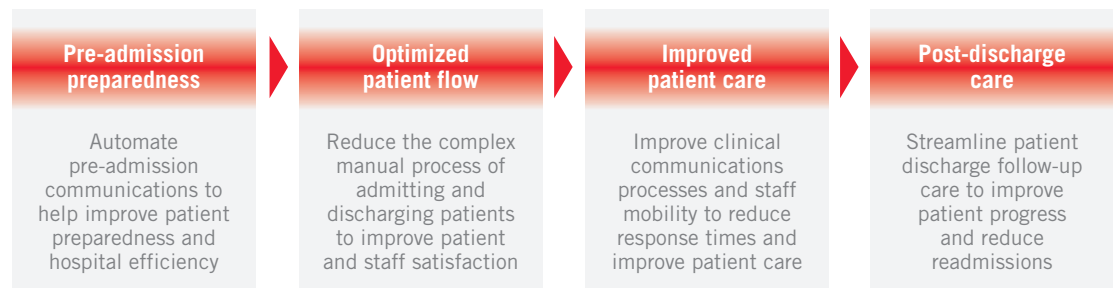
⁷“A 36 Hospital Time and Motion Study: How Do Medical-Surgical Nurses Spend Their Time?,” *The Permanente Journal*, Summer 2008, Vol. 12 No. 3.

Even though the healthcare industry aggressively deploys information technology—typically spending between 43 percent and 48 percent of its capital budget on IT⁸—such investments primarily take the form of diagnostic systems, clinical decision-support systems or EHR investments.⁹ A day in the life of a nurse, however, entails the completion of dozens—if not hundreds—of discrete processes that require manual intervention because they are not integrated or linked through technology. With the growing shortage of nurses, as well as increasing demand on nurses’ time, hospitals are looking for ways to change this dynamic.

Effectively managing the patient care continuum to improve patient outcomes

Communications technology can improve nurses’ experiences—and, not incidentally—patient outcomes in many ways during the patient care continuum (Figure 2).

Figure 2. The patient care continuum



Automated processes and communications deliver numerous benefits to nurses and the broader healthcare organization.

Among the technologies that can improve nurses’ experiences are three broad groupings of capabilities: nurse mobility, patient care collaboration and communication, and patient contact services and workflow.

Nurse mobility

Nurses are mobile professionals. They need to be in continuous communication with patients, clinical staff and administrative personnel, and available to their patients at all times they are on duty. Yet studies show that nurses spend, on average, 39 percent of their time at nurses’ stations compared to just 31 percent in patients’ rooms.

Additionally, because nurses work in shifts and share patient responsibilities, there’s the risk of miscommunication. What happens if a critical call about a patient comes through just as or just after a shift is changing? Who is responsible for routing the call to the right shift nurse? What happens if the wrong one gets paged?

Today’s best-of-breed communications systems for hospitals can handle these and other issues with centrally managed mobility solutions.

⁸“Hospital I.T. Spending Surge Predicted,” *Health Data Management*, June 4, 2009, <http://www.healthdatamanagement.com/news/ARRA-38437-1.html>.

⁹“2010 Annual Report of the U.S. Hospital IT Market,” Healthcare Information and Management Systems Society, <http://www.himss.org/content/files/ANNUALREPORTEXCERPT.pdf>.

For example, in a typical hospital today, a patient needing a nurse pushes the call button to the nurse's station. The attendant at the station attempts to call or page the nurse on duty. Often, there is a delay while the attendant tracks down the right nurse. Improving the responsiveness of nurses to such calls from patients is one way to improve patient satisfaction and medical outcomes.

One communications solution is for patients to be automatically connected to their on-duty nurse via a centralized notification system programmed to route calls directly. By eliminating the middle person—the nurse station attendant — from the equation, patient calls get answered sooner and nothing falls through the cracks.

Such a solution is easier on nurses, too, since they only need to log on at the beginning of their shift. From then on, all calls can be routed directly to their predetermined phone numbers. The nurses carry handsets—owned by the hospital—that they check out at the beginning of their shifts and check back in at the end of their shifts simply by swiping barcodes on the phones, along with their staff badges, at a communications kiosk. This solution enables nurses and other hospital staff to improve clinical communications by reaching the right person at the right time virtually anywhere within the facility. It also reduces administrative work so more time can be spent caring for patients.

Other benefits of this solution include:

- Improved nurse availability for direct patient care—up to 60 minutes per shift
- Increased patient flow because of enhanced nurse mobility and communications
- Decreased staff turnover through stress reduction and increased mobility
- Reduced patient wait time and increased patient satisfaction and referral rates

Addressing each phase of the patient care continuum

As providers well know, patients are admitted to hospitals not necessarily because of the medical procedures they need, but because they require skilled nursing care. Otherwise, procedures would simply be performed on an outpatient basis. From a nursing perspective, the patient care continuum consists of four stages that can be enhanced with collaborative communications tools: pre-admission, patient flow, patient care and post-discharge care (Figure 2).

Pre-admission. This first stage of the patient care continuum is when hospital personnel reach out to patients with community health information and appointment reminders. The chief driver of doing this: the high cost of missed appointments. Automation is a critical enabler of this stage, as manually calling patients with reminders is a costly and inefficient use of skilled clinical resources.

Patient flow. This involves admitting patients into the hospital before their procedures or consults are performed, and discharging them after their visit is completed and the patient is deemed safe to leave the hospital. Among the challenges the nursing staff faces during this stage are that long wait times can destroy patient satisfaction; that patients may choose to go to—or will be diverted to—other medical facilities if their admittance is delayed; and that if patients

Sidebar continued on page 5

Patient care collaboration and communication

Nurses need to constantly collaborate while on the job—with each other, as well as with other hospital employees—and track down equipment and supplies as needed.

For example, in addition to staying connected with their patients, nurses may need to be in close contact with physicians, housekeeping, medical technicians and emergency personnel. They also need to be able to locate supplies or equipment, such as medications, wound dressings and wheelchairs. On average, nurses walk up to five miles per day and spend 60 minutes per shift looking for or waiting for equipment—time that they should be spending with patients.

Programmable Internet Protocol (IP) phones, PDAs and touch-screen tablet devices—powered by the latest generation of Session Initiation Protocol (SIP)-enabled unified communications—can be used to keep clinical, administrative and operations staff connected, whether by voice, video, instant message, e-mail or paging.

These devices can be programmed for voice-activated number lookup and dialing. Doctors and other clinical staff can be located and communicated with via instant message and “presence” capabilities. The latest video collaboration tools enable staff to instantly set up voice conference calls and high-definition videoconferences, removing and adding participants by simply touching a screen. Even equipment can be easily located throughout the hospital with a simple click.

By embedding these collaboration capabilities into existing workflows, hospitals can help nurses and other staff be more efficient and accessible and, in the process, provide better patient care. Leveraging your existing infrastructure and clinical systems, these solutions enable:

- Quick retrieval of key patient data to help nurses and other clinical staff act faster
- Faster access to knowledgeable and available clinical staff
- Improved collaboration and scheduling capabilities, both with clinical staff and medical equipment

Continued from page 4

are not discharged in a timely manner, bed turnover rates decline and hospital revenues suffer. Finally, the discharge process requires a considerable amount of coordination by the clinical staff, usually performed by telephone. As in the pre-admission stage, this phone work typically doesn't represent optimal use of nurses' time.

Patient care. This stage involves all actions taken by the nursing staff to deliver the highest-quality care to patients. In this stage, nurses are under pressure to increase the number of patients being seen at the hospital through accelerating bed turnover rates; to successfully coordinate the dispersed staff and medical equipment needed to provide the care; and to transcend the often inefficient communications systems that delay timely transfer of critical information.

Post-discharge care. This final stage of the patient care continuum involves proactively contacting patients to improve their compliance with post-discharge instructions and care. Nurses are under pressure to do this well because of the high cost of patient readmissions. For example, in the United States, Medicare and Medicaid readmissions within 30 days of discharge will not be reimbursable to the hospital.

Patient contact services and workflow

Admitting patients efficiently, accurately and in a timely manner is mission-critical to hospitals. Yet numerous phone calls between the hospital and admitting physicians, emergency department, floor nurses, administration and housekeeping can delay admissions or cause patient no-shows or wrong-shows. Surgery and non-surgery no-show patients can cost hospitals more than \$1 million annually. Yet simple miscommunication and busy schedules are often at the root of such mistakes.

At the other end of the care continuum, nurses often spend 90 minutes or longer making all the phone calls necessary to complete each patient discharge. Added time is spent on routine or post-discharge follow-up calls, many of which don't require direct nurse contact.

The solution: communications technologies that automate patient admission workflow and post-discharge calls.

Automated patient admission solutions can streamline the admission process—for example, from an emergency department—through process automation and communications enablement of clinical business processes. These solutions address all the necessary admission touch points, including the admission office, bed management, nursing, transport, primary care physician, patient family and housekeeping. The appropriate resources are selected automatically according to predetermined business rules, and automated calls are generated to those parties until the task is accepted. Tasks are monitored for completion, and detailed records are automatically generated for performance measurement and management.

Similarly, automated communications with discharged patients for routine follow-up can help improve patient compliance with post-discharge care instructions, rehabilitation procedures and medications. It also allows nurses to spend much more time with those patients who really do need help—typically a small percentage of discharged patients.

Potential benefits of these types of pre-admission, discharge and post-discharge communications solutions can include:

- Reducing no-shows by 20 percent, improving patient flow and minimizing lost service revenue
- Increasing new revenue by 20 percent through proactive calling and rescheduling
- Reducing patient discharge time by up to four hours per patient
- Automating communications with discharged patients to improve patient compliance and satisfaction
- Reducing preventable readmissions by up to 80 percent by focusing efforts on high-risk patients¹⁰

¹⁰Centers for Medicaid & Medicare Services (CMS)

Building on current and past investments

The good news is that hospitals don't need to reinvent the wheel to have these types of capabilities. Leading collaborative communications solutions should complement, not replace, your existing systems and processes. Here are three steps to getting started:

Prioritize your needs. Assess areas in which your nursing team is struggling most. Is it related to mobility? Collaboration? Patient workflow? All three? Many issues will be obvious to chief nursing officers, but others may require additional analysis. By identifying specifically where your challenges exist, you can decide which collaboration tools and processes are most likely to work best and provide the most effective ROI.

Find a vendor that understands the healthcare market and offers you complete solutions, not just point products. Technical competence is certainly important—today's unified communications and collaboration tools are sophisticated and powerful technology. At the same time, you need someone who understands the healthcare industry and the nuances of the hospital environment—and even specialty areas within that environment. The provider you choose should demonstrate a willingness to address all aspects of the solution, including problem identification, solution design, business case development, performance measurement, deployment strategy and road map development, and solution implementation and maintenance.

Take a planned step at a time. A leading practice for businesses that deploy unified communications and collaboration capabilities is taking measured steps. The deployment strategy and road map should identify areas of “low-hanging fruit” in which collaboration solutions can have the greatest and fastest impact, thus paving the way for longer-term capabilities. Such an approach can help you show results faster—to your board and patients alike—and, through accelerated ROI, potentially fund later phases through improved revenue streams and more effective cost management.

Avaya: Collaboration solutions for improved healthcare

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