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A Call to Action: Overcoming Communication Challenges in Hospitals

Accenture Study Shows Game-changing
Hospital Transformation Opportunities
with Improved Nursing Communications

Improved nursing communications and collaboration is possibly one of the greatest untapped opportunities that could help hospitals become high-performing health systems.

Nursing communication challenges are an under-appreciated, often overlooked contributor to higher cost, lower quality care and patient dissatisfaction. With ever-increasing demands for improved quality and efficiency in hospitals, improving communications should be an executive-level imperative.

Today's digital world opens new doors to diagnose and address the causes of poor communications in hospitals, and—in the process—impact the hospital bottom line.

A recent study by Accenture provides insights to common and frequent communication challenges that can impact hospital performance.

According to the American Association of Colleges of Nursing, nursing is the nation's largest healthcare profession, with more than 3.1 million registered nurses (RNs) in the United States.¹ There are more than four times as many registered nurses as physicians in the United States. Hospitals have invested in this highly skilled, highly trained workforce. But they haven't fully recognized and quantified the challenges of nurse communication, nor have they fully invested in finding solutions.

The cost of communication breakdowns

Communication challenges have always carried a cost in terms of lost productivity, insufficient time with patients and longer lengths of stay. U.S. hospitals could "waste" approximately \$12 billion annually due to poor communication among care providers. The loss, as percentage of hospital revenues, is about 2 percent. A typical 500-bed acute-care hospital could experience an annual economic burden of about \$4 million due to wasted physician and nurse communication time and potentially increase in length of stay.²

New reimbursement models also tie nursing communication to the bottom line as new measures factor in patient satisfaction. For example, the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey for discharged patients includes questions related to communication with doctors, communication with nurses and responsiveness of hospital staff. Hospitals risk losing 1 percent of their Medicare reimbursement this year if they don't meet expected patient satisfaction levels. That will jump to 2 percent by fiscal year 2017.

The bottom-line impact is enough to move this issue to the front burner of hospital C-suite imperatives, yet communication challenges continue to be an untapped area of opportunity. Adding to the impetus are initiatives such as The Joint Commission National Patient Safety standards, which identify "improv[ing] the effectiveness of communications among caregivers" as one of its primary patient safety goals.

Answering the call to action

Communication challenges in hospitals have been around for a long time. Nurses have become accustomed to the challenges, and have devised workarounds to be as efficient as possible, masking both the underlying causes and the impact on quality and efficiency. The solution is a combination of process and culture change along with information and collaboration technologies. More than ever before, the availability and maturity of technology is intersecting with nurse readiness to integrate technology into their work.

Nurses are using technology at work, and they see the benefits. One study revealed that 56.5 percent of nurses find information and communication technology (ICT) very useful.³ About one-third of nurses believe the use of ICT improves patient care, and 18.2 percent reported improved communication with patients.

There is no magic pill to provide a cure for hospitals struggling with communication challenges. However, the right mix of technologies and process change can help nurses to communicate more efficiently and effectively, allowing them more time to focus on providing outstanding patient care.

Accenture's study revealed common communication challenges. For executives, these ubiquitous examples are the starting point for process and culture transformation enabled with technologies.

About the Study

Accenture conducted an observational study that examines nursing communications challenges within acute care hospitals across multiple departments and multiple shifts. The observation and analysis revealed four primary impact areas: interruptions, patient transitions between units, communication between nursing staff and patient/family, and communication between nurses and physicians.

Accenture set out to observe and measure communication inefficiencies to identify tangible ways where improvements could result in time and economic savings, better patient care and safety. Accenture conducted situational observations and 1:1 shadowing of nurses during three two-day periods at three community hospitals in the Midwest. Observations occurred in the emergency department (ED), on medical surgical, short stay and intensive care units (ICUs), and across perioperative areas, including the post-anesthesia care unit (PACU). The observations averaged between 50 and 75 interactions per hospital visit.

The content that follows outlines the findings of this study and provides recommendations for improvement.

Examining the Findings

Key Findings at a Glance

- Locating other clinicians and knowing how and when they are available to communicate are two of the biggest contributors to time loss. Integrating information and collaboration technologies with unified communications is a key opportunity area.
- Interruptions are frequent and come in many forms, presenting a more significant risk to patient safety and quality. Technologies must help both the communication originator and communication recipient manage time-sensitive interactions.
- The wide range of information and communication technologies in place contributes to communication complexity. Greater technology integration and health system wide-technology portfolios are called for.



Interruptions

Sample interruptions from the Accenture study include:

- In one emergency department, overhead page interruptions occurred, on average, every three minutes.
- In one ICU, 10 different family members from one family called within a three-hour timeframe to get an update on the patient's condition.

Interruptions come in many forms—phone calls, pages, other caregivers' requests, alarms, requests from patients and family members, and more. Nurses are frequently interrupted during the course of their work, which can have an adverse impact on safety and care continuity, and potentially contribute to errors.

Accenture researchers observed frequent and varied interruptions across units. For example, one ICU nurse had 15 interruptions within one hour regarding a new post-operative patient.

Although interruptions are to be expected in healthcare—and some are appropriate as they provide nurses critical information—many of these interruptions are avoidable. Reducing unnecessary interruptions and better managing critical interruptions may help improve quality and efficiency costs.

Gaining control of interruptions through unified communications

Adding technology can add more avenues for potential interruptions. Nurses will often use multiple channels to connect with their colleagues and were observed contacting other nurses through their administrative house coordinator, and concurrently, placing a desk call as well as paging or calling the nurse's wireless phone.

Nurses participating in Accenture's study remarked that some wireless phones create challenges because they allow communication with anyone at any time. Nurses said the phones can have an impact on patient care because there are times when the nurse simply cannot answer, such as while administering medication, and the phone interruption is a distraction.

Unified communications can help resolve such issues by establishing controls for both the sender and receiver. People using a variety of network-enabled devices and media can more easily interact and collaborate. Unified communications technologies help people find those they need to interact with, know

if others are available and through which medium, and provide choices for information sharing and interactions. For example, a message can be available through both voice mail and email with unified messaging.

Business rules can be built into a messaging system so that each message is classified according to level of urgency and routed to the right person. Messages may also include context, such as information about the sender or receiver's location within the hospital.

A nursing coordinator in Accenture's study received 198 pages during an eight-hour shift (one page every 2.4 minutes). Unified communication and a feature-rich mobile device would prioritize the messages being sent to her and make it more efficient for her to receive and reply to messages. With unified communications, a call would be directed straight through to a care-giving nurse if he or she were not busy, or it would be directed to voicemail if the nurse were with a patient.

Patient Transitions Between Units

Sample hand-off challenges from the Accenture study include:

- On average, it took nine minutes to find the receiving nurse and complete the change of shift handoff, with an average of one interruption.
- Time spent waiting to complete transitions between units ranged from 42 minutes to almost two hours, exacerbated by one to six interruptions.

Patient transitions are continuous in a hospital setting. Some nursing units may transfer or discharge 40 to 70 percent of their patients every day.⁴ Numerous interactions occur during patient care transitions, such as during admission, discharge and during changes in levels of care between units (for example, ICU to medical surgical unit). Furthermore, there are a number of methods used during handoffs and change of shift, such as tape-recorded, written or verbal communications at the bedside.

During "warm" handoffs, the sending nurse synthesizes patient data and provides a summary of pertinent information about the patient to the receiving nurse at change of shift or during transfer to another unit. These transition processes are often not standardized and can be inefficient.

In some cases, nurses stayed an hour or two longer to finish giving reports and transferring their patients to new caregivers. Time is lost finding each receiving nurse, and receiving nurses are delayed in beginning patient care while waiting for reports on their patients. Nurses also experienced lag time in transfers. One nurse reported making four phone calls to get a single patient transferred.

Improving handoffs through context and data capture at point of care

Message senders and recipients have differing schedules, priorities and preferred methods of communication. A variety of technology tools can accommodate both parties.



Location/presence technologies.

As in the case of interruption management, understanding context is helpful when it comes to knowing when patient handover is possible. Presence technologies will indicate the nurse's physical location and his or her "status" (with a patient or available, for example). The system can alert the sending nurse when the other nurse is free. Therefore, the calling nurse is able to move on to other tasks, confident that communication would follow at the earliest opportunity.

The receiver can also indicate the most appropriate time they are "available" to receive messages, thereby avoiding distractions at inconvenient times. The receiving nurses would then know which messages to address first as they would be flagged as time-sensitive.



Voice recording. Speech is a fast and accurate way to capture information at the point of care.

Nurses can dictate patient notes on a handheld device, upload the information and make it available to the incoming nurse, on-call physician or family member seeking information. The patient's family member could call and enter a key code plus the medical record number to access information. The nurse can also use the voice recording to share the patient's story with the receiving nurse and other members of the care team: "Mr. Smith has difficulty hearing. His oldest son John is able to help his father understand what nurses are sharing. Mr. Smith is feeling a lot of anxiety about his surgery."

Voice recordings can minimize the number of interruptions from patients' families, and they can maximize efficiency during signoffs. Recipients can access voice recordings through the medium that best works for them—through the phone, on their computer, or even read dictations that have been translated into text for the electronic medical record.

Accenture researchers observed a nurse record her report into the phone system so the incoming nurse could listen to the report while the departing nurse was still in-house helping with patients. At the end of the recording, both nurses would confirm understanding by pressing a confirmation button on the phone or wireless device.



Video interactions. Video communication between nurses

or between nurses and doctors can help establish rapport among the communicating parties and can help ensure that the information is accurately received—because clarifications can be made in real time. Video can bring benefits much like in-person exchanges, and it also saves travel time for both sender and receiver.

During Accenture's observational study, many nurses commented that they wished that nurse-physician communication could occur in person. Oregon Health & Science University uses video conferencing equipment to connect nurses for warm discharge hand-offs. This method can be done at the patient's bedside, allowing patients and caregivers to be more fully involved in discharge and care. The nurse can demonstrate parts of the care plan and solicit live feedback.⁵



Mobile devices. By its nature, healthcare is highly mobile and interactive. Smart phones and tablets provide caregivers the ability to do their work from anywhere in the hospital, as well as from outside the four walls of the hospital. Having point-of-care tools at their fingertips makes the nurse and physician much more productive. Easy access to electronic medical records, lab results and other relevant administrative information, such as discharge information, nurse schedules and more, make it easier to get work done.

Many of today's mobile devices are small enough to fit in a lab coat, and they allow nurses to be hands-free and multi-task when communicating with others. For example, a nurse can pose a question to the doctor via phone while administering a procedure.

Information that is identifiable to a patient must be protected at all times. Through mobile device management solutions and clear hospital security policies and practices, issues around data privacy and security can be more effectively managed, even potentially in cases where caregivers bring their own mobile devices to work.

Communication Among Nursing Staff, Patients and Families

Sample family interaction challenges from the Accenture study include:

- One PACU nurse did her best to step out and speak with families after receiving a patient, especially after the waiting area receptionist had left; in each instance, this pulled her away from patient care.
- An ICU nurse juggled patient care duties while answering an in-person family member's question and concurrently fielding a phone inquiry from another family member, both of which interrupted her from her care delivery duties.
- A medical surgical nurse delayed her break to respond to patient/family questions.

Communication between nursing staff and patients as well as family members is critical to the care delivery process and to ensuring that patients and families have timely information to make decisions and receive needed information. Patients and families look to nurses for up-to-date information about their clinical care and progression of their plan of care throughout a patient stay.

Communication difficulties or breakdowns create stress for nurses, patients, and family members. Patients and family members may be frustrated and dissatisfied when nurses cannot provide timely and comprehensive information to address their questions and concerns.


For the hospital, reputations and reimbursement are at stake. The ability to satisfy patients and family requests in a timely manner is increasingly critical in HCAHPS scores and other patient satisfaction metrics. Since these metrics are publicly reported, an organization may experience an adverse financial impact due to poor or inadequate patient/family communication.

Improving the lines of communication

Nurses are always busy, and families and patients are always eager for information and updates. Technology can help reconcile the communications challenges between the two groups.

Automated communications.

Proactively providing information to patients' families will reduce the number of interruptions for nurses. A data feed from clinical and scheduling systems can be one automated way to provide basic updates on a patient's journey or status to the family. Updates might include information about a patient's room number, whether they're back from surgery or the name of the nurse on duty. These updates can be sent as texts to the family member's mobile device.

 **Interactive kiosks.** Kiosks can streamline and support the patient experience by providing check-in, direction assistance and even educational information. Interactive kiosks can also optimize patient flow and staff efficiency by offering self-service options for processes, such as signing consents. Security is critical to a successful kiosk program. Many of these stations require sign-on authentication using magnetic card readers, photos, barcode scanners, biometrics or manual information entry.



Physician and Nurse Communication

Sample nurse–physician interactions from the Accenture study include:

- Immediate response to a routine page is the expectation (for example, within 10 minutes).
- Nurses were challenged to find and communicate with not only off-premise doctors, such as on-call physicians, but also facility-based physicians, such as hospitalists and intensivists.

Wide variations in the quality of communication among physicians and nurses is an age-old problem. Nurses may hesitate to contact physicians with all but the most important questions. Simply locating other clinicians is also a problem. Physicians dislike being paged and then get put on hold when they call in response to the page. Physicians may not be able to identify the nurse caring for a specific patient, and nurses may not be able to easily and quickly identify the appropriate physician.

Technology can improve communication, but it may be a hindrance when not leveraged consistently and uniformly. For example, many physicians have smart phones but often don't allow direct calls from care team members, so a two-step process of paging and call back is required. Or teams might use various features and functions over multiple communication devices and channels, so there is a lack of uniformity and integration.

Enabling efficient, real-time communications

Poor communications between nurses and doctors presents a major blockage in the efficiency and effectiveness of a hospital system. In addition to the voice and video interactions mentioned previously, there are ways to open up and improve these lines of communication.



Mobile orchestration platforms.

Mobile orchestration helps nurses to enter information in real time at the bedside, speeding the process for some interactions that require a doctor. For example, if a nurse needs an order from a physician, the platform will send a text to the attending physician's computerized order entry system so he or she can submit the order.



Call routing. Systems that link rules engines with location technology and scheduling systems can dynamically route calls to the appropriate device based on pre-determined preferences that are set up by the clinician. For example, calls to a doctor would be sent to his or her mobile phone when he or she is on-site, or sent to the doctor's office when he or she is off-site.



Single number reach. This capability makes it so that all of the clinician's devices ring at the same time and he or she can answer via the device that is most convenient.



Context management tools. It is important to understand the context of the clinician placing the call. By linking context management tools into the routing platform, a nurse looking at a patient record can place a call to the attending physician and have the context follow the call. For example, as the physician's phone rings, an instant message is also sent to the doctor's computer or smartphone containing a link that pulls up relevant patient data for review in real time during the conversation.

Addressing this C-Suite Imperative

While the challenges are immense, it is possible to address the nursing communication issue and aim to alleviate its potentially detrimental impact on finances, patient satisfaction and quality. Key members of the C-suite can lead the way along the journey to improvement.

Chief Nursing Officer

- **Build awareness.** Illustrate the magnitude of the nursing communications issue by documenting and substantiating the key challenges and costs.
- **Be a change agent and champion.** Link the nursing communication issue to patient safety and quality of care to build an undeniable business case.
- **Make technology a priority.** Be actively involved in technology discussions and get involved early in decisions regarding selection of technology.

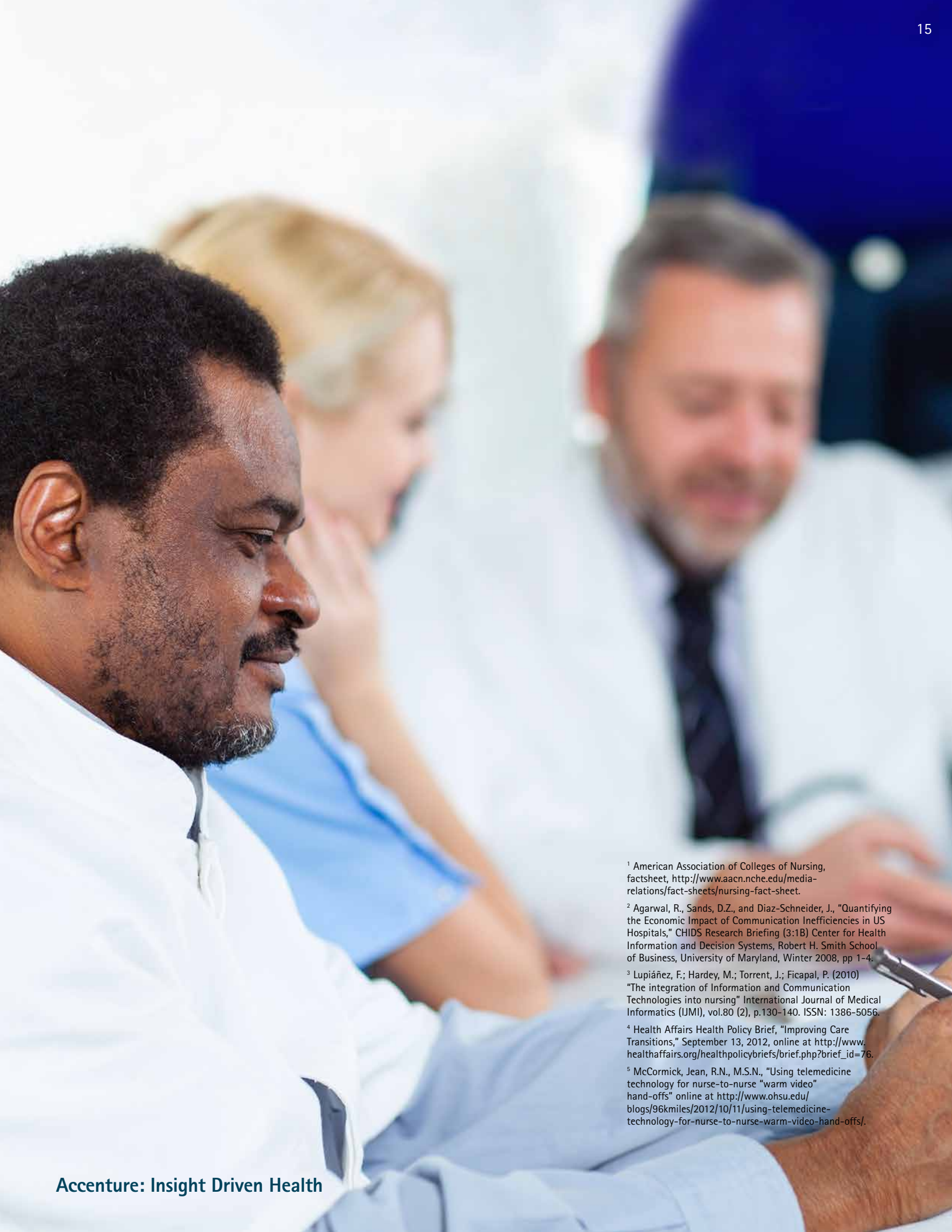
Chief Information Officer

- **Partner for success.** Work closely with the chief nursing officer to ensure you are addressing challenges and pursuing opportunities in lock step.
- **Establish governance models.** Develop "end of life" policies and practices to assess the technology that should be retired, and build an understanding of what existing technologies are helping nurses to do their jobs better.
- **Constantly scan.** Proactively evaluate and prioritize new technologies, possibly dedicating a person or team to focus on nursing needs.

Chief Executive Officer

- **Build the business case.** Assess and define the financial impact of nursing communications on areas including patient safety, quality and efficiency.
- **Illuminate the opportunity.** Work with the board to underscore why an investment in nursing communications is a top priority and imperative.
- **Continue to put patients at the center.** Communicate internally and externally the value of improved nursing communications and its impact on patient safety and care.

For real change to happen, hospital leadership must work together to champion and advocate for improved nursing communication. Each member of the C-suite must think outside of traditional silos and pursue a holistic strategy that addresses people, process and technology. The collective determination and collaboration will fuel transformation that can improve patient care now, and for years to come. The call to action and opportunity for transformation are clear.



¹ American Association of Colleges of Nursing, factsheet, <http://www.aacn.nche.edu/media-relations/fact-sheets/nursing-fact-sheet>.

² Agarwal, R., Sands, D.Z., and Diaz-Schneider, J., "Quantifying the Economic Impact of Communication Inefficiencies in US Hospitals," CHIDS Research Briefing (3:1B) Center for Health Information and Decision Systems, Robert H. Smith School of Business, University of Maryland, Winter 2008, pp 1-4.

³ Lupiáñez, F.; Hardey, M.; Torrent, J.; Ficapal, P. (2010) "The integration of Information and Communication Technologies into nursing" *International Journal of Medical Informatics (IJMI)*, vol.80 (2), p.130-140. ISSN: 1386-5056.

⁴ Health Affairs Health Policy Brief, "Improving Care Transitions," September 13, 2012, online at http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=76.

⁵ McCormick, Jean, R.N., M.S.N., "Using telemedicine technology for nurse-to-nurse "warm video" hand-offs" online at <http://www.ohsu.edu/blogs/96kmiles/2012/10/11/using-telemedicine-technology-for-nurse-to-nurse-warm-video-hand-offs/>.

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