

The High Cost of Nurses' Communication Challenges

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Introduction

Transforming healthcare to achieve better quality care with a more efficient, effective workforce is a national imperative in the United States. For healthcare providers of all types, electronic health records (EHRs) are the favored solution for improving patient safety and reducing duplicate tests and procedures. And yet, the increasing focus on EHRs and electronic health information masks a potentially powerful and immediate remedy to healthcare's ailments. There is an opportunity for better, easier communication and collaboration among the roughly 14 million U.S. healthcare professionals,¹ especially clinicians working inside health systems.

A recent survey—Cisco 2009 National Survey of Hospital Nurses—identifies the impact of communication challenges facing nurses. Commissioned by Cisco® and conducted by Zogby International, the survey reveals that easier, more effective communication and collaboration can positively impact health system performance—not only patient safety, but also clinician efficiency, healthcare costs, and patient satisfaction.

Nurses represent roughly one-third of workers in hospitals.² The survey shows that communication challenges have a significant economic impact on both direct and indirect costs. Nurses face a variety of problems caused by communication challenges. A major problem is wasted time. Nurses said that they can spend upwards of two hours locating other people to get answers and searching for supplies.

Nurses also face a digital divide—fewer than half currently have communication technologies with features and functions most needed to work effectively. Hospitals that support nurses with technologies to communicate, locate other clinicians and patients, and quickly track supplies will realize the greatest improvements in productivity and quality.

The Cisco survey provides a call to action for health system leaders, technologists, and solutions vendors to work in partnership with nurses. Together, they can design and implement communication solutions—integrated with clinical applications—that give nurses more time at patients' bedsides and the ability to work effectively with all members of a care team to create a personalized care experience for each patient and family member.

1. www.bls.gov/oco/cg/cgs035.htm

2. Ibid.

Survey Overview

Two hundred and fifty-three practicing nurses—representing disciplines as varied as medical-surgical, emergency room, operating room, and critical-care services—participated in the Cisco 2009 National Survey of Hospital Nurses.

Conducted the first quarter of 2009, the survey illuminates the costs of communication lapses on patient care and the overall ability of nurses to do their jobs. Highlights from the survey include the following findings:

- Eighty-two percent of nurses surveyed said that common communication hurdles have a “high to very high” impact on their ability to work efficiently.
- Approximately 60 percent of nurses estimated working up to 10 hours of overtime each week due to time wasted trying to locate patients and communicate with staff.
- When asked how communication lapses impact patient safety, 92 percent of nurses noted a “medium to very high” impact.

Survey findings in Table 1 detail the impact of communication lapses across executive priorities in response to the following question: “On a scale of 1 to 5, with 1 being ‘no impact’ and 5 being ‘very high impact,’ how would you rate the impact of job-related communication lapses in the following areas?”

Table 1. The Impact of Communication Lapses

| | No–Low Impact | Medium Impact | High–Very High Impact | Not Sure |
|----------------------------|--------------------|------------------|--------------------------|----------|
| | (% of respondents) | | | |
| Your productivity | 4 | 10 | 82 | 4 |
| Patient safety | 3 | 15 | 77 | 5 |
| Patient experience* | 8 | 13 | 74 | 6 |
| Quality of your work life* | 7 | 16 | 74 | 4 |
| Patient throughput | 3 | 15 | 66 | 16 |

*Numbers have been rounded off and do not necessarily add up to 100 percent.

Source: “Cisco 2009 National Survey of Hospital Nurses,” Zogby International, 2009

From the standpoint of technology-investment planning, the above findings demonstrate a clear need to balance investments in clinical systems such as computerized physician order entry (CPOE) and EHRs with investments in communication solutions. In fact, hospitals without CPOE and EHR systems may improve patient safety faster by prioritizing investments in interpersonal communications technology ahead of clinical systems.

For hospitals that already have clinical applications in place, communications technology may provide meaningful incremental improvements in patient safety and quality. For all hospitals, investments in communication solutions can have a positive impact across multiple business priorities, compared with clinical systems that may address only one care process, such as medication administration.

The Cost of Lost Productivity Is Clear

The economic impact of time wasted due to communication difficulties inside hospitals is measurable and meaningful, causing up to 10 hours of overtime each week. According to the nurses surveyed, “less wasted time” is the top work challenge a communications device could help overcome.

Connecting People To Communicate

Improving connections among hospital staff, particularly communication across care teams, offers the greatest potential for positive impact. According to 86 percent of respondents, “time spent chasing other people to get answers” can take as long as two hours per shift.

When asked which type of information was needed to improve communications, 48 percent said “care team availability and location” is needed most from a communications device at the point of care.

In response to an open-ended question about the most significant challenge a nurse’s communications device could address, 24 percent said “better communication between staff” (most-popular response), and 11 percent said “access to patient information/ records” (second-most-popular response).

Improving the tracking of patient location and status is another area of opportunity for communication solutions. It also was the top choice among 56 percent of survey respondents when asked, “What is the most important information nurses need at the point of care?”

Tracking and Locating Supplies

Nurses lose significant amounts of time searching for hospital resources. Eighty-five percent of respondents reported spending as many as 60 minutes per shift searching for supplies, such as wheelchairs and infusion pumps.

Hospitals focused on improving productivity should consider implementing location-tracking solutions integrated with nursing communications devices. Hospitals that provide nurses with technologies for communicating with team members, locating other clinicians and patients, and tracking supplies will generate the greatest productivity improvements.

Patient Safety and Quality of Care Are Impacted Equally

The nurses surveyed emphasized the importance of improved communications for better patient care. When asked to describe the impact of job-related communication lapses, 77 percent said impact on patient safety is “high to very high.”

Nurses are looking for specific features in communications devices to support improved patient care. Closed-loop confirmation was the second-most-important feature (following extended battery life), with 94 percent listing closed-loop as a “nice-to-have” or “must-have” feature. Interoperability with clinical applications was the third-most-desired feature. Further details are shown in Table 2.

Table 2. Desired Device Features

| | Must Have | Nice to Have (% of respondents) | Unnecessary | Not Sure |
|--|-----------|------------------------------------|-------------|----------|
| Battery that can last an entire shift without recharging | 81 | 15 | 2 | 2 |
| Closed-loop confirmation* | 51 | 43 | 4 | 3 |
| Interoperability with clinical applications* | 49 | 43 | 5 | 4 |

*Numbers have been rounded off and do not necessarily add up to 100 percent.

Source: “Cisco 2009 National Survey of Hospital Nurses,” Zogby International, 2009

Impact on the Patient Experience

The survey highlighted another topic of importance to nurses and CXOs: the patient experience. When asked to rate the potential impact of improved communications on the patient experience, 74 percent of nurses noted a “high to very high” impact. In addition, “more timely patient care” was the second-highest-ranking response when nurses were asked, “If a nurse’s communications device could help you overcome one key work challenge, which one would have the greatest positive impact?”

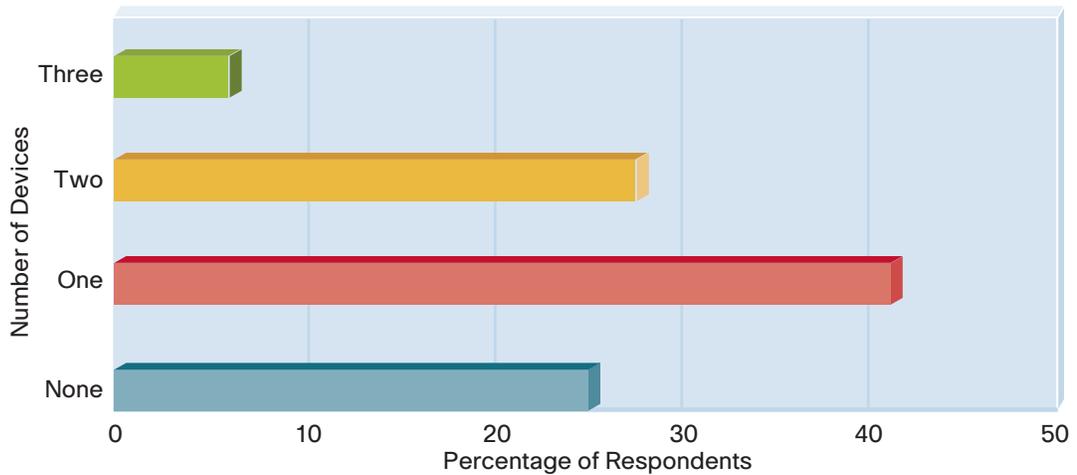
Patient satisfaction is emerging as both a competitive differentiator for health systems and a factor impacting reimbursement. For example, to receive the full Medicare reimbursement update, most U.S. hospitals must now report results from the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey. In addition, many leaders across the healthcare industry now acknowledge that consumers define clinical quality based on their perceptions of the care experience.

Nurses Face a Digital Divide

Despite the communications-intensive nature of patient care, 25 percent of nurses surveyed reported having no access to a mobile communications device. Other nurses reported using multiple mobile devices that do not interoperate.

Of the nurses surveyed, 91 percent said they would like a single communications device to meet their needs, but only 41 percent reported actually using a single device. Another 27 percent said they use two devices during a typical shift (see Figure 1).

Figure 1. Number of Communications Devices Used During a Typical Shift



Source: Cisco IBSG Healthcare Practice, 2009

When asked about their preferred communications device, more than half (57 percent) of the respondents said they prefer a device that provides voice, while 38 percent said they prefer one that provides text.

Their responses raise several interesting implications for hospital managers and technology vendors. Devices that are more similar to phones than to PCs are a better choice. Great attention has been paid to making PCs easily accessible to staff in patient-care units, but the survey suggests that “computers on wheels” and other full-screen PCs may be needed only when access to a complete clinical record is necessary. In fact, almost half of the nurses surveyed said that having a screen size similar to that of the average laptop computer is unnecessary.

These findings may indicate that nurses need immediate access to specific information more often than they do for comprehensive reports and records. There is a clear opportunity for IT vendors to provide text-to-voice technologies, in addition to the current generation of voice-to-voice and voice-to-text solutions.

The Need for IT Integration

One question best illustrates a theme found throughout the survey—specifically, the need to integrate applications (clinical and administrative) with technologies such as radio frequency identification (RFID) and “presence” into a single mobile communications device. Responses to this question are highlighted in Figure 2.

Figure 2. Information Nurses Need To Access at the Point of Care

| Information Needed | Percentage of Respondants |
|-------------------------------------|---------------------------|
| Patient location and status | 56 |
| Care team availability and location | 48 |
| Patient lists (coverage) | 39 |
| Room availability | 32 |
| On-call directory | 29 |
| Map showing location of equipment | 13 |
| Other* | 13 |
| Not sure | 17 |

*See Appendix A, question 1 for more details.

Source: “Cisco 2009 National Survey of Hospital Nurses,” Zogby International, 2009

Integration among devices is equally important. Nurses who reported using more than one communications device during a typical shift said they do so because the devices do not communicate with each other. Possibly the strongest call to action for hospital IT teams is to integrate a wide range of systems and technologies.

Conclusion

Significant improvements in the performance of nurses hospitalwide are possible when the barriers to easy, collaborative nursing communications are broken. This survey, and others, provides a call to action for health system leaders, technologists, and solutions vendors to work in partnership with nurses. Together, such partnerships can develop and deploy communication solutions tailored to nurses’ unique needs. Well-designed solutions incorporated into nursing practice promise greater efficiency, improved quality, and more satisfaction among patients and nurses.

(See Appendices A and B for additional information from the survey.)

Appendix A

Appendix A provides a sampling of questions and answers from the “Cisco 2009 National Survey of Hospital Nurses.” Two hundred and fifty-three practicing nurses participated in the survey, conducted by Zogby International.

Additional questions from the survey related to product development are considered proprietary and are not provided as part of the survey report.

1. Nurses often use mobile devices such as a smartphone, tablet PC, walkie-talkie, or pager to communicate and relay information about patients. What information do you need to access on a nurse’s communications device at the point of care? *(Choose all that apply)*

| Information Needed | Percentage |
|-------------------------------------|------------|
| Patient location and status | 56 |
| Care team availability and location | 48 |
| Patient lists (coverage) | 39 |
| Room availability | 32 |
| On-call directory | 29 |
| Map showing location of equipment | 13 |
| Other* | 13 |
| Not sure | 17 |

*Other: Of the 13 percent of respondents who chose this category, 17 people gave specific details:

- Lab results, medication information (4 responses)
- Drug reference, medical records, patient status (2 responses)
- Calendar function, reports, emergency code, home computer database, physician status, plan of care, new admissions, treatment schedule (1 response)
- None/do not use (10 responses)

2. If a nurse’s communications device could help you overcome one key work challenge, which one would have the greatest positive impact?

| Key Work Challenge | Percentage |
|-------------------------------------|------------|
| Less wasted time | 37 |
| More timely patient care | 27 |
| Avoid patient care errors | 19 |
| Better prioritization of work tasks | 9 |
| Avoid delaying discharges | 2 |
| Other* | 1 |
| Not sure | 6 |

*One response each:

- Protect HIPAA information
- Does not apply to average hospital nurse

3. How many minutes per shift could be saved?

| Time Saved | Percentage |
|----------------------|------------|
| Up to 30 minutes | 11 |
| 30–60 minutes | 50 |
| One–two hours | 23 |
| Two–three hours | – |
| Three–four hours | 1 |
| More than four hours | – |
| Not sure | 15 |

4. How many overtime hours per week could be avoided?

| Overtime Hours Saved | Percentage |
|----------------------|------------|
| Up to 10 | 60 |
| 11–20 | 9 |
| 21–30 | 1 |
| 31–40 | 1 |
| More than 40 hours | 1 |
| Not sure | 29 |

5. On a scale of 1 to 5 with 1 being “no impact” and 5 being “very high impact,” how would you rate the impact of job-related communication lapses in the following areas?

| Communication Lapses | High Impact* (5+4) | 3 | Low Impact* (2+1) | Not Sure |
|---------------------------|-----------------------|----|----------------------|----------|
| Your productivity | 82 | 10 | 4 | 4 |
| Patient safety | 77 | 15 | 3 | 5 |
| Patient experience | 74 | 13 | 8 | 6 |
| Quality of your work life | 74 | 16 | 7 | 4 |
| Patient throughput | 66 | 15 | 3 | 16 |

*In the High Impact and Low Impact categories, responses for two rankings on a scale of 1 to 5 are combined. The plus signs indicate the combination of these rankings.

6. How many communications devices (beepers, pagers, phones, alert systems, etc.) do you carry with you on a typical shift?

| Number of Devices | Percentage |
|-------------------|------------|
| One | 41 |
| Two | 27 |
| Three | 6 |
| More than three | – |
| None | 25 |
| Not sure | 2 |

7. Why do you carry more than one communications device?

| Reason | Percentage |
|--|------------|
| Devices do not communicate with each other | 49 |
| Personal preference | 22 |
| Administration policy | 22 |
| Prefer to use single-function devices | 2 |
| *Other | 4 |
| Not sure | 1 |

*One response each:

- That is all that is available
- On-call and work in several buildings
- Pager for “call lights” and a walkie-talkie for staff communications

8. Would you rather have a single nurse’s communications device with multiple functions or multiple nurses’ communications devices with a single function?

| Device Preference | Percentage |
|---|------------|
| A single device with multiple functions | 91 |
| Multiple devices, each with a single function | 5 |
| Not sure | 4 |

The following table is in response to questions 9 and 10.

9. How many minutes per typical shift do you spend chasing other people to get answers?
10. How many minutes per typical shift do you spend searching for equipment like wheelchairs and infusion pumps?

| Time Wasted | Minutes Per Typical Shift Spent... | | | | | | |
|-------------------------------------|------------------------------------|---------------|-----------|-----------|-----------|----------|----------|
| | 0–30 Minutes | 30–60 Minutes | 1–2 Hours | 2–3 Hours | 3–4 Hours | 4+ Hours | Not Sure |
| Chasing other people to get answers | 23 | 38 | 25 | 7 | 1 | – | 6 |
| Searching for equipment | 44 | 41 | 8 | 2 | 0 | – | 6 |

11. What is the most significant challenge in your job that a nurse’s mobile communications device could address, but doesn’t today?

| Challenge | Total | Percentage |
|----------------------------------|-------|------------|
| Better communication among staff | 56 | 24 |
| Patient information/records | 26 | 11 |
| Staff location/availability | 19 | 8 |
| Elimination of paper | 17 | 7 |
| More reliable device | 17 | 7 |
| Wasting time | 12 | 5 |
| Charting | 8 | 3 |
| Better patient care | 6 | 3 |
| Hands-free function | 4 | 2 |
| Multifunction in one device | 4 | 2 |
| Security/privacy | 2 | 1 |
| Battery life | 2 | 1 |
| None/not sure/don’t use | 58 | 25 |

12. Is there a significant communication issue you face that was not touched on in this survey?

| Communication Issue | Total Responses |
|-------------------------------------|-----------------|
| Better communication with superiors | 10 |
| Staff location | 3 |
| Drug updates | 2 |
| Illegible handwriting | 2 |
| Data updates | 1 |
| Safety | 1 |
| Contact with supporting agencies | 1 |
| Patient history | 1 |

Appendix B

Survey Methodology

A sample of participants from Zogby International's online panel, which represents the adult population of the United States, was invited to participate in the survey from February 20, 2009 to March 10, 2009. The margin of error is ± 6.2 percentage points. Margins of error are higher in subgroups.

| Years of Nursing Experience | Sample Number |
|------------------------------------|----------------------|
| 0–3 years experience | 31 |
| 4–6 years experience | 23 |
| 7–10 years experience | 24 |
| 11–15 years experience | 27 |
| 16–20 years experience | 32 |
| More than 20 years experience | 116 |
| Type of Nurse | Sample Number |
| Emergency room | 37 |
| Operating room | 32 |
| Critical care/intensive care | 42 |
| Medical–surgical | 90 |
| Other | 52 |
| Hospital Characteristics | Sample Number |
| Fewer than 100 hospital beds | 35 |
| 100–199 beds | 33 |
| 200–299 hospital beds | 29 |
| 300–499 hospital beds | 51 |
| 500–699 hospital beds | 17 |
| 700–999 hospital beds | 15 |
| 1,000+ hospital beds | 1 |
| Not sure/did not answer | 64 |

Note: Numbers have been rounded to the nearest percent and might not total 100.

Source: "Cisco 2009 National Survey of Hospital Nurses," Zogby International, 2009

For more information about the “Cisco 2009 National Survey of Hospital Nurses,” contact:

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