

# The State of Clinical Communication & Workflow

patientsafe//  
solutions



## **A HIMSS Analytics Industry Benchmark Study**

A new HIMSS Analytics survey shows healthcare organizations evolving away from legacy solutions that can't keep up with workflow needs.

Produced by

**HIMSS** Media

In partnership with

**HIMSS** Analytics

**To take the pulse of today's clinical mobile communications practices, HIMSS Analytics partnered with PatientSafe Solutions to ask clinical, informatics and IT stakeholders nationwide about their current usage and future plans for mobile clinical communications.**

## Unrealized Potential

The healthcare industry is in the midst of a mobile evolution as organizations replace pagers and legacy wireless handsets with smartphones, whose compact size and computing power carry the promise of improving clinicians' productivity, care coordination and, ultimately, patient outcomes. One of the most active categories across the entire clinical mobility landscape in the past two years is in what Gartner identified as the Clinical Communications and Collaboration (CC&C) market.

However, many early CC&C adopters have yet to fully realize the potential of such solutions, often because first-generation technologies were designed for singular functions unable to fully integrate with clinical systems or align with real-time clinical workflows. These limitations have led to frustration for three major stakeholders: IT teams struggling to ready their infrastructure and gain control over the proliferation of mobile devices (many unsecured); clinicians who are forced to juggle multiple applications and

devices; and clinical informatics professionals who provide a bridge between the two groups.

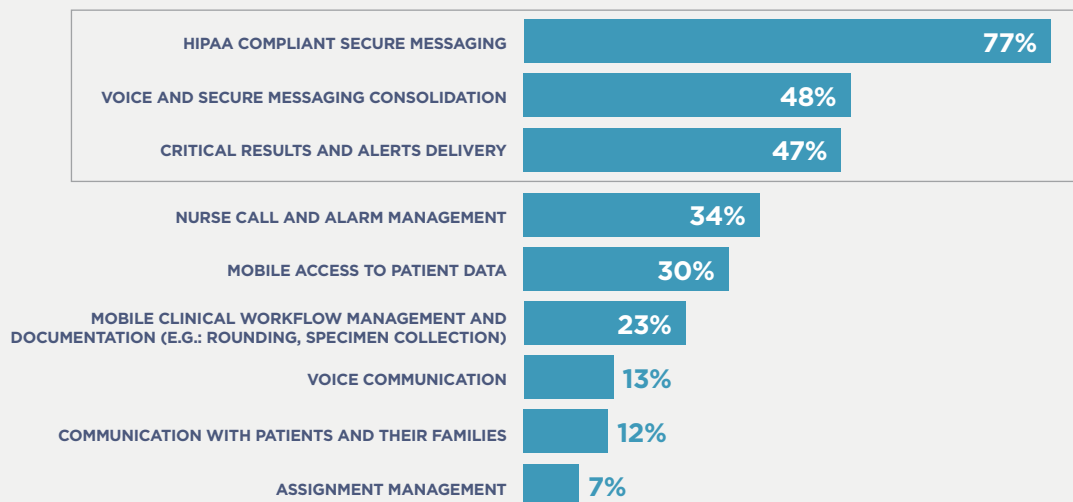
A HIMSS Analytics study sponsored by San Diego-based PatientSafe Solutions found that these healthcare stakeholders are being hindered, rather than helped, by the current state of their mobile communications solutions. As a result, some remain reliant on older, limiting forms of communications and documentation, which slow down workflows and add to the burdens of the frontline care team.

Among the cited obstacles to achieving a more unified clinical communications environment:

- fragmented point solutions and disparate device deployments, which force clinicians to carry multiple devices (the “fat clinical tool belt”), and lose time and effectiveness working across multiple single-purpose mobile applications.
- lack of true integration between communications solutions and clinical workflows.

**FIGURE 1: TOP DRIVERS FOR CLINICAL COMMUNICATION SELECTION BY IT RESPONDENTS**

What do you want to achieve with your mobile communication solution? (Top three selected)



**The gap between expectations and performance is one reason healthcare leaders are re-examining their mobile strategies and product roadmaps.**

- first-generation solutions that haven't achieved convincing outcomes such as improving HCAHPS and reducing cost on devices and maintenance.

This gap between expectations and performance is one reason healthcare leaders are re-examining their mobile strategies and product roadmaps. For some, legacy communications tools are nearing the end of their life expectancy. Others are just starting on their journey to a more mobile clinical workforce. Both groups have an opportunity to eliminate current pain points and overcome existing hurdles by deploying newer solutions that bring together secure communications and access to clinical systems, such as care team directories, on-call schedules, EMR data, telemetry alerts and even sepsis warnings — all in a unified application for greater ease of use. In turn, these more robust mobile offerings geared for clinicians may fulfill the vision of a more productive, efficient healthcare workforce better able to coordinate care across the continuum.

### About the Survey

To take the pulse of today's mobile communications practices, HIMSS Analytics partnered with PatientSafe Solutions to ask clinical, informatics and IT stakeholders nationwide about their current usage and future plans for mobile clinical communications.

#### **The State of Clinical Communication & Workflow**

Benchmark Industry Study is based on a survey administered in November 2017 that drew 302 respondents in clinical (49%), IT (31%) and informatics (20%) roles, with 31% working in multi-hospital health systems, 29% in stand-alone hospitals and 22% in critical access hospitals.

The survey's organization-size composition is comparable to that of the 5,465 hospitals nationwide, where there is roughly a 40 to 60% age split between smaller (with fewer than 50 beds) and larger organizations. In both, about 1 in 5 respondents are tied to either a hospital with 101 to 200 beds or 201 to 500 beds.

### Drivers For Clinical Communication System Selection

Key stakeholders differ on the anticipated goals for a mobile clinical communications rollout, whether it's hardware, middleware or applications. In the HIMSS survey (Figures 1 and 2):

The top three clinical communication selection drivers among IT respondents were:

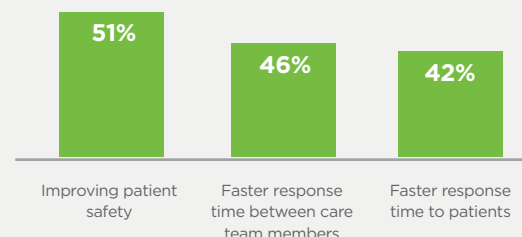
1. HIPAA-compliant secure messaging (77%)
2. Voice and secure messaging consolidation (48%)
3. Integration with critical results and alerts delivery (47%)

The top three drivers among clinicians and clinical informatics respondents were:

1. Improving patient safety (51%)
2. Faster response times between care team members (46%)
3. Faster response times to patients (42%)

#### **FIGURE 2: TOP THREE INTENDED OUTCOMES FOR CLINICAL & INFORMATICS STAKEHOLDERS IN THEIR SELECTION OF A CLINICAL COMMS SOLUTION.**

Which of the following outcomes were most important in your selection of a mobile communications solution? Top three were ranked, with 1 as the most important.



Note: Percentages based upon Rank 1, 2, 3 cumulative



... we're still early in the evolution of smartphone use in healthcare settings.

Joyce Sensmeier | Vice President of Informatics | HIMSS



“From what I see in the survey results, it looks like the primary use of mobile clinical communications solutions today is texting and other forms of communications, versus leveraging ‘smart’ capabilities — like easier access to patient data, that are available today,” said Joyce Sensmeier, MS, RN-BC, CPHIMS, FHIMSS, FAAN, Vice President of Informatics for HIMSS. “To me, clinicians are still reliant on mobile devices for general communications, as opposed to a detailed clinical care focus, which makes sense given we’re still early in the evolution of smartphone use in healthcare settings.”

While IT may be more focused on regulatory compliance and improving secured messaging environments, and on the clinical side, improving response times, those goals intersect when it comes to leveraging a chosen technology for better care team coordination and real-time access to the pertinent patient information clinicians need to do their jobs.

The survey shows the vast majority of both clinicians and IT want to see strong

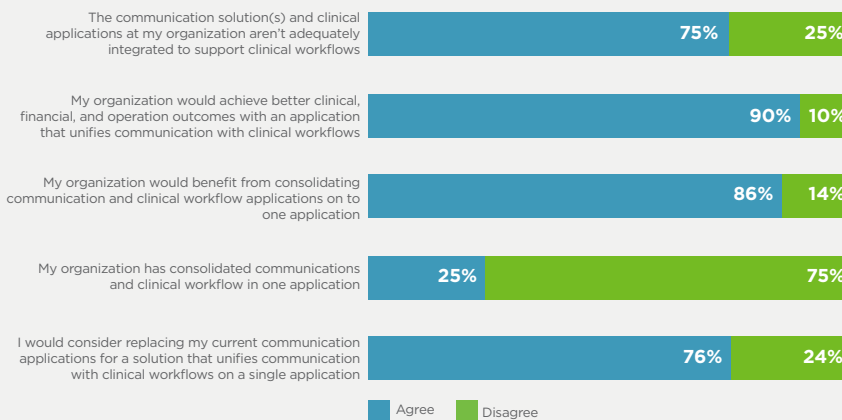
integration of workflow and communications capabilities within a unified application, which potentially makes it the strongest driver for ongoing adoption (Figure 3). However, for the most part, that hasn’t happened, primarily because of product limitations. Enabling clinical workflow requires communication platforms to integrate with multiple clinical wireless information systems, alerts and monitors and IT infrastructure — a tall order.

“If you look at early clinical communication providers, historically they’ve been focused on voice over IP or secure messaging. Vendors haven’t provided a solution that brings both a clinical workflow and communications together,” said Steve Baum, Vice President of Products for PatientSafe Solutions. “If you talk to clinicians and those in IT, they want those capabilities more tightly integrated.”

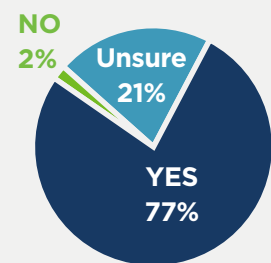
And hospitals appear ready for a more integrated solution. In the survey, more than 50% of those organizations with secure messaging plan to extend those platforms with

**FIGURE 3: STRONG INTEGRATION OF WORKFLOW AND COMMUNICATION CAPABILITIES WITHIN A UNIFIED APPLICATION IS POTENTIALLY THE STRONGEST DRIVER FOR ON-GOING ADOPTION.**

What is your level of agreement with the following statements?  
Clinicians responded:



IT respondents indicated if they would like their communications solution(s) to integrate with clinical workflow management and documentation.





**... we see an increasing focus on clinical impact and outcomes for mobile solutions measured and owned by clinical and/or clinical informatics stakeholders.”**

Steve Baum | Vice President of Products | PatientSafe Solutions

more functionality. This should help with a primary pain point for all three groups: reducing the time spent on care coordination so that there’s more time spent on direct patient care.

“As the survey data shows, if you look at all the different tasks a care team member needs to accomplish, there is considerable workflow fragmentation caused by the sheer number of devices and apps on those devices they still need to use,” Baum said. This has resulted in clinicians carrying so-called “fat tool belts”. Still all too common are nurses who must carry one device for communications, another for, say, blood administration and a third for specimen collection.

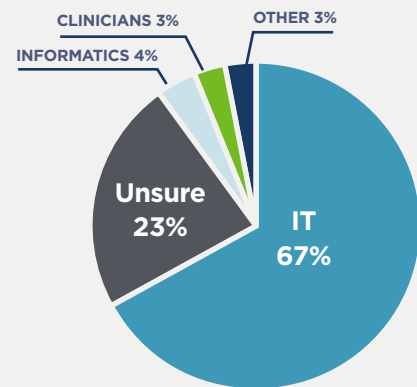
Baum said he’s gone into hospitals and physicians’ rooms and has seen stacks of devices on desks, such as a Spectralink mobile handset, a personal cellphone, a pager and a hospital-issued mobile phone. “This becomes very costly because IT must maintain multiple solutions with different lifecycles,” he said.

HIPAA compliance also comes into play. With nurses and physicians using multiple devices, sometimes including their own unsecured personal mobile phones, the risk of pulling up or exchanging data not properly secured is a real risk.

Even when organizations successfully consolidate clinical tasks onto one device, there still may be multiple applications to open. A physician may need to open several different applications to access the assigned, on-call care teams and specialists across her health system network, then she must go to a different application to contact them via secure messaging and another application to access patient information the team needs to make care decisions.

**FIGURE 4: IT REPORTS THAT THEY ARE RESPONSIBLE FOR MEASURING ROI**

Who has primary responsibility for measuring the ROI of communications technology in your organization?



### Measuring Outcomes & ROI

Not surprisingly, 67% of IT survey respondents said IT is responsible for measuring success (or failure) for a chosen mobile communications solution. They said only 7% of clinicians and informaticists had similar responsibility, while 23% weren’t sure who owned outcomes (Figure 4). “It makes sense that IT is the primary driver because IT initiates such a project,” Baum explained. “Typically, IT allocates budget to replace aging phones. However, we see an increasing focus on clinical impact and outcomes for mobile solutions measured and owned by clinical and/or clinical informatics stakeholders.”

Ash Goel, MD, CIO and CMIO of Bronson Healthcare Group in Kalamazoo, Michigan, believes measuring ROI in this context is among the hardest parts of any mobile deployment. “How do you justify the amount of resources needed to integrate





***The move to 5GHz is the right direction to go. Wi-Fi providers now are providing multiband integration so devices auto-connect to the best available strength. But it has its limits.***

Ash Goel, MD | CIO and CMO | Bronson Healthcare Group

and to make this an effective mechanism? It's costly to do business, and to measure ROI on a platform that increases employee efficiency and communications efficiency is a very difficult to do," he said.

A significant number of survey respondents do recognize that as communications technology advances and clinical outcomes become the key measure of ROI, clinical stakeholders will need to have a growing influence on selection decisions. When asked who is involved in communication technology evaluation and selection, in addition to IT (97%), respondents cited nursing leadership (80%) and physician leadership (69%).

Such inclusion bodes well for these same clinical user groups playing active roles in evaluating ROI, especially as clinical outcomes become a bigger part of the mobile clinical communications picture. "We're seeing more IT departments including clinicians during analyses and ROI modeling," Baum said.

Clinical informaticists also report being more involved in strategic decisions surrounding communications technologies and applications. Almost 60% said they were personally involved in evaluating, implementing or maintaining communications technologies and apps, with another 19% saying they had influence, if not direct involvement. About the same number (17%) had visibility to decisions, but no explicit influence.

## Current State of Wi-Fi Network Experience

More than 78% of the informatics staff and more than 60% of clinicians rated Wi-Fi experience neutral to excellent (Figure 5). So recent infrastructure investments are yielding return, but more work is ahead to support expanding smartphone deployments.

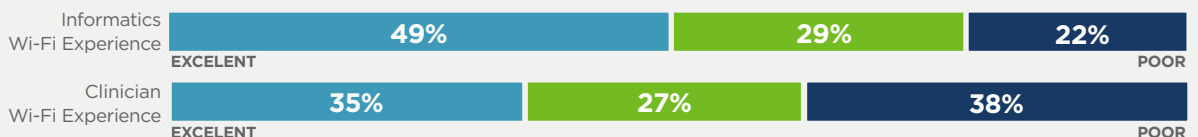
Ron Hashem, Senior Vice President of Operations for PatientSafe Solutions, believes many healthcare organizations are at a crossroads. Their current communications tools, such as badges, pagers and handsets, are aging and will need to be replaced soon. This provides an opportunity to upgrade to improved mobile wireless solutions that can do more — which also means optimizing wireless networks for more bandwidth and access points.

Baum agrees. "A lot of legacy phones were simply capable radios, so IT teams felt that since these technologies performed well, their Wi-Fi infrastructure was solid," he said. "However, ask any nurses or clinicians who are still using those technologies, and they'll know where dead spots are and avoid them when making a call. A similar issue with signal strength throughout a facility exists today with call quality and smartphones."

More than 50% of IT respondents said they had recently moved, or plan to move,

**FIGURE 5: PERSONA COMPARISON: WI-FI EXPERIENCE.**

How would you rate your experience with your current Wi-Fi service in your organization?  
Rated on a scale of 1 to 7, (1 = poor, 7 = excellent)





*It's shocking that the people doing critical work are worrying about not having the right device, or information, when they need it.*

Joyce Sensmeier | Vice President of Informatics | HIMSS

to 5Ghz Wi-Fi, which allows for faster data transmission rates. However, increased strength is only one component in an optimized Wi-Fi network.

“It’s going to be a constant battle,” said Bronson Healthcare Group’s CIO, Goel. “The move to 5GHz is the right direction to go. Wi-Fi providers now are providing multiband integration so devices auto-connect to the best available strength. But it has its limits.” Bronson’s IT staff conduct periodic Wi-Fi surveys, in which team members walk a campus with different devices and map signals to see where more wireless access points might be placed. Not every hospital, however, has the manpower to conduct such periodic tests, especially with so many different devices in use.

### State of Devices in Use & Their Adoption Characteristics

The survey showed a great deal of fragmentation among communications modalities and technologies amid myriad

clinical user groups. Clinical and IT stakeholders report the same general distribution of device adoption and usage. Physicians are predominant users of smartphones (20%) and pagers (19%); meanwhile, nurses are most likely to use legacy handsets (17%) and badges (21%) throughout their shift (Figure 6).

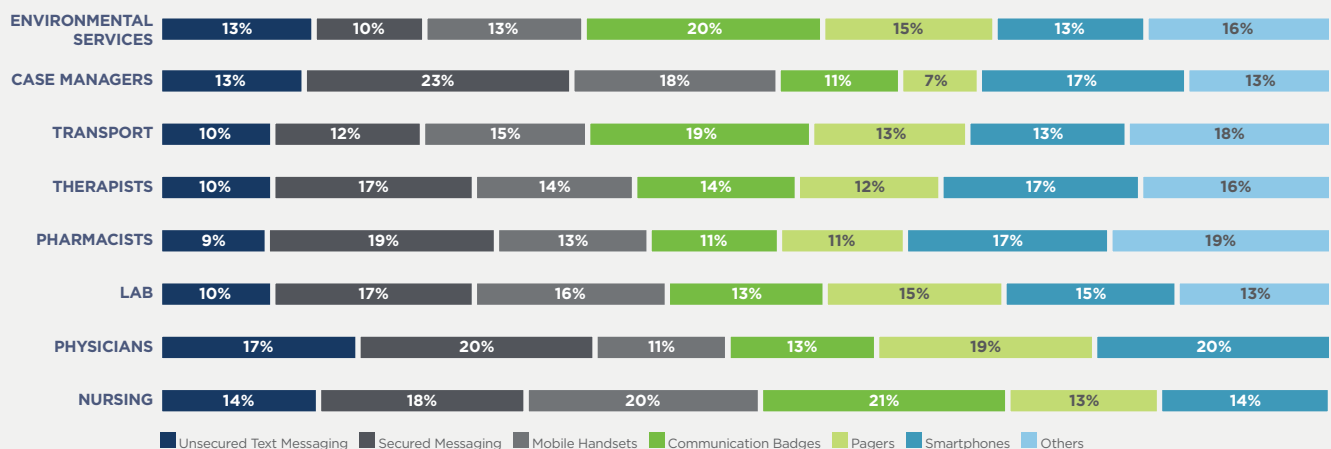
This juggling of multiple devices and opening numerous independent apps bogs down workflows, particularly among those for whom minutes matter.

“The bottom line is they shouldn’t have to deal with this,” HIMSS’ Sensmeier said, referring to nurses. “They are managing the patient situation, maintaining patient safety and keeping people alive. It’s shocking that the people doing this critical work are worrying about not having the right device, or information, when they need it. They should have a seamless workflow.”

Sensmeier’s comment is underscored by survey results that show devices are not

**FIGURE 6: SIGNIFICANT COMMUNICATION FRAGMENTATION AT THE POINT OF CARE**

What communication devices and modalities are in use today in your organization?



## FIGURE 7: HIGH INCIDENCE OF UNSECURE TEXTING.

Which of the following clinical roles in your organization use the following mobile communication forms?

**59%**

of informaticists report use of unsecure messaging across all clinical roles.

**39%**

of informaticists report use of unsecure messaging by clinicians even when secure messaging is in place.

evenly distributed across the entire care team, leaving out critical roles needed to complete the full spectrum of care delivery. In addition, the data show that for every care team role, there are multiple devices and modalities of communications in active use today, potentially impeding workflow efficiency and productivity.

### Unsecure messaging still exists

Unsecure text messaging is still in use according to 59% of clinical informaticists. And a full 39% of clinical staff indicate unsecure messaging is happening even when secure messaging is in place. (Figure 7) “I’m certain convenience has something to do with it,” PatientSafe’s Baum surmised. “Everyone has their own cell phone. If the care team can’t easily reach each other with the hospital-provided devices and apps, they’ll use whatever is fastest to take care of their patients. Physicians on BYOD may have a secure messaging app but might need to switch to a web application to reach a nurse. That’s not efficient.”

### Single-department deployments impede integration

Hospitals continue to struggle with deployments limited to single departments and single-care roles, which raises both interoperability issues and headaches for IT teams tasked with mobile device management. Mobile handsets, such as those made by Cisco and Spectralink, and communication badges, such as those from Vocera, have the highest incidence of single-department deployments, according to the survey. Nursing in particular is especially

reliant on handsets, accounting for 57% of users within their organizations. Physicians, meantime, are more likely to use smartphones (35%) or pagers (38%) to communicate.

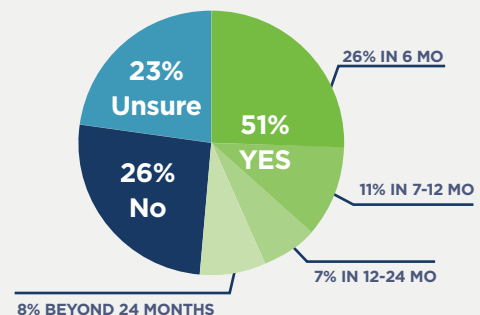
### A move to smartphones

Smartphones, meantime, are typically deployed in multiple departments or enterprise wide. According to 47% of surveyed clinicians, the devices were in use across their organizations. That figure may grow considerably in the coming two years. The study shows 5% of IT respondents planned to implement smartphones, with 43% doing so within 24 months. A major driver of this shift is total cost of ownership for expiring legacy devices (Figure 8).

“Phones and badges are not cheap, and maintaining them becomes harder because of specialized units,” Hashem said. “If you have a VoIP phone and all it does is VoIP calls, you’re basically spending \$600 for a phone with a longevity of only three years.” That’s why the shift to smartphones makes sense for organizations wanting to decrease TCO [total cost of ownership] and create clinical communications uniformity across organizations. Smartphones have an edge over other communications technologies, given their ubiquity in the consumer space and falling price points. In addition, they can support the

## FIGURE 8: 51% OF IT RESPONDENTS PLAN TO IMPLEMENT SMARTPHONES

Do you have plans to implement smartphones as communication devices in your organization?







*... I think we are way beyond where hospitals should be thinking about providing that structure. It should be in place already.*

Ash Goel, MD | CIO and CMO | Bronson Healthcare Group

right type of clinical communications apps, especially those wedded to clinical workflows.

“People see how smartphones have transformed the consumer world and can envision putting those same phones in the hands of their care teams to provide access to secure messaging and voice calls,” Baum said. “Then, when you add clinical systems integrations — such as routing alerts through the device — there is an even greater return on their investments. The value increases when smartphone applications integrate with paging systems and care team directories, leverage current investment in telephony and free patient data from the EMR. They can also help nurses decrease documentation time, providing better productivity for the care team.”

Baum added, “This is where lightbulbs begin to turn on for that multidisciplinary selection team.”

### Secured Messaging Use & Compliance

Not only are clinicians using multiple devices to get work done, they’re also continuing to send unsecured texts among care team members, even when a secured messaging system is available. Almost 60% of informatics respondents indicated unsecure text messaging is still in use. And, 39% said unsecure messaging is happening even when secure messaging options are in place — a sign current solutions aren’t meeting clinicians’

needs. Only IT roles reported a low incidence (less than 10%) of the unsanctioned practice.

The regulatory implications, of course, include being cited for HIPAA violations. But more may be at stake. In January, the Centers for Medicare & Medicaid Services issued a clarification on when providers can text patient information, after a published report said the agency had banned all types of texting. “The practice of texting orders from a provider to a member of the care team is not in compliance with the Conditions of Participation (CoPs) or Conditions for Coverage (CfCs),” according to the official notice. However, it added, care teams can text patient information, but only using secured messaging platforms.

### Mobile Device Management (MDM)

The survey response suggests that as mobile challenges are evaluated holistically, clinicians, informaticists and IT are beginning to see that a consistent, integrated and secure approach to mobile device management is necessary. One approach to addressing the challenges illustrated throughout the survey is to move to an all-smartphone, enterprisewide deployment. This approach would help alleviate a common pain point among IT practitioners: managing a burgeoning mass of mobile devices, some of which are neither owned, nor controlled, internally.

Bronson Health’s Goel was surprised at how prevalent some challenges to smartphone

## FIGURE 9: 64% OF CLINICAL RESPONDENTS FEEL THERE IS LIMITED CLINICAL WORKFLOW INTEGRATION WITH COMMUNICATIONS TECHNOLOGY.

How would you rate the level of integration between your communication technology and your clinical workflows (rounding, specimen collection, nursing documentation, etc.)?

INTEGRATION (Rated on a scale of 1 to 7, 1 = No Integration, 7 = Highly Integrated)





***The first generation of communication products absolutely didn't have the level of clinical workflow integration that clinicians really wanted.***

Ron Hashem | Senior Vice President of Operations | PatientSafe Solutions

deployments remain among survey takers. More than 70% of informatics respondents cited managing mobile devices and consolidating existing ones as the top challenges to solve fragmented device and app usage. Additionally, despite the inundation of mobile devices in the acute-area setting, 40% don't have a mobile device management plan, let alone a practice, in place. For those who do have MDM, the majority (64%) do not manage all mobile devices.

"Yes, mobile device management is a challenge. Yes, consolidation of existing devices is a challenge," Goel said. "But I think we are way beyond where hospitals should be thinking about providing that structure. It should be in place already."

While mobile device management is a challenge, new technology and applications are available to more simply tackle this tenacious issue. The study suggests that the key is looking at these options in a way that addresses the hospital's needs holistically — not one department, one group at a time.

### State of Workflow Integration

According to the study results, any smartphone deployment (whether using hospital-issued or personal devices) would be most efficient if done with clinical workflow integration and enhancements in mind. The survey showed 64% of clinicians believe their current mobile communications technology falls woefully short in this category (Figure 9).

That doesn't surprise Ron Hashem and Steve Baum of PatientSafe. "The first generation of communications products absolutely didn't have the level of clinical workflow integration that clinicians really wanted," Hashem said. "You need a much higher-grade solution from a clinical communications perspective before this 64% will be satisfied."

### Security is one thing, clinical context is everything

Baum agrees. "Some of the legacy communications technologies today, and even some newer ones focused on secure messaging, are missing the clinical context that is needed to drive better workflows," he said. "They may check the security box, but what nurses and physicians are looking for are concise communications tools that have actual patient information to help them do their job more efficiently and be more productive while delivering quality care."

The time and cost savings can be significant. All stakeholders, including clinicians, informaticists and IT, believe mobile access to the most up-to-date care team assignments, on-call schedules and patient data are good places to start. This is particularly true for those clinical workforces still depending on "old school" communications tools, such as desktops and whiteboards, for care team coordination and documentation. However, changing delivery tools may require a different mindset around mobile communications.

"Organizations need to avoid the trap of just looking at this as a telephone replacement, and look at this as a workflow enablement solution," Baum said. "This means establishing multidisciplinary teams of clinicians, informaticists and IT so everyone in a critical role is represented in purchase decisions."

In replacing legacy equipment with smartphones, "you may find the apps you put on that phone are single-purpose applications and end up creating fragmentation on the smartphone itself," he continued. "A multidisciplinary team might uncover how to consolidate so that communications from multiple applications are directed into a single inbox. It's then an all-in-one place,



***Each nurse and physician has the patients' safety and care in the forefront of the mind. They will use whatever they feel is the best source of information so that they don't make mistakes and they don't cause errors.***

Joyce Sensmeier | Vice President of Informatics | HIMSS

which allows everyone to be more productive and effective with communications.”

The study, however, shows such considerations of clinical workflows aren't customary. Only 52% of informatics respondents said clinical workflow was always factored into communications device and application selections. Another 36% said it's often, but not always, included, with 12% admitting workflow is only occasionally part of deliberations.

Instead, the organizations surveyed in the study still rely heavily on desktops and web portals/apps for clinical functions. Those include:

- nursing documentation (89%);
- admittance documentation (86%);
- specimen collection (80%);
- blood product administration (76%);
- medication administration (75%); and
- rounding (70%).

The second most popular workflow delivery tools are workstations on wheels. Even if

brought to the bedside, these carts force caregivers to divide their time between communicating with the patient and inputting or pulling up data on the machines.

### Care Team Assignments & Patient Access

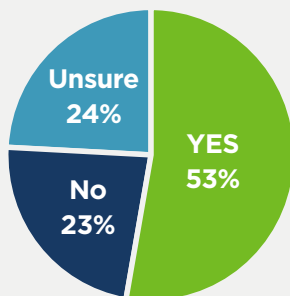
Time is lost looking up assigned care team members. The HIMSS Analytics survey says it can take up to 10 minutes, according to a majority (64%) of clinical informatics participants. Another 10% reported the average time to find assigned care team members was closer to 11 to 30 minutes.

#### The driver is always patient care

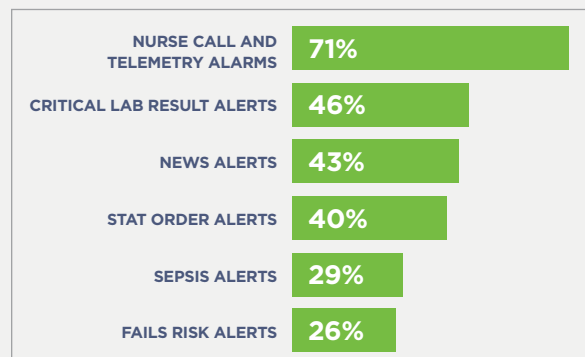
Additionally, 74% of clinicians said they cannot access the entire assigned care team through their current communication solution. Sensmeier, the HIMSS VP of Informatics, isn't surprised such low-tech workflow delivery tools are still the norm, particularly among nurses and physicians. "I think it speaks to the challenge of innovation in healthcare," she said. "Each nurse and physician has the

**FIGURE 10: STRONG INTEGRATION OF WORKFLOW AND COMMUNICATION CAPABILITIES WITHIN A UNIFIED APPLICATION IS POTENTIALLY THE STRONGEST DRIVER FOR ON-GOING ADOPTION.**

Do you plan to expand your mobile communications platform beyond secure messaging? IT respondents replied:



Which of the following areas do you plan to expand upon in your communication platform? IT respondents replied to the question selecting all that apply:





***We aim to work with technologies that deliver the right closed-loop effect at the point of care.***

Steve Baum | Vice President of Products | PatientSafe Solutions

patients' safety and care in the forefront of the mind. They will use whatever they feel is the best source of information so that they don't make mistakes and they don't cause errors. If there is a whiteboard with the information, then that's what they use until they are confident that that new technology works appropriately and isn't creating a disconnect with the patient and patient care. That's going to be their decision point."

### State of Communications Platforms

Despite current reliance on analog communication relays, and legacy devices with limited clinical workflow value, organizations are showing signs that they now realize better ways are available to leverage their investments in mobile communications solutions and the wireless infrastructure surrounding the communications solutions they use.

#### Time to incorporate more functionality into mobile clinical communications solution

Almost 53% of IT survey-takers plan to expand their mobile-device capabilities beyond secure messaging. For all three roles, a good start

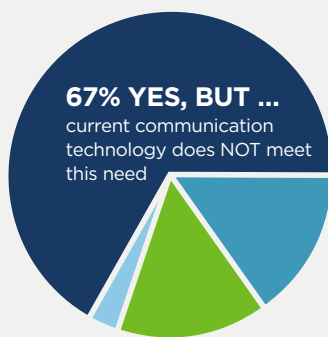
will be incorporating nurse call and telemetry alarms (82% for clinicians; 71% for IT; and 27% for informatics), followed by critical lab results alerts (which ranged from 46% for IT to 27% for informatics). A little later on the integration timeline would be fall risks and sepsis alerts (Figure 10).

"Those survey results resonate with what I've seen. Responding to nursing calls and telemetry alarms accounts for a large part of a clinicians' workday," Baum said. "Alert, nurse call and alarm integration is key. Other information — such as falls risk, sepsis alerts and critical results — improve efficiency and patient safety. If a nurse knows a patient is at a high risk of falls, when he gets an alert that a patient needs to use the bathroom, he can quickly respond. That reduces that risk significantly."

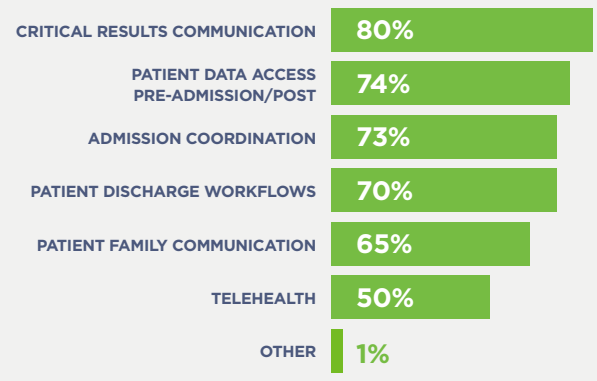
Baum is particularly intrigued by solutions that provide sepsis alerts, given that sepsis incidence has increasing prevalence among the hospitalized patient population and is now tied to value-based care reimbursements.

**FIGURE 11: COMMUNICATION TECHNOLOGY ENABLING CARE COORDINATION**

Do you envision the possibility for clinical communication technology to enable care coordination processes across the healthcare continuum?



In what areas should your communication technology enable care coordination across the healthcare continuum? (please select all that apply)





*If you look at organizations that are implementing a successful mobility strategy, they have a solid plan based on input from all key stakeholders.*

Ron Hashem | Senior Vice President of Operations | PatientSafe Solutions

Providers whose government-insured patients acquire hospital-borne infections may not be paid the full bill for the care provided. “Sepsis is a major issue — but also a potentially highly controllable situation with the right trigger-intervention feedback loop,” he said. “Getting the alerts so caregivers can respond more quickly is one of the first steps to avoiding septic shock. Every 10 minutes that goes by increases a patient’s mortality rate. We aim to work with technologies that deliver the right closed-loop effect at the point of care.”

### **Changing mindsets for tech providers & users**

Faster response times to both reach care team members and respond to patients now have organizations reconsidering how better to leverage their mobile communications models. For starters, clinicians need to become less reliant on web portals accessed through desktops or WoWs and more comfortable getting to directories and EMRs from their smartphone devices.

“Nurses are mobile, and they have to provide care in multiple rooms for multiple patients,” Baum said. “They spend 20% of their time documenting care and would prefer spending more of that time at the patient bedside. But the reality is they have to go back to those desktops for information, and it’s very inconvenient and time-consuming.”

Those delays in care add up, he noted. “If you’re at the bedside, and the information you need is at the desktop, it may be 5 to 10 minutes before you know you should have responded to something that was urgent.”

### **Future Evolution**

When HIMSS Analytics asked those surveyed to look at the next phase of evolution for a clinical communications platform, 67% believe such technology should better enable care

coordination processes across the healthcare continuum. The majority of stakeholders (72% of informatics; 69% of clinicians; and 60% of IT) don’t believe their current communication technology can achieve such care coordination functions and processes, despite their desire to expand towards such use cases. (Figure 11).

### **Stakeholders want integrated, coordinated & easily accessible technology**

All three major stakeholders want to leverage their clinical communications platforms to address the full spectrum of care coordination needs. And they want to start by addressing the top three currently unfulfilled areas: communicating various results across care-setting boundaries (80%); proper post-discharge follow-up coordination (73%); and patient data access anywhere, anytime (74%).

### **Start with a solid plan**

“If you look at organizations that are implementing a successful mobility strategy, they have a solid plan based on input from all key stakeholders. They start focused and controlled on the initial scope and grow steadily to where they want to be,” Hashem advised. “They make mobility the centerpiece because that will free their care teams to do a lot more in less time. Everything revolves around keeping that strategy in mind. A chosen mobile device, infrastructure and some marquee applications become the backbone of their mobile clinical communications and collaboration strategy. Then they can build on top of that to support their evolving business model — taking care of patients on a community and population level.”

Added Baum: “Investing in the future means integrating smartphone technology, clinical communications and workflows. The study shows that IT, clinical informaticists and clinicians all agree: A unified platform of clinical communications and workflows



would yield better clinical, financial and operational outcomes. Strong foundations laid down today will be leveraged in all care coordination efforts moving forward.”

From the survey results, it appears the path to clinical communication and workflow integration is being laid. Plans for expansion beyond secure messaging and smartphone purchases in the next 24 months indicate healthcare organizations are invested in eliminating fragmentation at the point of care. There remains the opportunity for more cross-functional collaboration to ensure a chosen technology delivers on all stakeholders’ expectations. In order to achieve this goal, organizations will need to overcome key challenges: infrastructure readiness, systems integration, and device/application proliferation and fragmentation.

The industry is learning from the shortcomings of immature mobile technologies. Today, clinicians, clinical informaticists and IT professionals are seeking solutions to improve, rather than impede, care collaboration. Selecting sustainable solutions will be critical to effectively connecting the inpatient and outpatient setting. It comes down to consolidation and choosing among platform-based solutions that can unify workflow and communications in a single application, on one device: the smartphone.

For more information about the study, or assistance with your clinical communications strategy,

**Contact PatientSafe at: 858.746.3322**  
**TalkToUs@PatientSafeSolutions.com**



#### About PatientSafe Solutions

PatientSafe Solutions helps care teams communicate and work together reliably and efficiently through a mobile platform that unites communication with clinical workflows in one application, on one device. PatientTouch delivers secure messages, voice calls, pages, alerts, nurse calls, critical results and notifications to a unified inbox prioritized for each care team member. The platform extends to include clinical workflows like rounding, specimen collection, sepsis and nursing documentation. Deeply integrated with the EMR, clinical, and directory systems, PatientTouch provides up-to-date patient, clinical and care team context for more efficient care collaboration and decision making. For more than a decade, PatientTouch has helped clinicians in and outside the hospital streamline care delivery, increase patient satisfaction and lower costs. For more information, please visit [www.patientsafesolutions.com](http://www.patientsafesolutions.com).