



THE EVOLUTION OF **MOBILE** **STRATEGIES** IN HEALTHCARE

SURVEY RESULTS PART 1

Since 2011, Spok has asked healthcare professionals to weigh in on the development of mobile strategies in healthcare. We have years' worth of data that tells an evolving story of mobile devices, their use cases, and the system integrations hospitals choose to support for mobile care team members. This year the survey was expanded to include a deeper dive on specific areas of mobile strategies. We asked questions about how long mobile strategies have been in place, how they are monitored and enforced, what strategic hospital goals are part of these plans, and more.

This eBrief is the first in a two-part series presenting the results of our annual survey. *The Evolution of Mobile Strategies in Healthcare* focuses exclusively on mobile strategy topics and the bigger picture. The second part of our series focuses on the details—what devices are supported, what challenges hospitals are experiencing with mobile device usage, and what are the biggest opportunities for mobile improvements over the next three to five years.

Our data, collected in February 2017, represents more than 300* healthcare professionals from around the U.S. Twenty-two percent of our respondents were physicians, 13 percent were nursing staff, 10 percent were IT staff and 7 percent were executive-level leaders. The remaining 35 percent were an assortment of other hospital roles, from risk managers and mobility engineers to infection prevention specialists and a director of quality, risk, and compliance. We hope you find this survey's analysis interesting and informative as you continue your own path toward integrated clinical communications.



Download Part 2

**This figure includes only respondents who answered more than 75 percent of survey questions.*



HOW TO DEFINE A MOBILITY STRATEGY

One of the hurdles to creating a mobility strategy may be understanding what one is. The data we received indicate that there isn't a single definition. Different organizations have different interpretations, or perhaps don't have a clear definition at all. So what is a mobility strategy, and why do hospitals need one? Mobility strategies help align mobile objectives with organizational goals. They feed the framework for all mobile-related projects and answer questions such as:¹ What strategic initiatives will be included in the plans for mobile enablement (e.g., decrease the ED discharge process time by 15 percent)? What are the measures of success (the time it takes to discharge patients from the ED)? What integrations are necessary to meet the larger goals of the hospital (easier communication methods among care team members to coordinate and speed necessary conversations)? In short, a mobile strategy brings together elements of security, technology, and communications in a collective plan to improve staff productivity and enhance patient care.

¹ <http://www.healthcareitnews.com/news/5-crucial-aspects-successful-mobile-strategy>

HOW COMMON ARE MOBILE STRATEGIES?

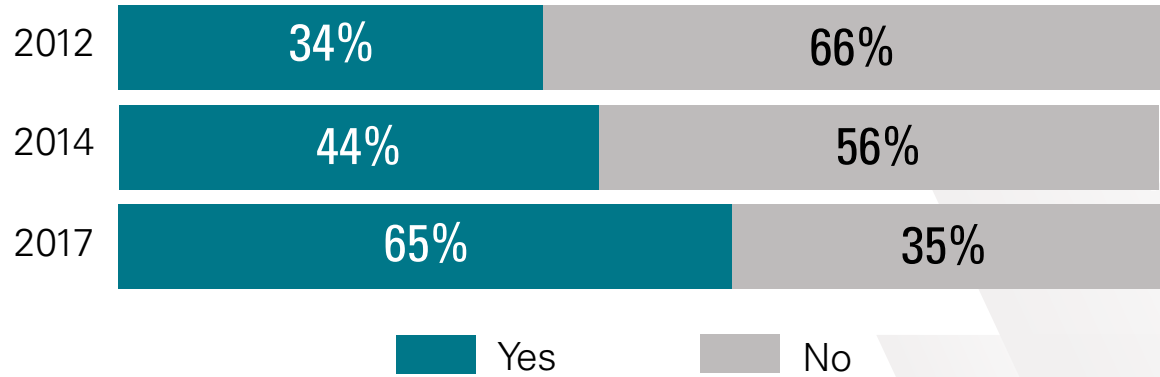
In 2012 when we first asked healthcare professionals if their organizations had a documented mobility strategy in place, 34 percent said yes. Five years later that number has nearly doubled, and 65 percent of our respondents indicate their hospital has a formal, documented strategy. The rising number of hospitals with documented strategies in place shows that more and more hospitals are investing valuable time and resources in creating formal plans for mobility.

For the organizations that do have a documented strategy in place, we asked how long that had been the case. Roughly a fifth have had a formal strategy for less than a year. Forty percent have had a strategy for one to three years, and a combined 39 percent report their strategy has been in place for more than three years. Creating a formal strategy is an important first step, but what the answers here do not reveal is how detailed or comprehensive these plans are. The rest of this eBrief begins to peel back the covers to look at what hospitals are including in these plans.

How long has your mobility strategy been in place?



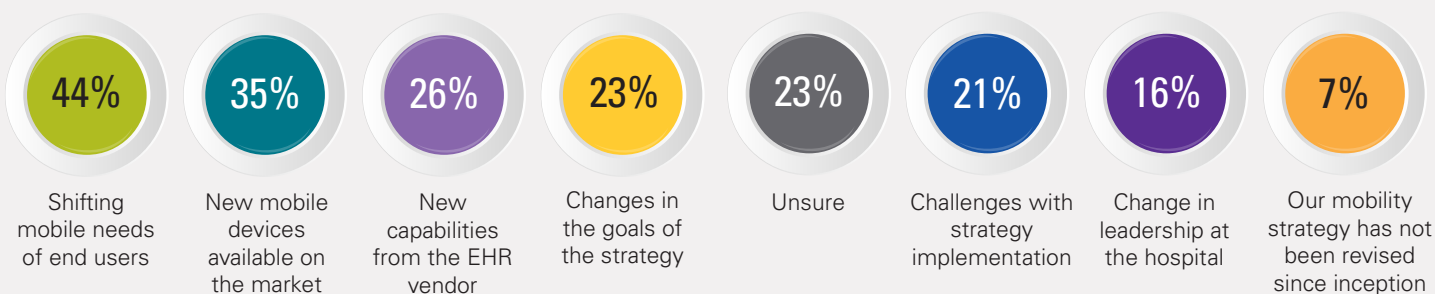
Do you have a documented mobility strategy in place?



MOBILE STRATEGY EVOLUTION

In addition to having a formalized strategy, we also wanted to know more about what healthcare organizations are doing to keep up with changes in technology and end-user needs. So we asked survey respondents whose mobility strategy has been in place for longer than a year if the policies have been updated since inception. Twenty-three percent of our respondent pool was unsure, and seven percent reported no, their mobility strategy has not been updated. Looking at the reasons respondents selected for updating a mobile strategy, the primary drivers relate to what end users need, and changes in the underlying technology—shifting needs of end users (44 percent) and new mobile devices available on the market (35 percent). This was followed by citing new capabilities from their EHR vendor (26 percent) and making adjustments because of changes in overall strategy goals (23 percent). Other examples of reasons for needing to update mobility strategies include challenges with implementing the original strategy (21 percent), and changes in hospital leadership (16 percent).

Has your mobile strategy been updated since it was first developed because of (check all that apply):



These responses point out that mobile strategies are largely fluid, with hospitals making amendments as needed. Looking ahead, we expect the number of hospitals with documented mobility strategies to continue rising. The increase in severity and frequency of security breaches, the changing needs of end users, and new mobile devices and solutions that solve clinical and business problems mean that hospitals not already working to refine strategic goals and plans regarding mobility will experience more and more pressure to get their arms around this expansive project. Organizations that began their journey even just two years ago are making modifications and revising guidelines because successful mobile strategies must evolve to retain relevance in an environment that changes so rapidly. We also expect to see more hospitals establishing dedicated, cross-functional teams with a singular focus on mobile enablement to oversee this evolution and to keep strategies and targeted goals up to date.



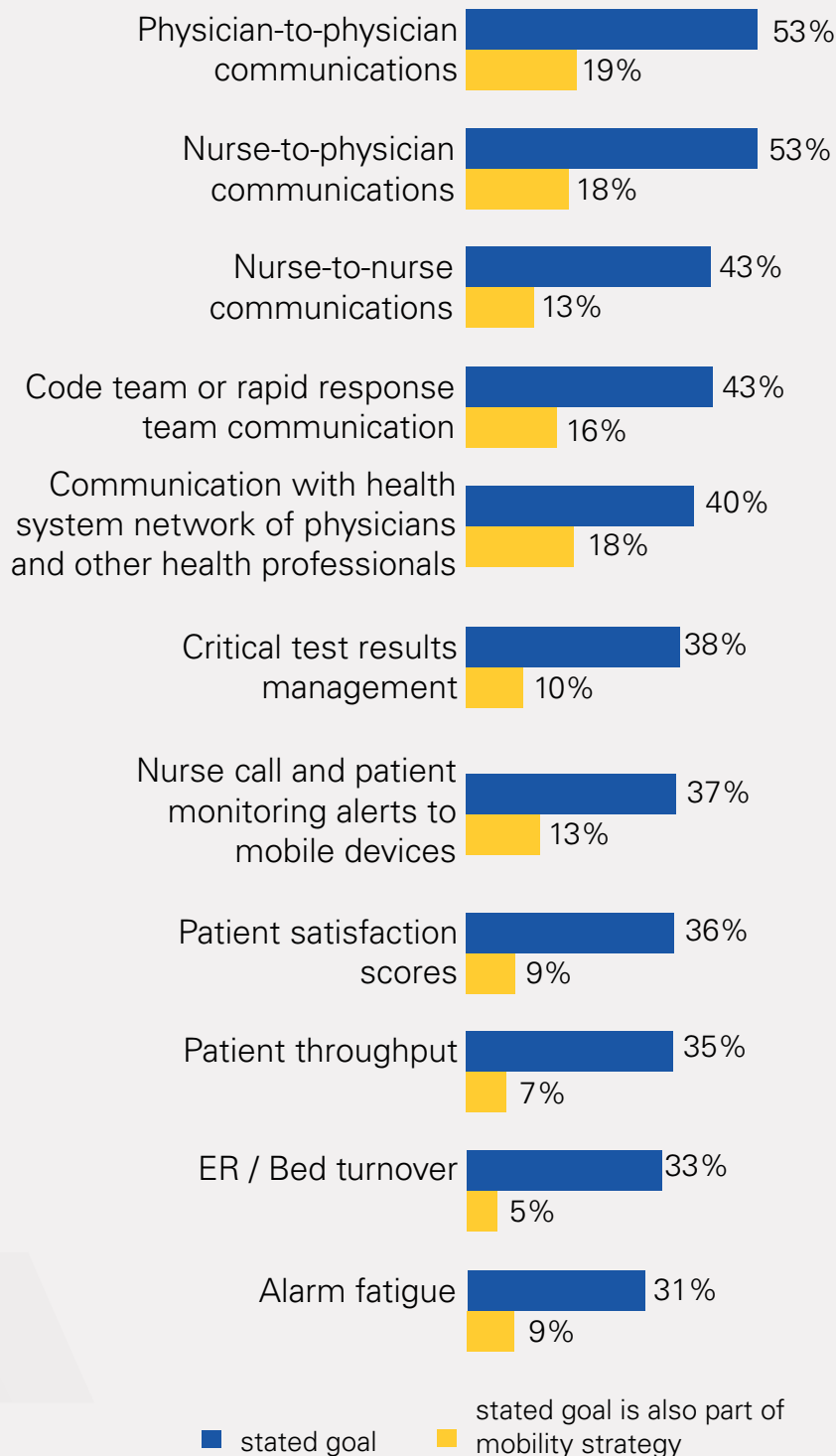
STRATEGIC ALIGNMENT

One of the primary functions of a mobility strategy is to help align mobile plans with organizational goals and act as a framework for designing all mobile-related projects. We wanted to find out how close mobile strategies are tied to strategic goals of the hospital. The responses illustrate a low incidence of including strategic hospital goals in mobility strategies.

Fifty-three percent of respondents indicate that improving physician-to-physician and nurse-to-physician communications are stated hospital goals, while 19 and 18 percent, respectively, said these goals are also included in the organization's mobility strategies. A similar trend follows for the additional nine options, from improving code team communication to addressing alarm fatigue, where the inclusion of the stated hospital goal within the formal mobility strategy ranges from five to 18 percent.

The results of this question show that some teams tasked with planning mobile strategies see them as an opportunity to help make impactful movement on strategic goals for the hospital. It also reveals a lot of room for increased strategy behind mobile planning and more inclusion of the big-picture goals within mobile plans. Organizations that do not consider how mobile solutions can enhance clinical workflows and help achieve strategic goals are missing a big opportunity to maximize the investment they are making in mobile enablement efforts.

Does your organization have stated goals to improve the following areas?
(check all that apply)
Is that hospital goal included in your mobility strategy?



WHO HAS INPUT INTO THE MOBILITY STRATEGY?

For the past several years we have asked survey participants about the people involved in creating the mobility strategy for their hospital. At 82 percent, the IT department remains the most involved with these initiatives, declining by only four percent since 2014. The involvement of telecom (34 percent) and parent organizations (14 percent) have also declined by modest amounts over the past three years. There are, however, several areas of significant increase: clinical roles and outside experts.

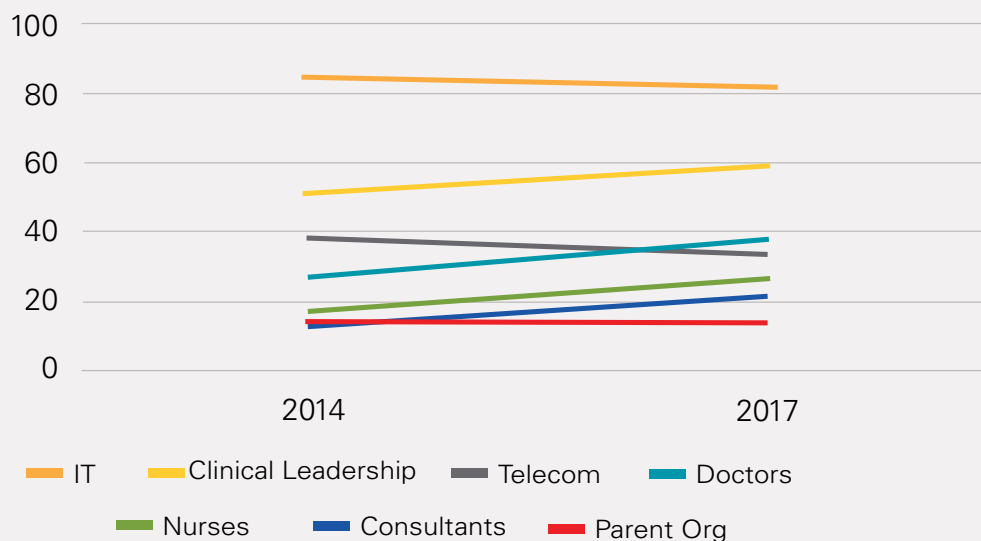
Clinical leadership has risen from 51 to 60 percent. This nine points represents an 18 percent increase in the rate of involvement by medical leaders in the planning process. Doctors and nurses are also up by nine and 10 points, respectively, equating to 32 and 59 percent increases. The growing trend to bring clinical representatives onto the planning teams shows that organizations recognize the importance of the clinical viewpoint. These are largely the end users of mobile devices and the staff that fall under mobile policy guidelines. Clinical participation helps ensure that concerns and practical hurdles are taken into consideration and that processes are designed with real-world workflows taken into account.

For example, instead of simply identifying 'secure text messaging' as a mobile security initiative, think about how clinicians will use secure texts from the communications perspective. If a hospitalist needs to connect with the on-call cardiologist about a patient concern, how do they identify the right person to send a text to? Does the hospitalist have to manually type in a number, or can they access the directory to look up the right person from within the secure texting app and start a message? Not having doctors and nurses represented at the design table can mean important details like this are overlooked, which may derail progress on those top two identified goals of improving communication among doctors and nurses. As an additional consideration, medical staff serving on planning teams can also act as champions of proposed solutions. Endorsements from a peer instead of the IT or telecom department are more likely to garner attention and help drive adoption rates. In short, the rising level of physician and nurse participation in mobile strategy planning efforts is encouraging, but their involvement still remains below 40 percent, leaving plenty of room for improvement.

Why hire consultants to assist with mobility strategy planning?

1. They are industry experts in:
 - Mobile technology device and deployment options
 - Network infrastructure for mobility
 - Adoption methods
 - Success measurements
2. They can help augment IT staffing levels and skills
3. They have best practice knowledge specific to healthcare

Who was or will be involved in developing your mobility strategy?



Participation from outside help, such as technology vendors or consultants, has also grown since 2014, up eight points from 14 to 22 percent (a 57 percent rise). These experts bring best practice knowledge and specialized skills with them to assist with everything from infrastructure requirements to understanding change management and creating plans for implementation and end-user adoption.

We expect both of these trends—more involvement by clinical roles and outside expertise—to continue increasing as hospital goals and the goals of mobility strategies become more interconnected.

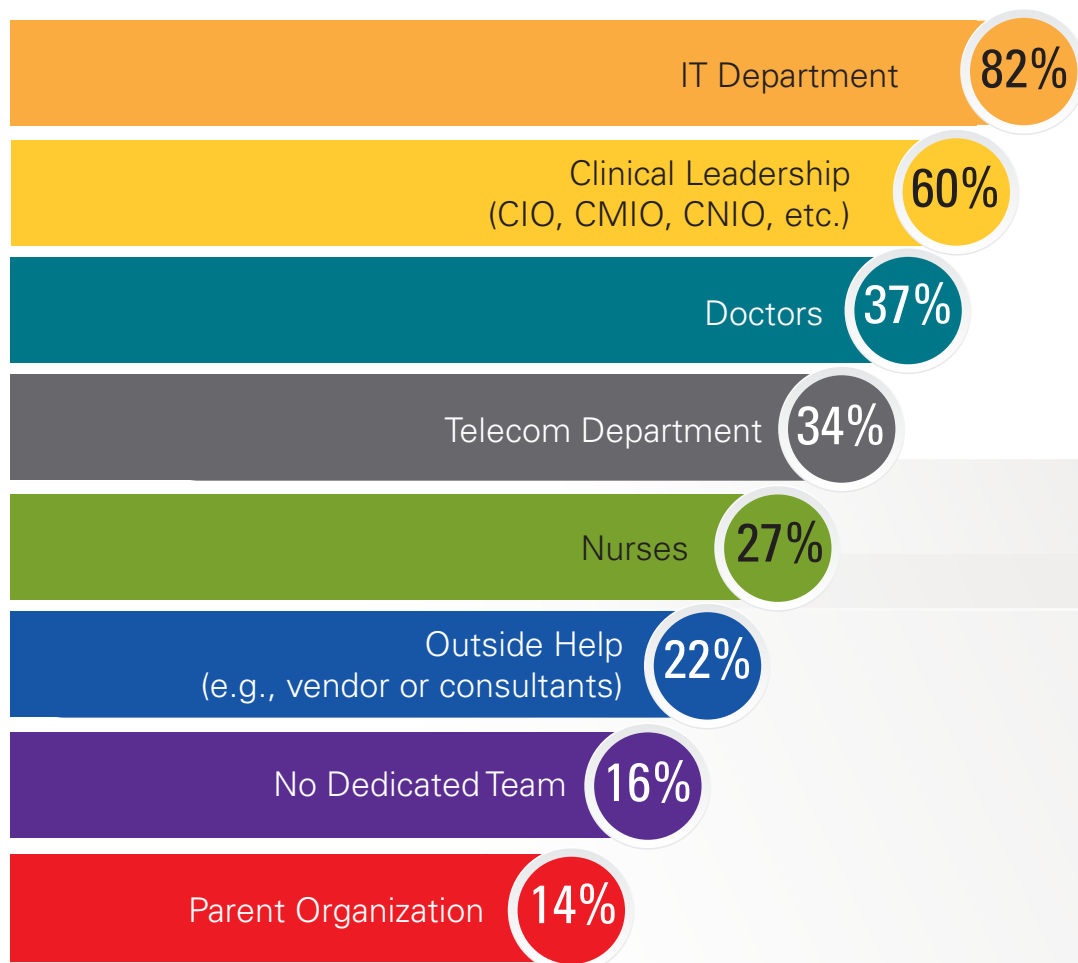
From 2014–2017 the participation changes in developing a mobile strategy are:

IT	-3 points	-4%
Telecom	-4 points	-11%
Clinical Leadership	9 points	18%
Doctors	9 points	32%
Nurses	10 points	59%
Consultants	8 points	57%
Parent Organization	-1 points	-7%

(pts) are the actual change in each role's involvement

(%) indicates the relative increase or decrease of each role's involvement

Who was or will be involved in creating a mobility strategy for your hospital? (check all that apply)

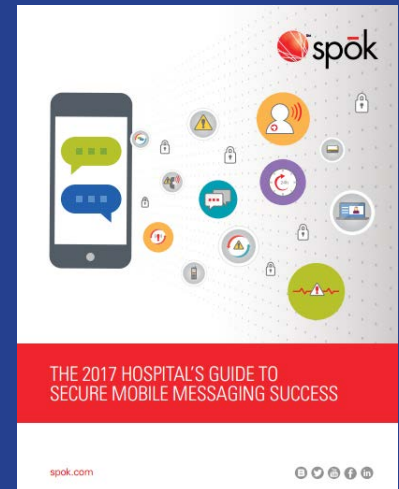
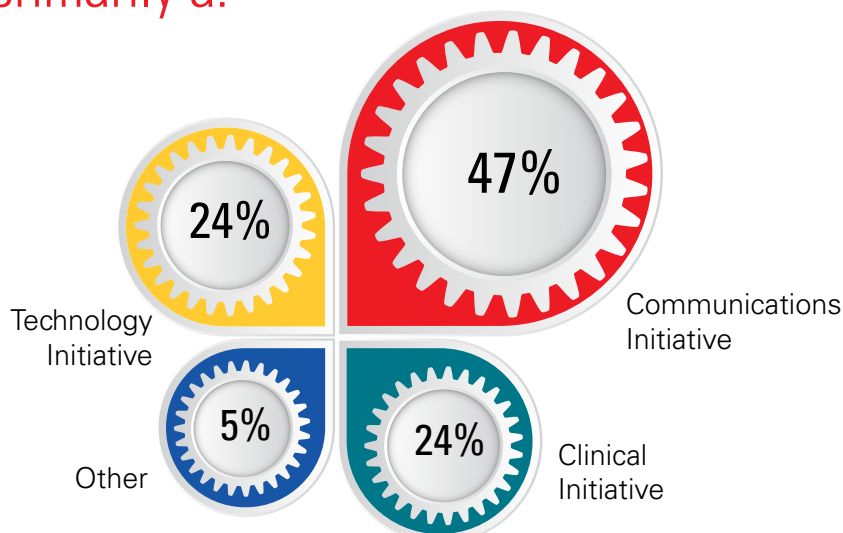


WHO ULTIMATELY OWNS THE MOBILITY STRATEGY?

Participation in mobile strategy planning is dominated by the IT department. These are the people usually tasked with taking strategies and turning them into a tangible, technological reality. However, mobile strategies were considered a technology initiative by only 25 percent of survey respondents. Twenty-four percent cited it as a clinical initiative, and the majority, 47 percent, said that their mobile strategy is considered a communications initiative. This is an interesting distinction in light of the last question that identified telecom as less frequently involved in mobile strategy planning teams (34 percent). The mismatch between project ownership of plan design versus execution may be in survey takers' interpretation, but it may also indicate a missed opportunity to form stronger cross-functional teams when establishing mobile plans and goals. Members of the telecom team are experts on the communications infrastructure. This includes understanding the storage and accessibility of contact data such as phone numbers, pager numbers, on-call schedules, code team member lists, and more. They are also the experts on existing communications pathways and processes, and their expertise at the beginning can prevent unforeseen delays when implementing strategies and plans.

In the 'other' category, free-form responses indicated that several organizations view mobile strategies as primarily a security project concerning HIPAA compliance. (Our view is that security should be a consideration when making mobile enablement decisions, not the driving purpose behind a mobile strategy.) A number of responses also said mobility is an initiative that overlaps with all three areas. Overall, the answers to this question emphasize that these complex initiatives are still evolving and there is significant variation in approach from one hospital or health system to the next.

Is your mobile strategy considered primarily a:



The 2017 Hospital's Guide to Secure Mobile Messaging Success

Secure mobile messaging success requires careful alignment among mobile strategies, security initiatives, and the communications ecosystem.

The most successful implementations come from planning teams that include members from each of these areas as well as a thoughtful approach for achieving overarching hospital goals.

>> [Learn who, why, and what](#) is necessary for these projects, with a step-by-step guide for structuring a secure mobile messaging rollout.

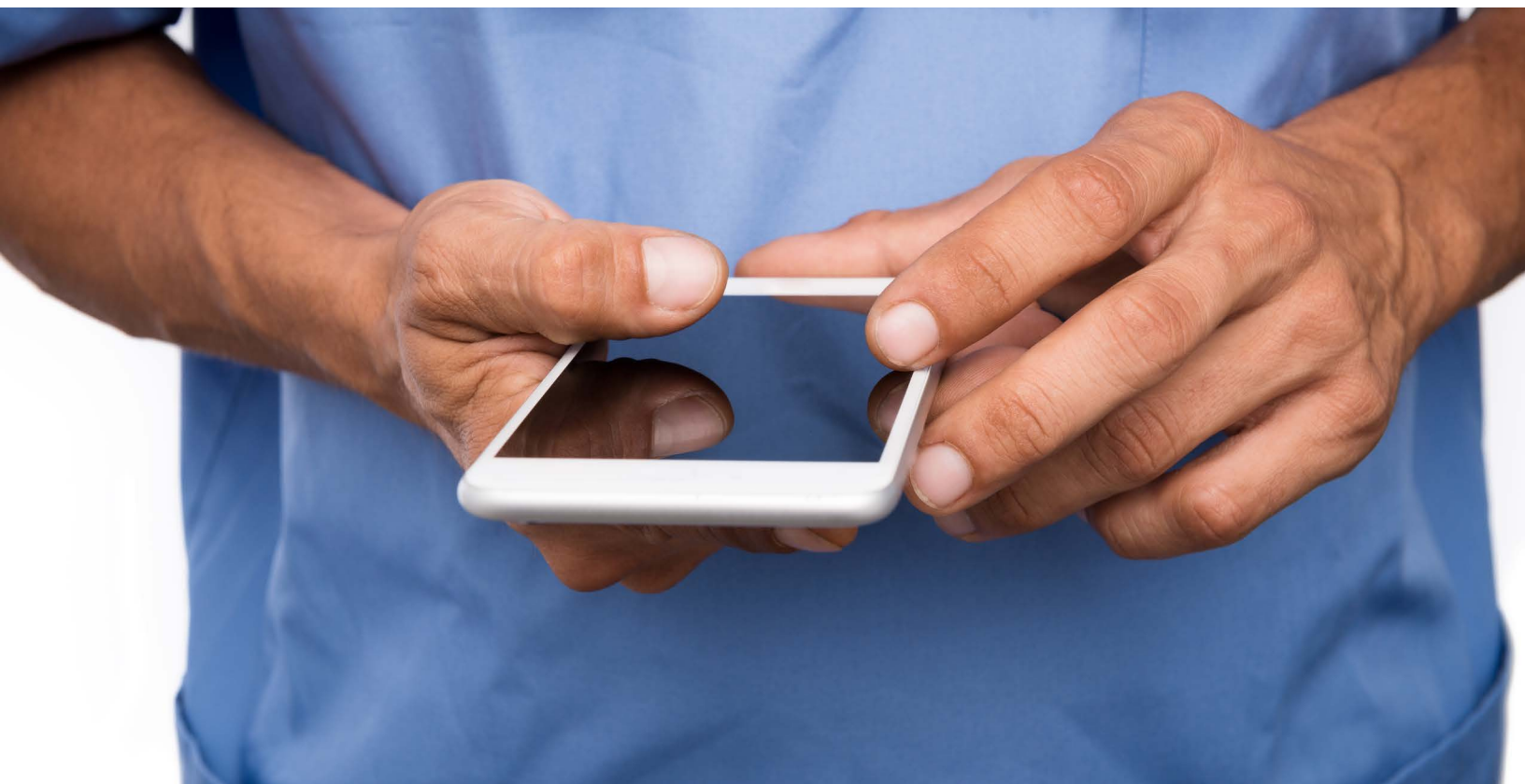
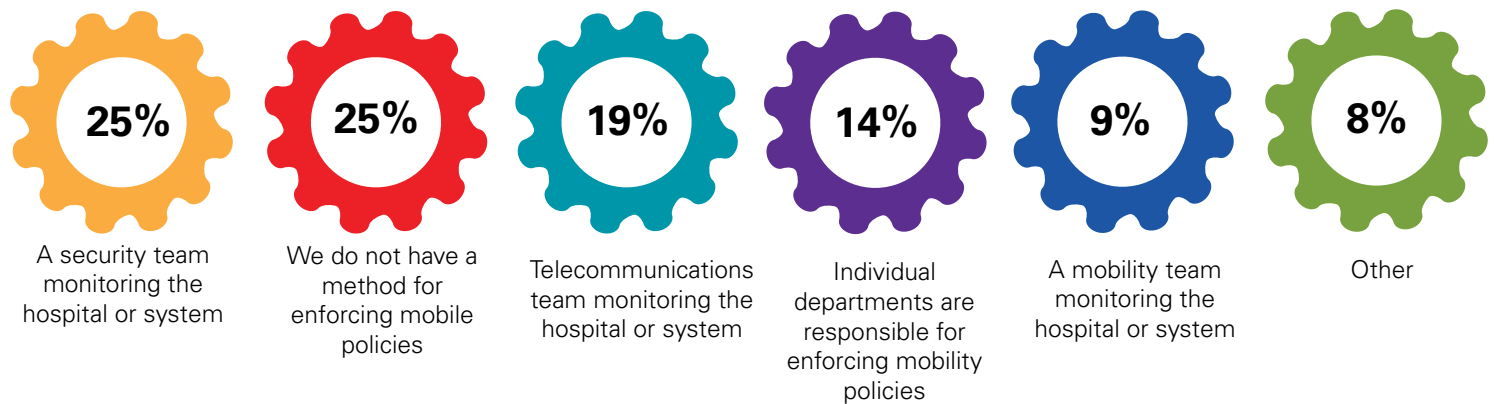
WHO ENFORCES THE STRATEGY?

Creating a policy or a rule is far easier than ensuring it is followed. We wanted to find out what hospitals are doing to oversee the implementation of their mobile policies and how they are being enforced.

Of the healthcare professionals who responded to our survey, 25 percent said mobile policies are enforced by a security team monitoring the hospital or system. This indicates that mobile strategies are in part viewed as security policies to govern the approved methods for sharing (or not sharing) patient information via mobile device.

Nineteen percent of survey participants indicated their mobile policies are enforced by a telecommunications team, 9 percent have a mobility team for monitoring and enforcing mobile policies, and 14 percent said that these tasks fall to individual departments. A quarter of participants, 25 percent, said there is no method for enforcing mobile policies.

Are mobile policies enforced by:



Please give an example of a rule/policy and how it is enforced at your hospital.

We further asked for an example of a rule or policy and how it is enforced. The responses to this open-ended question fell into several main categories.

1 Security is enforced by the IT department

"We are not to open emails from unknown or suspicious sources. Our IT department sends out 'fake phishing' emails to test users."

"Text messages are not permitted on off-network devices."

2 Some rules are enforced by a mobile device management (MDM) solution

"Passwords and encryption are required on all devices and enforced through an MDM solution—we cannot access hospital systems without them."

"Our MDM enforces a camera-use restriction."

3 Policies are enforced at the department or unit level

"Email is routinely scanned for sensitive patient information, and follow-up is done by an appropriate manager."

"No cell phones are allowed while on duty, and this is enforced by supervisors watching staff during work hours."

4 Miscellaneous

"Risk and compliance penalties include a discipline cycle up to and including termination if there has been a HIPAA violation."

"We cannot share passwords for devices with protected health information (PHI) on them. If found out we will be fired."

"Enforcement is an ongoing challenge."

"Cell phones are not to be used in public areas."

"No cell phone use is allowed in clinical areas."

These answers show that policies are used to establish what types of devices staff are allowed to use, as well as where, when, and how. Responses also reveal that mobile policies can go further in the area of monitoring and enforcement. Enforcement may be a challenge if details around what is to be monitored, how often, and by whom were not included in the mobile policy document. Monitoring also requires time and effort that may not be provisioned or planned for. Ultimately the success of a mobile strategy requires administration and enforcement, and it appears this is an area for future growth.

IS THE STRATEGY SUCCESSFUL?

Are hospitals and health systems measuring the effectiveness of their mobile strategies at achieving their goals? When asked if they have a formal review process for assessing the success of projects like mobile enablement, 32 percent said yes and 68 percent said no. Similar to monitoring and enforcement, measuring success is an important piece of a documented mobile strategy that may be overlooked in the early planning stages—but it should not be. Establishing quantifiable metrics at the outset defines what end results are being worked toward, from improving communications among doctors and nurses to improving patient satisfaction scores. Clear success measures help keep planning teams focused on the end goals and can act as a binding agent to unite stakeholders.

Starting a mobility strategy by clearly articulating the end goals serves three very important purposes:

1. It clearly defines the end result(s) and how they will be measured.
2. It helps keep the mobility team focused and motivated to overcome obstacles along the way.
3. It unites all stakeholders and end users behind a common purpose with clear benefits to the organization, individual health professionals, and to patients.

Excerpt from [The 2017 Hospital's Guide to Secure Mobile Messaging Success >>>](#)

Does your hospital have a formal process for reviewing the success of projects such as mobile enablement?

32%

Yes

68%

No

IS THE STRATEGY BEING ADOPTED?

Uniting stakeholders, such as doctors and nurses who use devices, or department heads tasked with enforcing policies, is vital to helping drive adoption of new technologies in cultures that are often resistant to change. Our conversations with customers on the subject suggest there is wide variability in approach, from a let-them-come-when-ready style, to more forceful tactics such as imposing financial penalties for failure to adopt a new app or device. So this year we asked the question:

What is your hospital doing to help drive user adoption of new technologies related to your mobile strategy, such as using a hospital-supplied secure text messaging app?

We received more than 200 free-form responses, and the most common themes cited were:

1. **education**
2. engaging **physician champions**
3. offering **training** and Help Desk support
4. not much or **nothing**

Several of the 'nothing' submissions were in all caps, exposing a level of frustration with the lack of activity to encourage change. Perhaps this frustration originates from within the 25 percent of health professionals who reported their organization has no method for monitoring or enforcing compliance, or the 68 percent that do not have a formal process for reviewing success (and therefore are not identifying the need for improvement or changes in established strategies). Or maybe the complexities of change management were not considered when planning the mobile strategy and allotting time, budget, and employee resources to implement new technologies.

Some of the more creative solutions regarding what hospitals are doing to drive adoption of new mobile technologies referenced grassroots acceptance and support, financial incentives, food, and Facebook®.

"Physician meetings with food to explain the app and get it installed on their phone."

"Relying on grassroots acceptance because of widely accessible and accepted technology "

"We have contracted with a vendor to help."

"Reimbursement for using secure text messaging."

"We have individuals complete the same task using two different methods to experience the gains."

"Charge users who are still using unsecured technology."

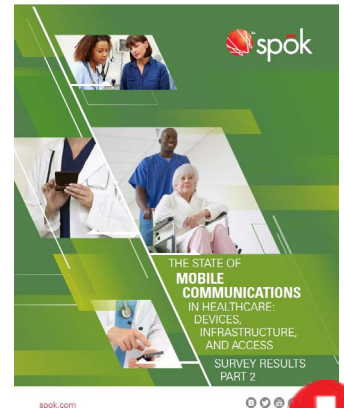
"We have a Facebook® page."

While food is a proven motivator to encourage meeting attendance, and financial incentives can stimulate some level of engagement, perhaps the most powerful tool for driving effective change is to demonstrate personal value for the new solution. As one respondent noted, “have individuals complete the same task using two different methods to experience the gains” and see first-hand the value. Presuming the new technology offers tangible benefits over the old, this method creates adoptees as well as champions to help spread the word and encourage others to adopt.

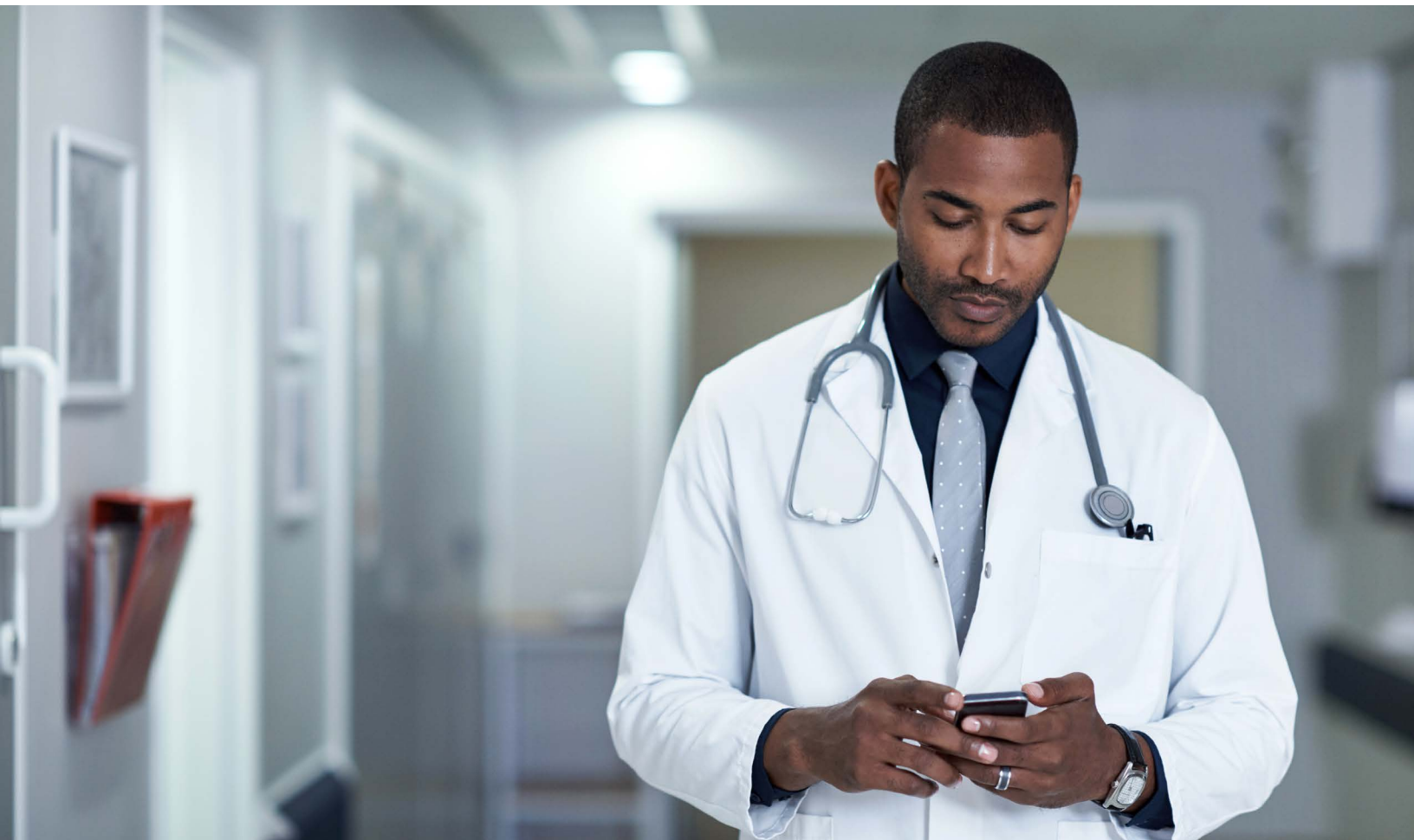
THE PATH AHEAD

Mobile strategies are gaining momentum, becoming more prevalent in healthcare, and in many cases, beginning to mature through revisions and amendments. That said, there is still a lot of room for growth and ongoing evolution. One big opportunity is to increase clinical involvement in the planning of these comprehensive mobile enablement plans. Doctors, nurses, and clinical leadership bring a vital end-user perspective to the table and can help prevent hurdles and improve adoption rates among clinical staff. The next opportunity is to weave more strategic hospital initiatives into the fabric of a mobility plan. Hospitals can elevate the thinking about these efforts beyond just adding a new technology or securing data to include the hospital’s annual goals regarding patient satisfaction scores, reducing average length of stay, etc.

In the second half of our Mobile Communications in Healthcare series we delve into the details about what devices are supported, what challenges hospitals are experiencing with mobile device usage, and what are the biggest opportunities for mobile improvements over the next three to five years.



[Download Part 2](#)





ABOUT SPOK, INC.

Spok, Inc., a wholly owned subsidiary of Spok Holdings, Inc. (NASDAQ: SPOK), headquartered in Springfield, Va., is proud to be the global leader in healthcare communications. We deliver clinical information to care teams when and where it matters most to improve patient outcomes. Top hospitals rely on the Spok Care Connect® platform to enhance workflows for clinicians, support administrative compliance, and provide a better experience for patients. Our customers send over 100 million messages each month through their Spok® solutions. When seconds count, count on Spok.

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