THE STATE OF MOBILITY IN HEALTHCARE

2014 BENCHMARK SURVEY

MADE POSSIBLE BY

HealthcareDIVE

spōk
Mobile technology: Despite its potential for improving communications and workflow, the pace of its adoption within the US healthcare industry has been deliberate compared to other industries. But the scenario is changing, partly because of healthcare’s complex demands and partly due to the technology’s increasingly widespread acceptance and use.

Despite information privacy and security concerns, will mobile technology—from paging and texting to telemedicine consultations and mobile access to electronic health records—keep gaining ground? Will its use improve clinical outcomes and cut costs by providing the right information at the right time in the right location? Will it become commonplace for patients to leave the hospital with apps linking them to their providers?

Seeking answers, Spok commissioned Healthcare Dive to survey organizations along the continuum of care. Nearly two-thirds of respondents were acute-care hospital staff, but physician medical practices, ambulatory care providers and long-term care facilities/nursing homes were also represented (Q1).

**Q1 WHICH BEST DESCRIBES YOUR ORGANIZATION?**

- **Hospital / Acute Care Provider**: 64%
- **Physician Medical Practice / Ambulatory Care Provider**: 23%
- **Long-term Care / Nursing Home**: 13%
About the Survey

Much depends on how willing providers are to invest in technology and training. The key question is whether there is sufficient return on investment—including better consumer satisfaction. Healthcare organizations have been slow to measure technology ROI, which is understandable in a fragmented market comprised of numerous small hospitals and medical practices lacking in sizable resources. But with competition heating up, administrators must meet consumer and clinician expectations, and mobility is an integral part of many Americans’ daily lives.

Healthcare Dive surveyed 247 US healthcare executives. Most were administrators, but physicians, nurses and clinical staff represented nearly two in 10 respondents to the survey; nearly one in 10 respondents were information technology (IT) professionals (Q3). Most of the respondents’ organizations were fairly large, ranging from 100 to 500-plus beds (Q2).

### Q2  HOW MANY BEDS DOES YOUR ORGANIZATION HAVE?

- 1-25 – 4%
- 51-100 – 9%
- 500+ – 29%
- 26-50 – 2%
- 101-500 – 35%
- Not applicable – 7%
- I am a provider but do not have any inpatient beds – 14%

### Q3  WHICH BEST DESCRIBES WHAT YOU DO?

- Healthcare Administrator – 60%
- Physician / Nurse/ Clinical – 19%
- Other – 12%
- IT Professional – 9%
The aim of moving patient information onto accessible mobile devices is to allow clinicians to make better, more timely treatment decisions, improving the efficiency and quality of care delivery. This is a challenging task in a complex environment governed by stringent privacy and security compliance regulations.

Healthcare institutions are exploring how best to adopt mobile technology and transform care in an industry that typically has been resistant to change. For every major academic medical center with vast resources and sophisticated systems, there are thousands of small institutions continuing to rely on costly, error-prone manual paperwork, outdated administrative procedures and basic computer hardware and software capabilities.
The State of Mobility in Healthcare

How is the industry currently using mobile technology?

Healthcare organizations’ most common use of mobility (59%) is for mobile access to electronic health records (EHRs). This is followed closely by paging (55%), secure texting (42%), and telemedicine consultations with other providers (35%) (Q4).

By far, healthcare organizations’ most common uses of mobile technology to communicate with patients are email (60%) and the online patient portal (55%). Next comes text messaging (32%), with mobile apps and telemedicine consultations at 23%. Its use for home monitoring is below 20%. (Q5).

Q5  HOW DOES YOUR ORGANIZATION USE MOBILE TECHNOLOGY TO COMMUNICATE WITH PATIENTS?

- **Email** 61%
- **Online patient portal** 55%
- **Text messaging** 32%
- **Telemedicine consultations** 24%
- **Mobile apps** 24%
- **Remote monitoring of inpatients** 19%
- **Home monitoring of patients** 19%
- **Other** 11%
As for staff clinicians, nearly two-thirds of healthcare organizations issue mobile phones to them, and most (53%) also issue laptops. About four in 10 organizations issue pagers to clinicians, and 35% issue tablets. Only 13% of organizations don’t provide some type of mobile device to clinicians at this point in time (Q6).
Nearly three-quarters of healthcare organizations expect to expand the use of mobile technology in the next year (Q7), and just shy of 50% are increasing their budgets for it.

However, perhaps because of uncertainty over the ACA’s impending second year of health insurance exchanges, nearly one-third of organizations don’t know whether their budgets for mobile technology will increase in the next year (Q8).

Hospitals are moving from standalone facilities focused on fee-for-service reimbursement that rewards heavy inpatient volume toward becoming integrated systems of coordinated care focusing more on outpatient services and population health management. The ACA, by covering previously uninsured Americans and expanding Medicaid, was intended to provide better access to primary care services and reduce unnecessary emergency-room use. But many hospitals have reported more ER crowding since the ACA’s exchanges first began coverage Jan. 1.

As a result, hospitals are jockeying to become (or remain) part of exchange plans’ increasingly narrow networks, participating in new care delivery models such as accountable care organizations and trying to comply with ever-changing reform regulations like Meaningful Use and ICD-10. All this uncertainty might put implementation of mobile technology on the backburner.
Currently, only a small minority of healthcare organizations employ a formal strategy for measuring their return on investment (ROI) in mobile technology. More than four in 10 organizations lack a formal ROI measurement strategy, and it wasn’t clear to almost one-third of executives whether their healthcare organizations have such a strategy (Q 9).

Mobile trendsetters—with a clear mobile strategy driving their investments—are more likely than their peers to use formal processes to measure mobile technology ROI, according to a recent IDG Research study commissioned by Unisys. Researchers conceded that measuring ROI for mobility programs can be tricky, leaving many to base their calculations on “soft” benefits such as enhanced customer satisfaction instead of financial metrics.

Q9 DOES YOUR ORGANIZATION HAVE A FORMAL STRATEGY FOR MEASURING ITS FINANCIAL RETURN ON INVESTMENTS IN MOBILE TECHNOLOGY?

- No: 43%
- Don’t know: 29%
- Yes: 19%
- NA, no significant mobile investments: 9%
Barriers to Using Mobile Technology

Although infrastructure costs are cited by healthcare administrators as the main barrier to the use of mobile technology, most survey respondents also cited privacy concerns. A fair number cited training costs, followed closely by regulatory issues.

Administrative or staff resistance also placed high on the list as a major barrier to implementation of mobile technology within healthcare organizations (Q10). This raises the issue of how to alter behaviors within organizations in order to advance mobile technology—and whether some resistance is due to administrators’ ongoing concerns about keeping mobile devices and services compliant with the federal HIPAA privacy rule.

Attorneys worry that, unlike their behavior with laptop and desktop computers, clinicians are far likelier to use personal mobile devices, not employer-issued devices, to obtain and exchange electronic protected health information.

Q10 WHAT ARE THE MAJOR BARRIERS TO IMPLEMENTATION OF MOBILITY AT YOUR ORGANIZATION?

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<thead>
<tr>
<th>Barrier</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Infrastructure costs</td>
<td>66%</td>
</tr>
<tr>
<td>Privacy concerns</td>
<td>51%</td>
</tr>
<tr>
<td>Administrative/Staff resistance</td>
<td>35%</td>
</tr>
<tr>
<td>Training costs</td>
<td>27%</td>
</tr>
<tr>
<td>Regulatory issues</td>
<td>23%</td>
</tr>
<tr>
<td>Scalability issues</td>
<td>18%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>9%</td>
</tr>
<tr>
<td>No major barriers</td>
<td>6%</td>
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</tbody>
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**Note:** The percentages may not sum to 100% due to rounding.
Recent analysis suggests that mobile health apps will become an integral part of physicians’ treatment plans for their patients by 2017. Yet most survey respondents said mobile health apps currently are not prescribed to patients within their organizations (Q11).

While nearly half of the survey’s respondents said they expect prescriptions of mHealth apps to increase in the near future, almost an equal percentage said they didn’t know what to expect (Q12). Yet industry experts predict that the number of mobile health apps will increase by 25% annually for the foreseeable future, making their presence difficult to avoid.

**Q11** \(\text{DOES YOUR ORGANIZATION PRESCRIBE THE USE OF MOBILE HEALTH APPLICATIONS TO PATIENTS?}\)

- No – 54%
- Yes – 34%
- NA – 12%

**Q12** \(\text{DO YOU EXPECT TO INCREASE PRESCRIPTIONS OF mHEALTH APPS IN THE NEAR FUTURE?}\)

- Yes – 45%
- Don’t know – 43%
- No – 7%
- NA – 5%
The overarching issue of who pays for mobile technology remains split. Three in 10 healthcare organizations reported contracting with insurers covering at least one telemedicine or mobile health service; equal percentages reported no such payer coverage or expectation of it in the future (Q 13). But insurers’ coverage could expand materially if they view mobile technology as a significant contributor to their members’ wellness and preventive care efforts.

Sharp Rees-Stealy Medical Centers and Amerigroup Florida, for example, issue asthma apps and devices to patients, mHealth News reported in June. Both issue an app and sensor, which attaches to a standard inhaler, as part of their respiratory health management programs. Asthma app makers began by selling directly to consumers, mHealth News said, but now see new business-to-business markets opening up as ACOs, providers and payers begin to realize the benefits of mobile self-management for healthier patients, including reduced admissions and cost-savings. And payers have the most to gain economically by better managing their members.

As for telemedicine, 21 states and the District of Columbia now require private insurers to cover telehealth in the same way as they cover in-person services, reports the American Telemedicine Association, and many more insurers cover at least some telehealth service or are interested in expanding their telehealth coverage.

**Q13** **DOES YOUR ORGANIZATION CONTRACT WITH ANY INSURERS THAT COVER AT LEAST ONE TELEMEDICINE OR MOBILE HEALTH SERVICE?**

<table>
<thead>
<tr>
<th>Yes</th>
<th>30%</th>
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<tbody>
<tr>
<td>No</td>
<td>30%</td>
</tr>
<tr>
<td>Not currently -but expect to in the future</td>
<td>28%</td>
</tr>
<tr>
<td>NA</td>
<td>12%</td>
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Nearly two-thirds of healthcare organizations expect the use of mobile technology to improve their financial performance (Q14). Mobile technology can help with billing and coding, for example, by allowing clinicians to look up diagnosis and procedure codes from their smart devices and capture them in patient charts in a more accurate and timely manner than after-the-fact coding. Mobile devices also allow providers to transmit information required by health plans to adjudicate claims—like lab reports, treatment authorizations, certificates of medical necessity, physician and nurse notes and referrals. Using these mobile capabilities could help to improve collection, streamline reimbursement cycles, simplify coding and billing and reduce administrative costs related to claims.

In addition to anticipated savings, nearly nine of 10 healthcare organizations expect the use of mobile technology to improve patient safety and clinical outcomes (Q 15). But how to use technology to foster better-informed decisions and collaboration remains murky. A recent IMS Health report found limited functionality to the tens of thousands of health apps on the market, for example, leaving physicians wary of recommending apps to patients absent clear evidence validating the benefits. Full integration of mobile health apps and devices thus remains a work in progress.