



Reports

# The future of the digital patient experience

Key findings from a survey on the adoption of digital health tools at hospitals and health systems



Center for  
**Connected**  
Medicine

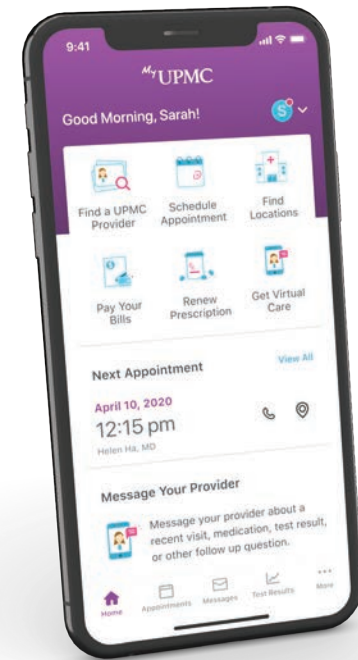


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# Introduction

## Health systems must catch up to meet patients' digital expectations

Effectively engaging with patients in the digital world is a key strategy for the future success of health systems. Meeting patients where they are – increasingly online via their mobile devices – is essential to retaining and attracting patients who could be steered to other providers by more tech-savvy competitors. The implementation of digital tools also may help health systems reduce costs. Scheduling appointments online, communicating directly with care teams by text or email, and accessing care via telehealth solutions are more convenient for the patient and are likely to incur lower costs.

Despite these advantages, the Center for Connected Medicine (CCM) has observed that many health systems have work to do when it comes to implementing patient-facing digital health tools. Tools need to be used by patients, integrated with the health system's existing technology infrastructure such as electronic health records, and provide a robust and user-friendly experience.

These observations also are backed up by recent CCM research. The Top of Mind 2020 survey, published in November 2019, looked at health system use of patient engagement technology and found that investment has focused primarily on patient portals and largely ignored third-party apps. The reasons for this are understandable. Health providers have spent millions of dollars standing up electronic health record systems and meaningful use requirements have pushed health systems to offer patients access to health data via

the portal. Integration of third-party apps, meanwhile, traditionally has been difficult due to challenges with interoperability of health care data.

This report follows up on the CCM's Top of Mind survey to look more closely at the use of patient-facing digital tools by health systems. Among the key findings that follow, we found that while more than half of health system representatives believe they understand which digital tools are most useful to patients, less than a third believe they are delivering a best-in-class experience to their patients.

What is causing that disconnect? The survey points to challenges, including costs, data integration obstacles, and operational roadblocks. Which is to say achieving success involves much more than rolling out great technology. Health systems need to not only prioritize these tools, but provide the investment, resources, vision, and timeline to get them up and running, maintain them, and integrate them into the overall environment.

Thank you for reading this report, which sets a baseline for the status of patient-facing digital health tools. Follow the CCM's work to continue the discussion about how health systems can succeed in this important area.



# Key Findings

1

## **Digital health tools are a priority**

Half of respondents said implementing digital health tools for patients is a critical or high priority for their health system.

2

## **Consumer experience is lacking**

While a majority of respondents said their organization has at least one digital tool available to patients, fewer than one-in-three believe their tools offer the best possible consumer digital experience.

3

## **Tools are currently focused on “basic” tasks**

Digital tools in use today help patients manage relatively simple tasks, such as accessing their health records, making an appointment, paying bills, and searching for a doctor. While tasks such as digital appointment scheduling may face layers of complexity, health systems are working to master the basics. But respondents said their organizations are planning to invest in tools to address important differentiators such as patient check-in and arrival management and monitoring and managing chronic conditions.

4

## **Improving access, care, satisfaction driving use**

Respondents said the biggest drivers for implementing patient-facing digital tools are to improve access to care, help patients monitor and manage their health, and deliver higher patient satisfaction.

5

## **Cost is top implementation challenge**

Respondents cited a number of challenges to adopting digital tools with the cost to build, buy and maintain tools, difficulty integrating tools with existing systems such as EHRs, and operational roadblocks topping the list.

A tablet computer is shown at an angle, displaying a digital health interface. The screen features a central 3D wireframe model of a human skeleton. To the right of the skeleton is a glowing blue DNA double helix. Various data visualization elements are scattered across the screen, including a bar chart, a pie chart, a world map, and several line graphs with fluctuating data points. The background of the interface is a dark blue with subtle grid lines and glowing points. The tablet is resting on a desk with a pen and some papers visible in the background, all under a soft, teal-colored light.

## Research Overview

The CCM partnered with HIMSS Media to conduct a survey of professionals at U.S. hospitals and health systems in September 2019. The goal of the research was to better understand how health provider organizations are approaching the adoption of patient-facing digital health tools.

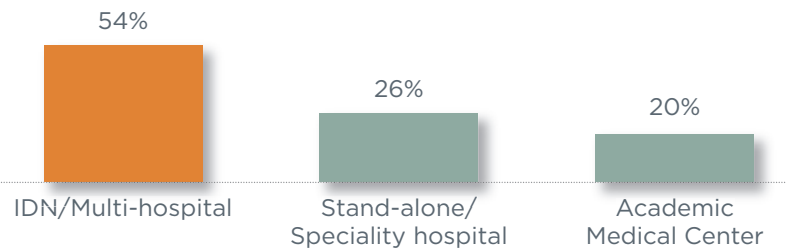
For purposes of this survey, digital health tools were defined as patient-facing apps, wearables, web tools, connected devices, and telehealth platforms.

A total of 136 qualified respondents were surveyed and they represented a mix of information technology, informatics, business, and clinical roles at U.S. hospitals and health systems. Respondents were asked questions about their organization's prioritization and adoption of digital health tools.

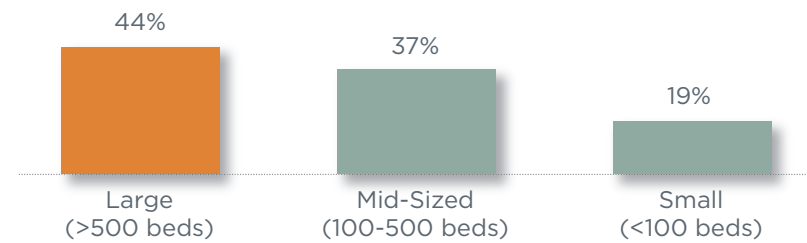
HIMSS Media conducted the online survey and the CCM was not identified as a sponsor of the research. Qualified respondents were sent an email from HIMSS Media inviting them to participate and were offered an incentive for completing the survey.

# Respondent Profile

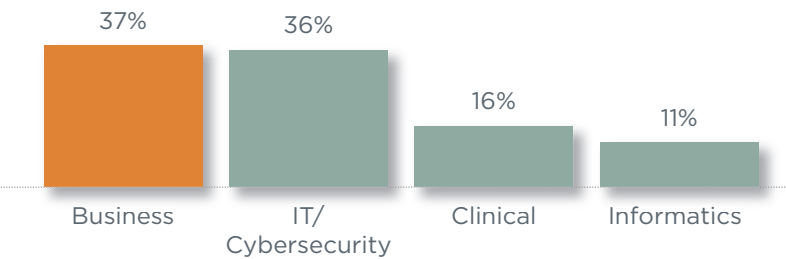
## Worksite



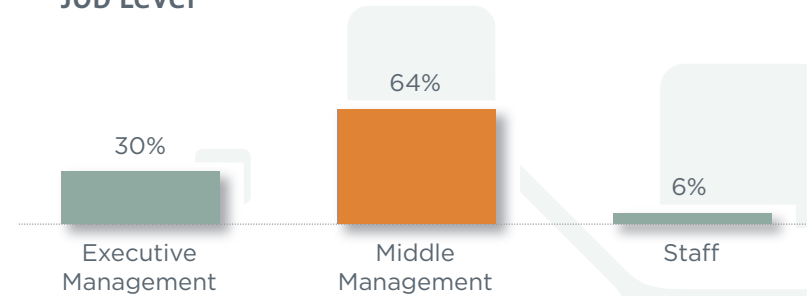
## Organization Size



## Job Role



## Job Level

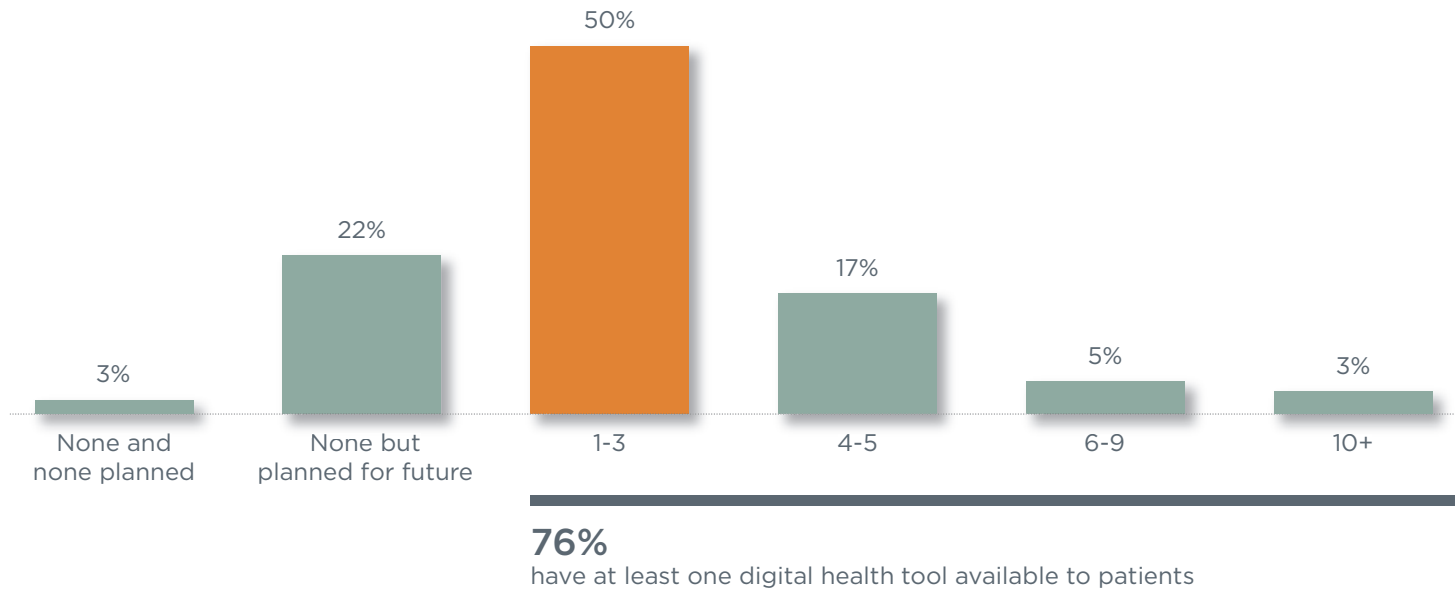


## Detailed Findings

### Digital tools are available to patients

Three-quarters of respondents reported that their health system has at least one digital health tool available to patients; and a quarter have four or more. It is encouraging to see that only 3% said they had none and did not plan to add any.

#### How many digital tools does your system have?





## Digital health tools are a priority

Given the growing demand by consumers to engage in their health digitally, it is positive to see that many respondents said their hospital or health system is making these tools a priority. Overall, 50% of respondents said implementing digital health tools for patients is a critical or high priority at their organization. Looking at responses by size of hospital or health system, we see that larger health systems are more likely to say patient-facing digital health tools are a critical or high priority.

### To what extent are digital tools a priority?

50%

say patient-facing digital health tools are a critical or high priority



58%

Large (>500 beds)

48%

Mid-sized (200-500 beds)

35%

Small (<200 beds)

**Larger orgs** more likely to say patient-facing digital health tools are a **critical** or **high priority**

## Consumer experience is lacking

More than half of respondents said their organization has a good understanding of what tools would be helpful to patients. However, fewer than half said their organization was successfully integrating digital tools into the patient experience. And even fewer said their digital health tools delivered an experience on par with the best digital consumer experience available.

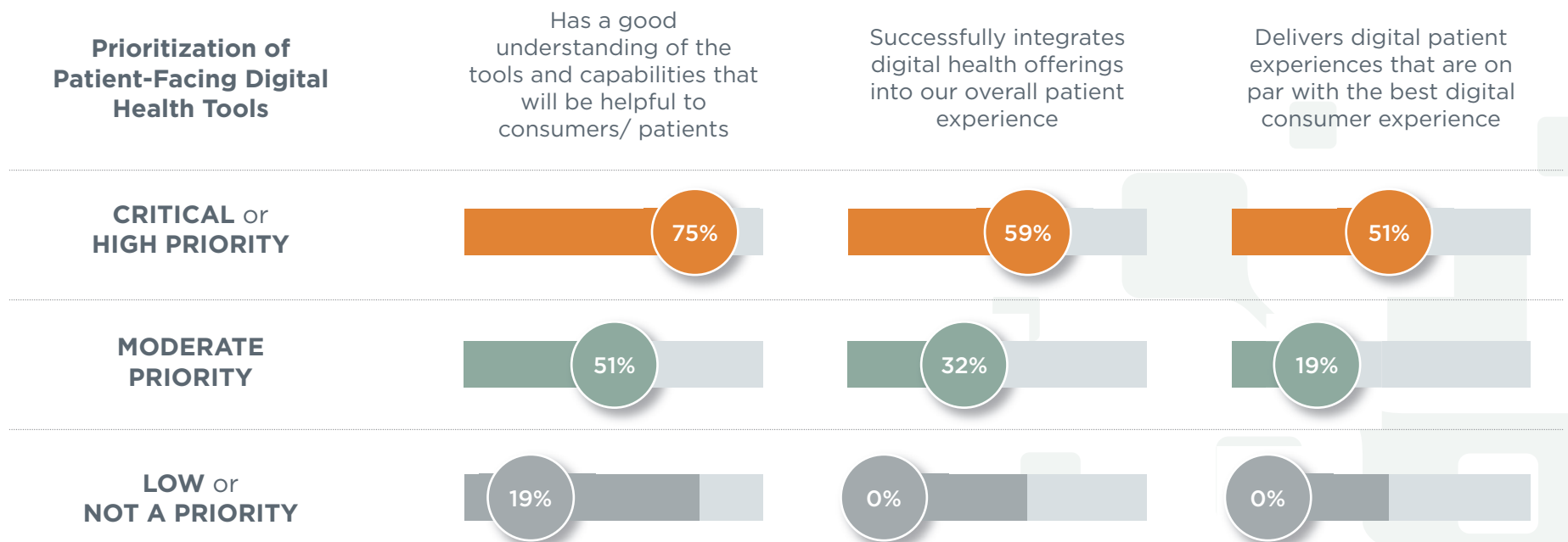
### Rate your agreement with the following statements



## Prioritization leads to success

By comparing respondents' answers from the previous two findings, we can see a correlation between those who consider patient-facing digital tools a critical or high priority and those with strong agreement of their organization's understanding, integration success, and view of the quality of digital tools. This suggests that organizations with a priority on patient-facing digital health tools are more likely to succeed.

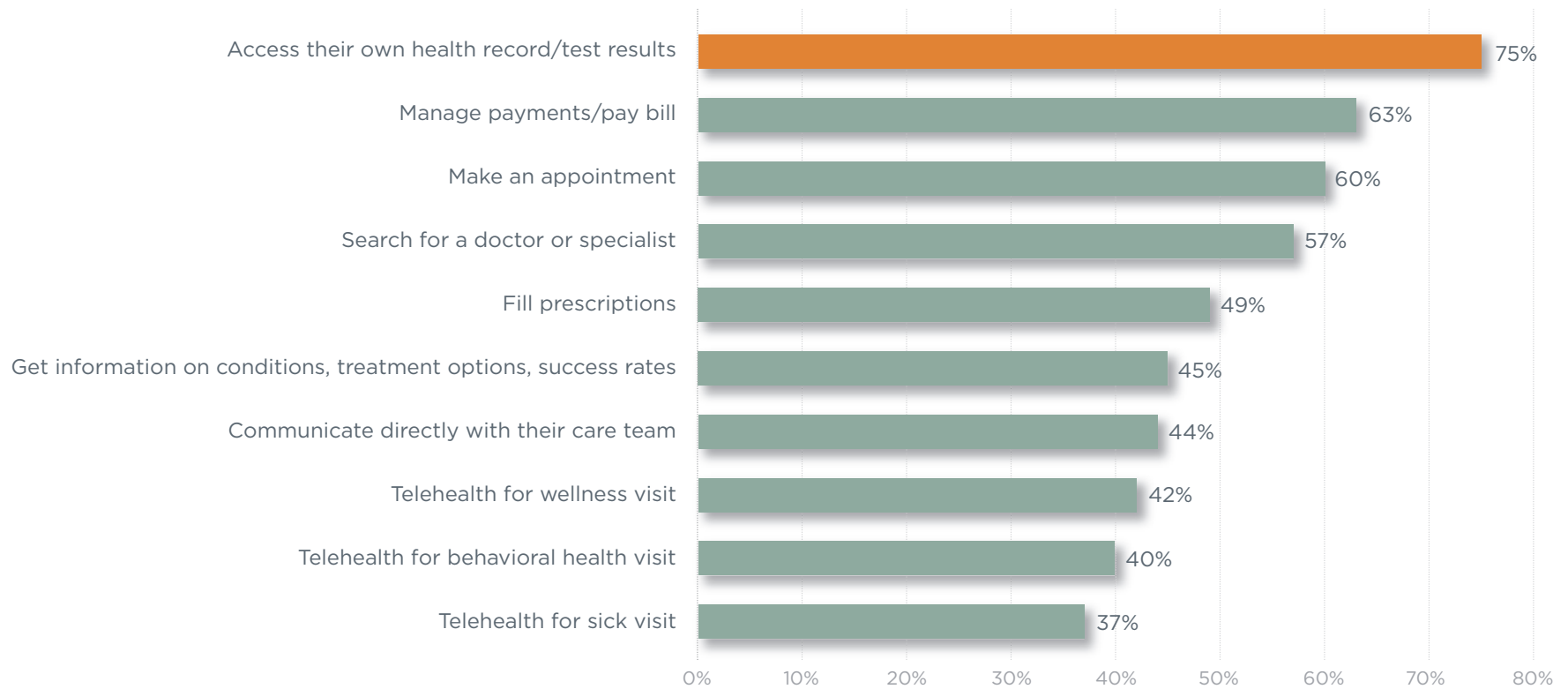
### Comparing priority with understanding, integration, experience



## Tools are currently focused on “basic” tasks

The most common digital health tools currently in use help patients manage simple tasks, such as accessing their health records, making an appointment, paying bills, and searching for a doctor, according to respondents.

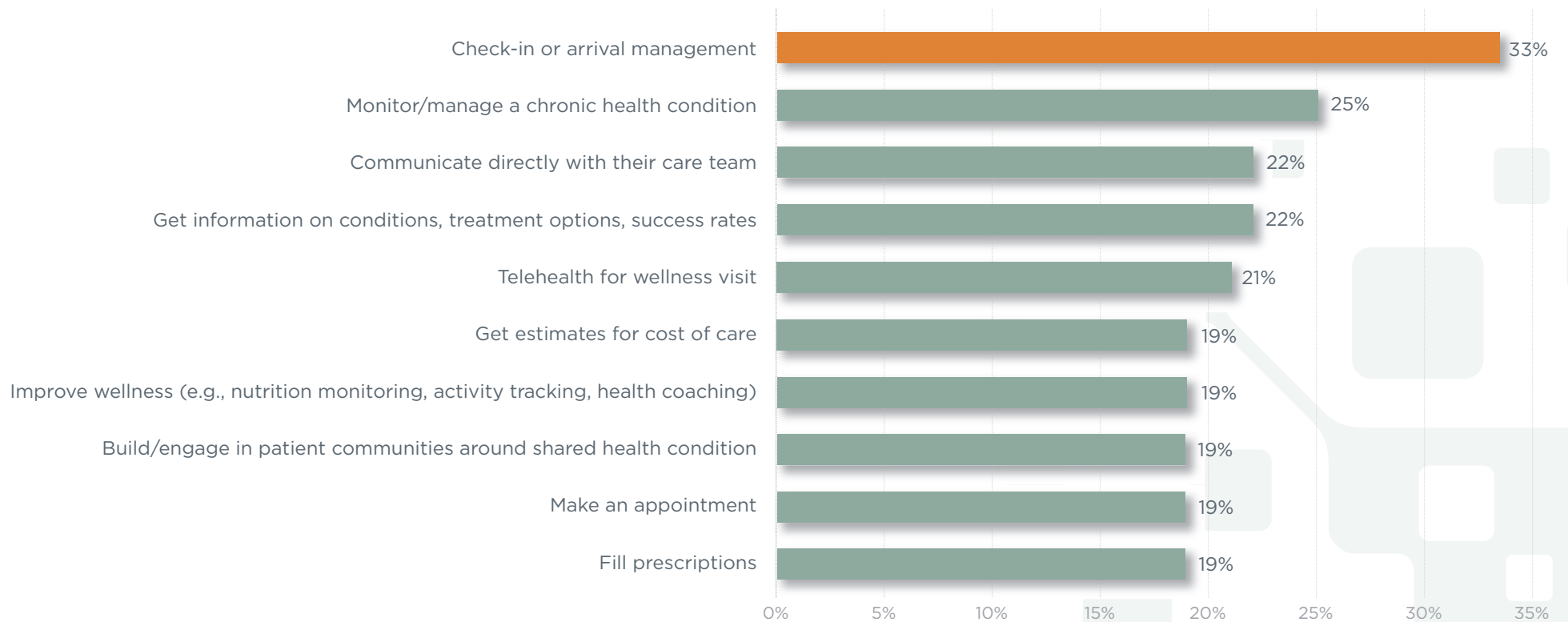
### Top 10 most commonly cited digital health tools currently in use



## Planned tools will address important differentiators

Respondents also said their organizations are planning to invest in tools in the next 12 months to address important differentiators such as patient check-in and arrival management and monitoring and managing chronic conditions.

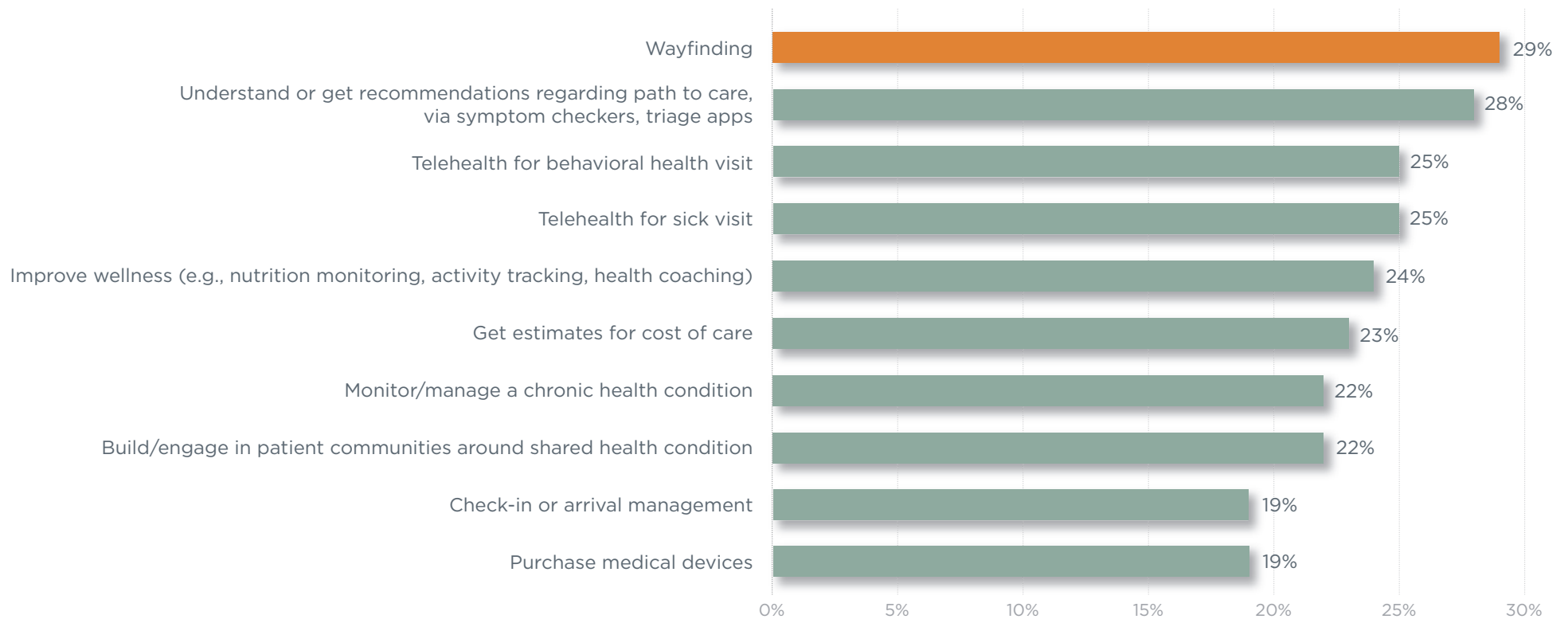
### Top 10 most commonly cited digital health tools planning to use in next 12 months



## Informational services being considered

Among the tools being investigated for implementation, many of the most commonly cited by respondents are related to helping patients find information, such as wayfinding, symptom checkers, and cost estimates.

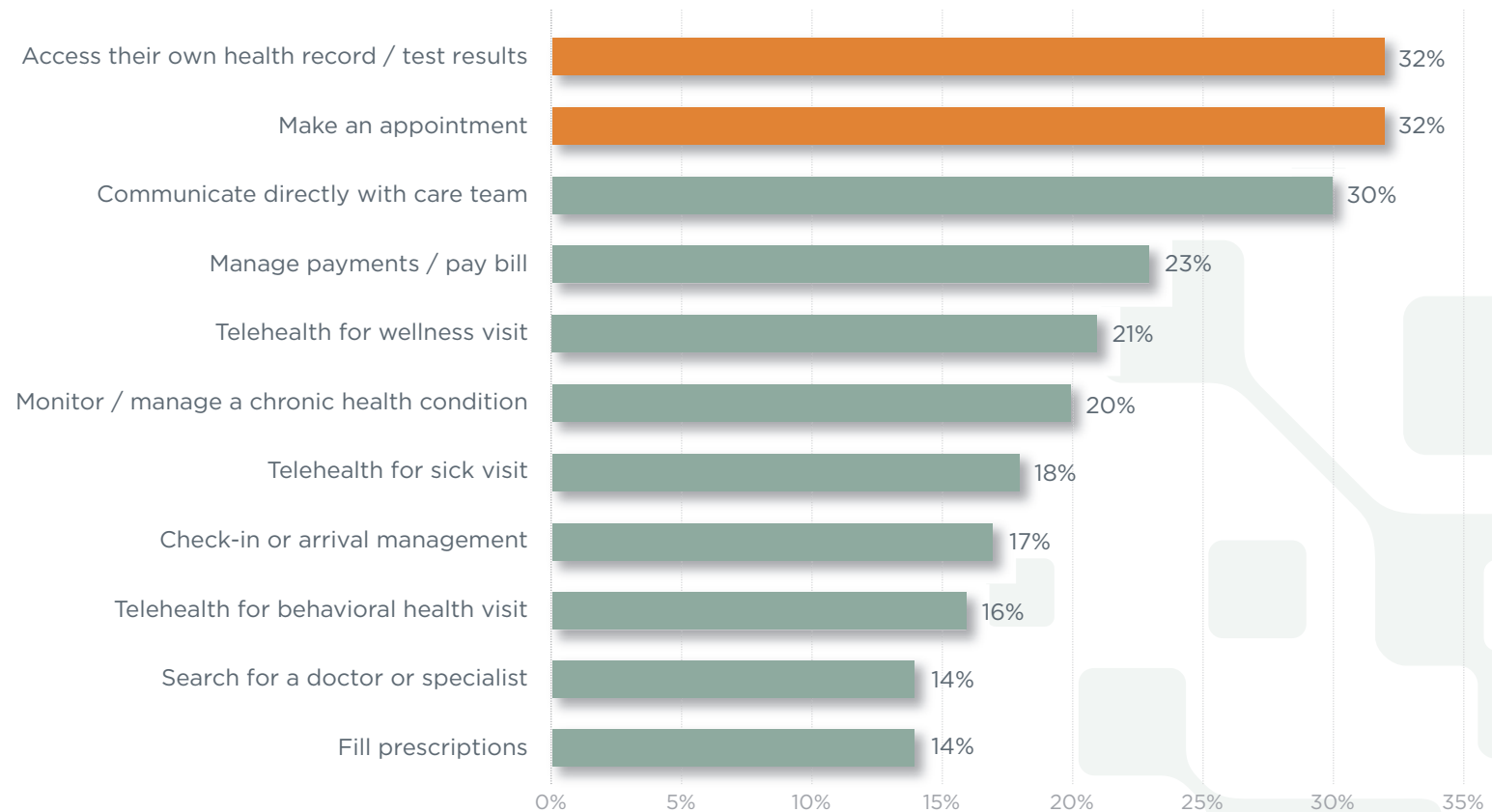
### Top 10 most commonly cited digital health tools under consideration for use



## Greatest return on investment

The top digital tools that are expected to provide a return on investment are, perhaps unsurprisingly, very similar to the list of most common tools that are currently in use. Given the fact that many health systems are only in the early stages of implementing patient-facing digital tools, it stands to reason that those providing a solid ROI would be targeted first.

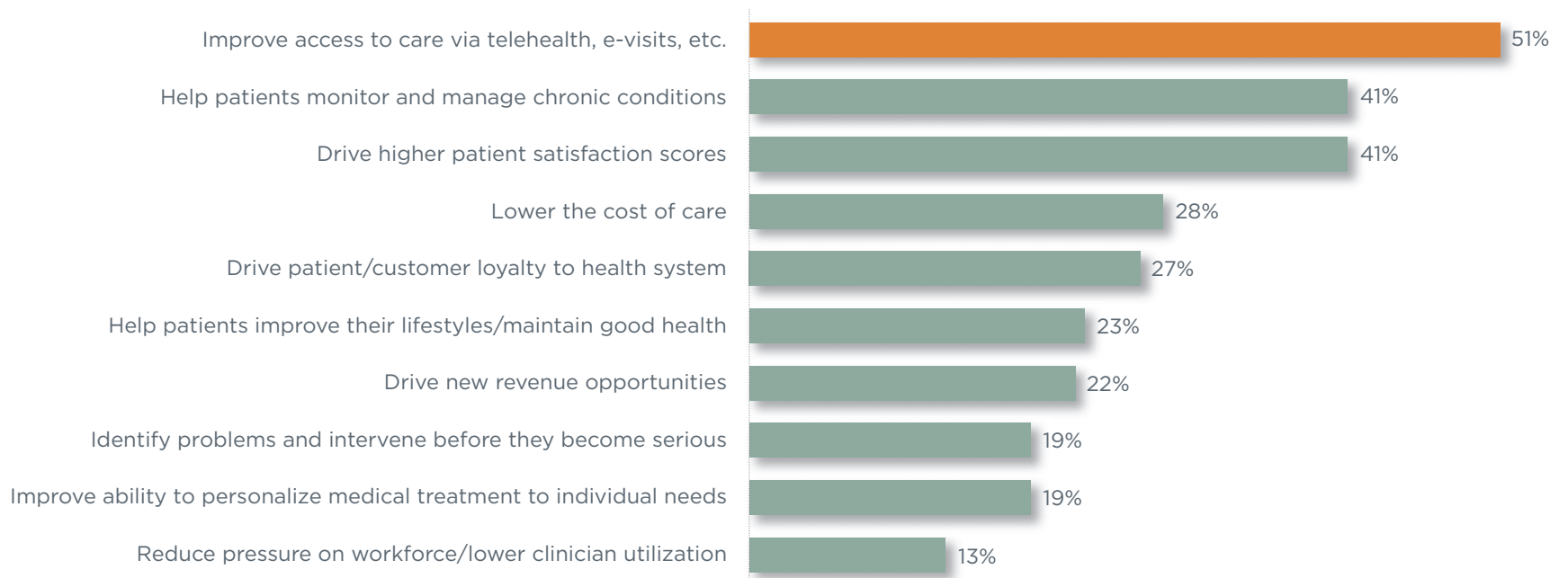
### Tools expected to provide greatest ROI



## Improving access, care, satisfaction driving use

Respondents said the biggest drivers for implementing patient-facing digital tools are to improve access to care, help patients monitor and manage their health, and deliver higher patient satisfaction.

### What are the drivers for digital health tools?

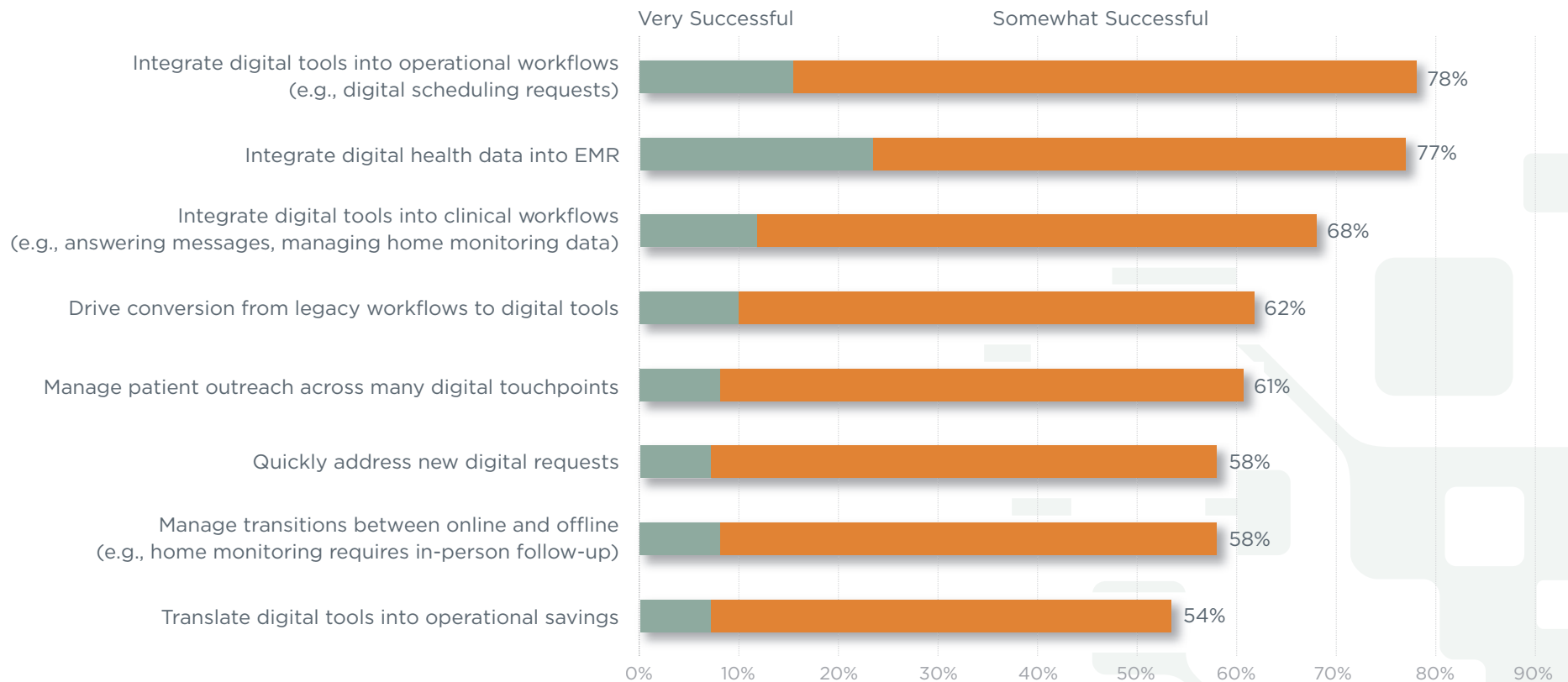




## Digital tools less likely to lead to cost savings

Health system respondents said their organizations are more likely to be successful integrating digital tools into operational workflows than translating the use of these tools into cost savings.

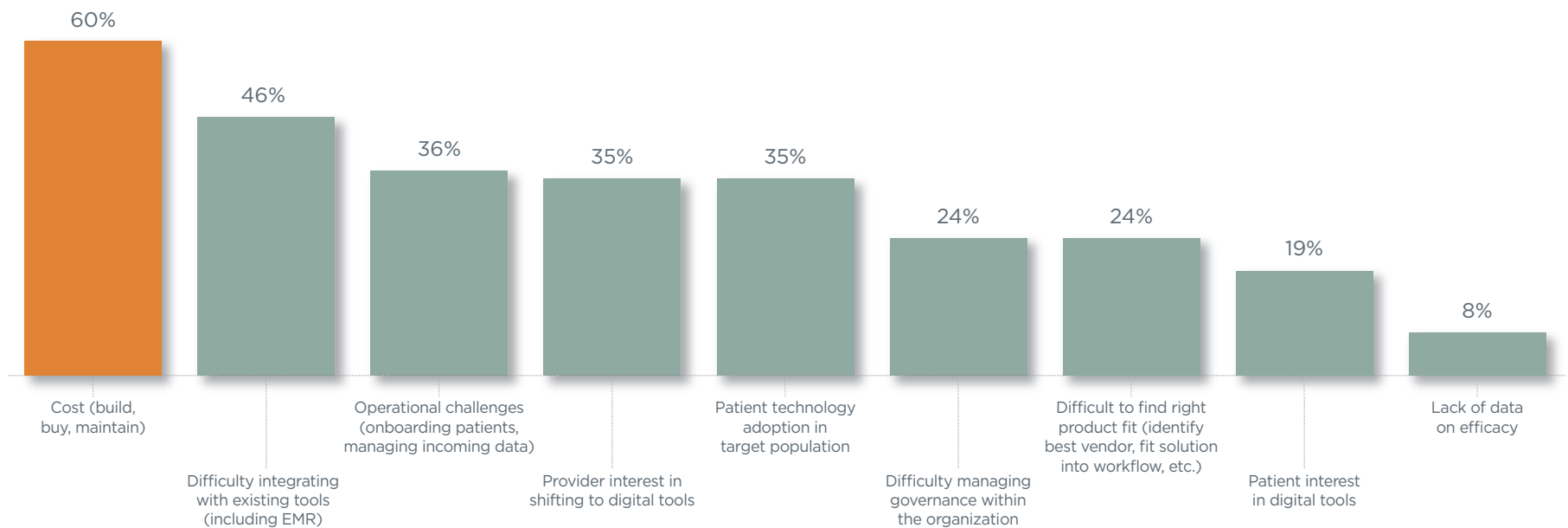
### Rate your success with the following



## Cost is top implementation challenge

Respondents cited a number of challenges to adopting digital tools with the cost to build, buy and maintain tools, difficulty integrating tools with existing systems such as EHRs, and operational roadblocks topping the list.

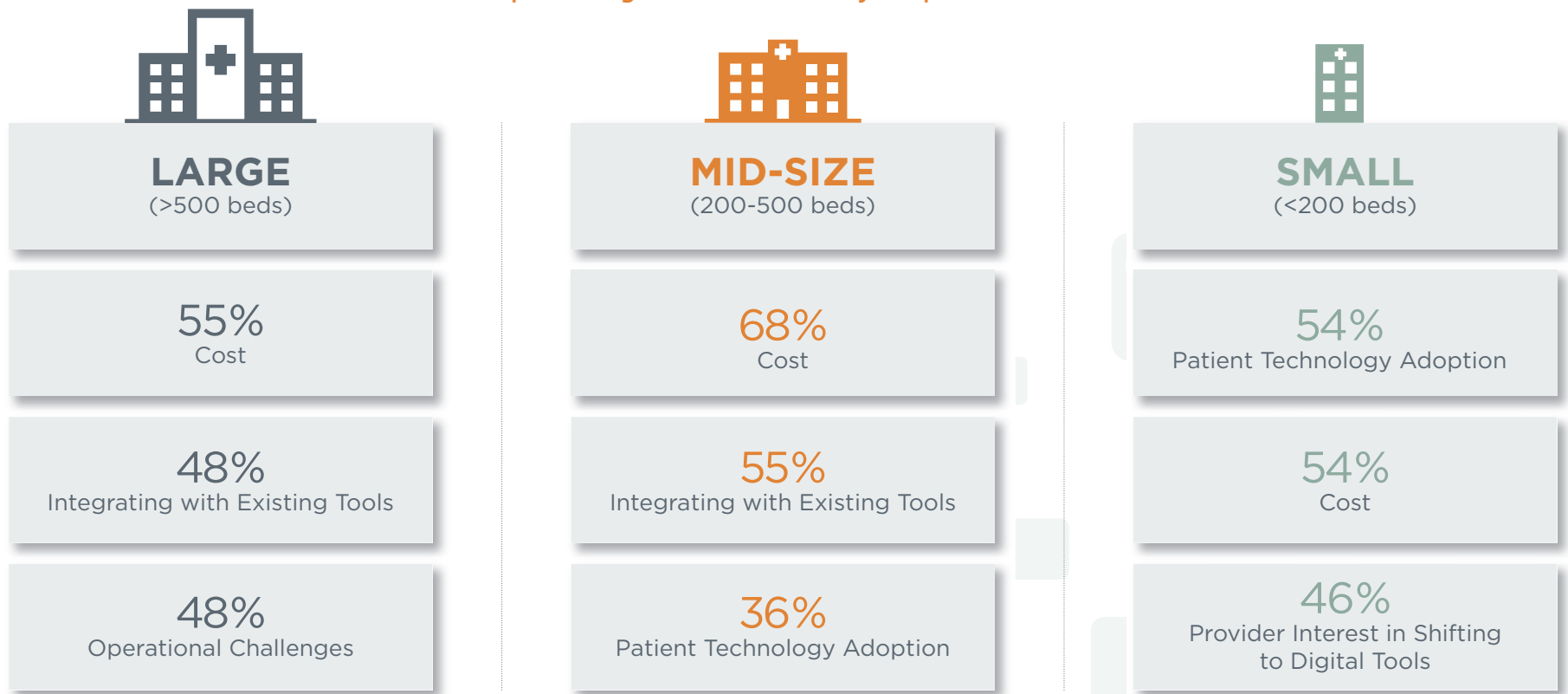
### Top challenges to implementing digital health tools



## Small hospitals cite patient adoption as top challenge

While respondents from large and mid-sized hospitals were more likely to cite cost and integration with existing tools as their top challenges with adopting patient-facing digital tools, survey takers from small hospitals said adoption by patients was their biggest challenge.

### Top challenges, broken down by hospital size



## About the CCM

The Center for Connected Medicine (CCM) is a gathering place where those seeking to drive improvements in health care through technology come to connect and inspire each other, both in the real and digital worlds.

The CCM, jointly operated by GE Healthcare, Nokia, and UPMC, connects and inspires leaders and innovators through original research and industry analysis, virtual events, and on-site experiences.



GE Healthcare

NOKIA

UPMC

Learn more at [connectedmed.com](http://connectedmed.com)  
[@connectedmed](https://twitter.com/connectedmed)



View more about the digital patient experience in health care from the CCM and its partners at [connectedmed.com](http://connectedmed.com) and [@connectedmed](https://twitter.com/connectedmed)



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