White Paper

# Top of Mind for Top Health Systems 2024

## AI Vaults to the Top of the Agenda

## Introduction

The Center for Connected Medicine's (CCM) annual Top of Mind for Top Health Systems survey asks health care executives across the country to share their insights on digital health technologies that are most exciting, showing the greatest progress, and best suited to solve industry challenges. The responses can be thought of as a proxy for technology priorities at health systems — what is "top of mind" — in the coming one to two years. The survey for this white paper was conducted in late spring of 2023 in partnership with KLAS Research.

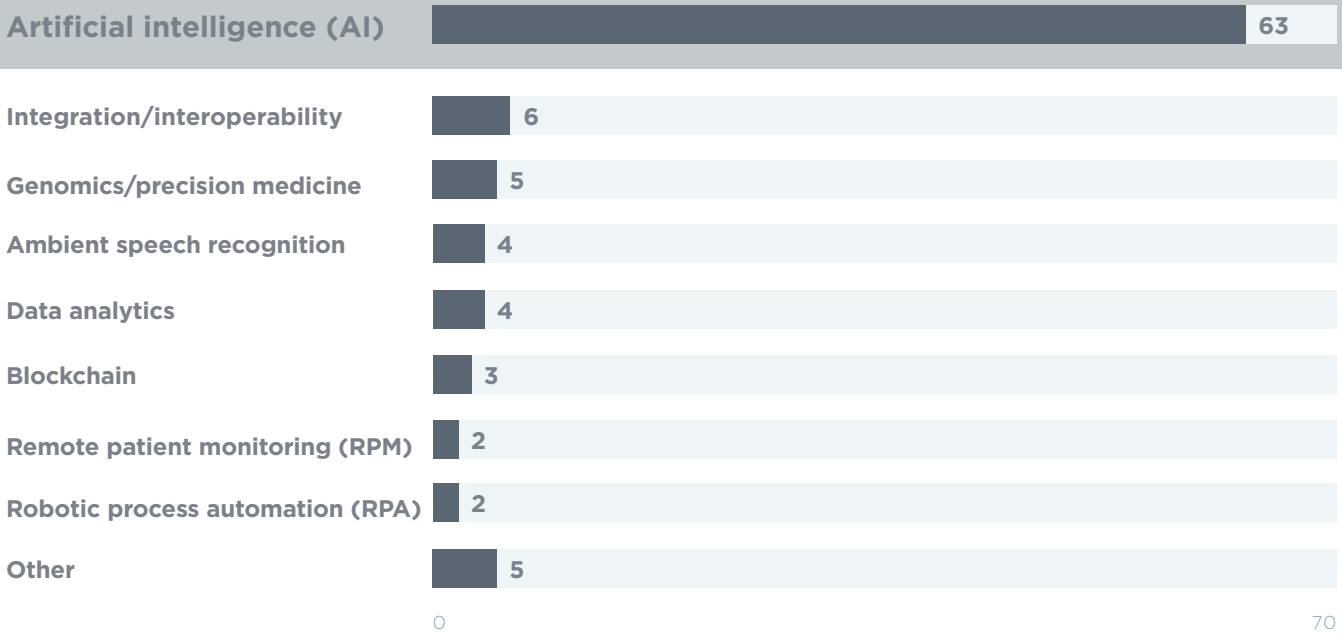
As detailed below, artificial intelligence (AI) is dominating the thoughts of many executives at health systems. While AI has ranked highly in past Top of Mind surveys, it was overwhelmingly cited in 2023 as the most exciting emerging technology, and it displaced virtual care as the technology seeing the most progress.

Also noteworthy, patient care was seen as the top problem to be solved with technology — this encompasses methods of improving care through decision support, continuity of care, remote patient monitoring, and other technologies. Patient care surpassed patient access, previously cited for two consecutive years as the top problem to solve with technology. While access remains a significant challenge for most health systems, it appears the end of the COVID-19 public health emergency has potentially shifted focus away from related patient access issues. Instead, attention may be shifting to improving patient outcomes and preventing critical health events.

# Excitement Growing Rapidly around Artificial Intelligence

As generative artificial intelligence (AI) quickly emerged and captured significant public attention in early 2023, health care leaders have become much more excited about and interested in leveraging AI technologies. This trend is reflected in the Top of Mind survey, in which AI surfaced as the most exciting technology and the most improved technology on health care leaders' minds. While use cases for data science solutions have mostly focused on clinical problems, health systems increasingly see AI as a tool that can also improve operational, financial, and efficiency-related challenges. Many health care leaders believe these types of technologies could help their health systems become more efficient and effective.

**What Is the Most Exciting Emerging Technology for Health Care?** (n=79)




Note: "Other" includes CDS, payer/provider technology, mobile applications, internet of medical things, and member management.

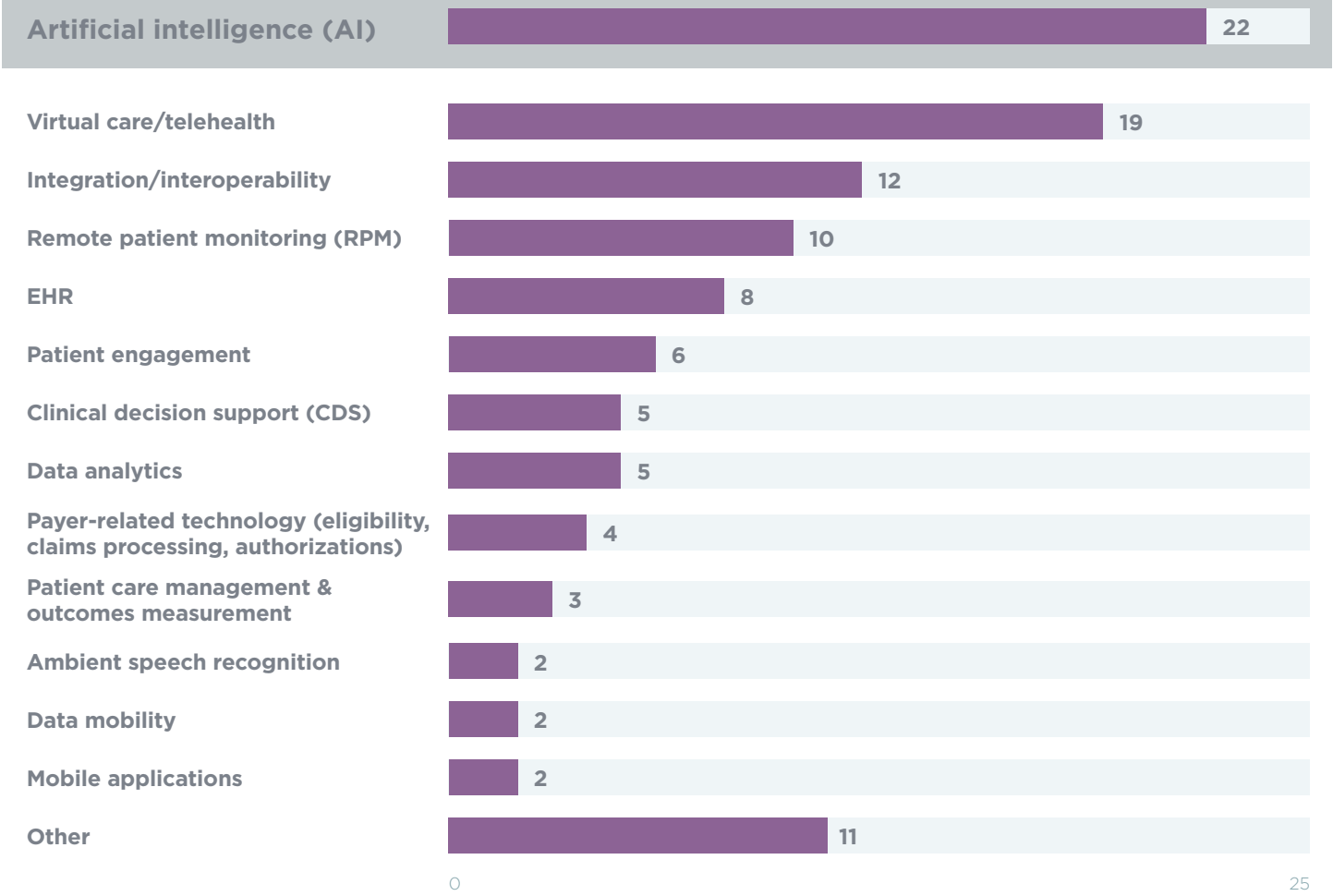
AI is also showing promise within other health care solutions, such as the electronic health record (EHR). Many health care executives mentioned Epic and their partnership with Microsoft to integrate generative AI in the EHR. Adoption of AI models has grown — in particular, the ability for Epic customers to access up to 10 free modules can make AI models more accessible for them. Adoption of AI and natural language processing (NLP) capabilities has also increased, with more solutions incorporating these types of functionalities — for example, in imaging software. While interest in AI and NLP has been high for a few years, the ultimate effectiveness will be measured more by breadth of adoption and whether the technology drives health systems' desired outcomes.

# Virtual Care, Interoperability, and Remote Patient Monitoring Also Improving

As noted above, AI also was cited as the most improved technology by health care executives. Perceived improvement in AI is likely leading to greater adoption, which was reflected in the CCM's report published in June 2023. In that research, most organizations shared they have adopted at least some AI technology.

Despite AI's move to the top of the rankings, executives continue to view telehealth and virtual care as technologies that have improved. Health care leaders report these technologies have become easier to use, and health systems continue to iterate on their strategy for how best to utilize virtual care platforms. Many organizations are currently looking at how to expand their use cases, simplify their technology stack by reducing the number of vendors used, and improve integration.

## What Technology Has Seen the Most Progress Recently in Health Care? (n=78)




"Other" includes broad technology in place, robotics, digital front door, digital workflow automation, call routing, in-room cameras for patient observation, capacity optimization management, clinical communication, and virtual nursing.

Many organizations also noted improvements to interoperability, including better ability to connect to data exchanges and receive outside data. A few mentioned they expect the new Trusted Exchange Framework and Common Agreement (TEFCA) standards to make a big difference in data sharing. Health care executives see TEFCA as a promising way to better govern data sharing between different health care organizations. Organizations still face challenges with adoption gaps, the elimination of vendor silos to make data exchange broader and more consistent, and the need for more collaboration between EHR vendors and provider organizations.

Health care executives also highlight improvements to remote patient monitoring (RPM). Reported outcomes from the use of RPM include earlier intervention and reduced utilization — both keys to successful value-based care. One vital aspect of RPM is the solution's ability to integrate well with the EHR. Reimbursement for use of RPM solutions in patient care also remains a challenge. Most organizations using RPM have tested it in small pilots and are seeing promising outcomes. Organizations with at-risk value-based contracts are more likely to realize return on investment from the use of RPM, specifically by preventing adverse events.

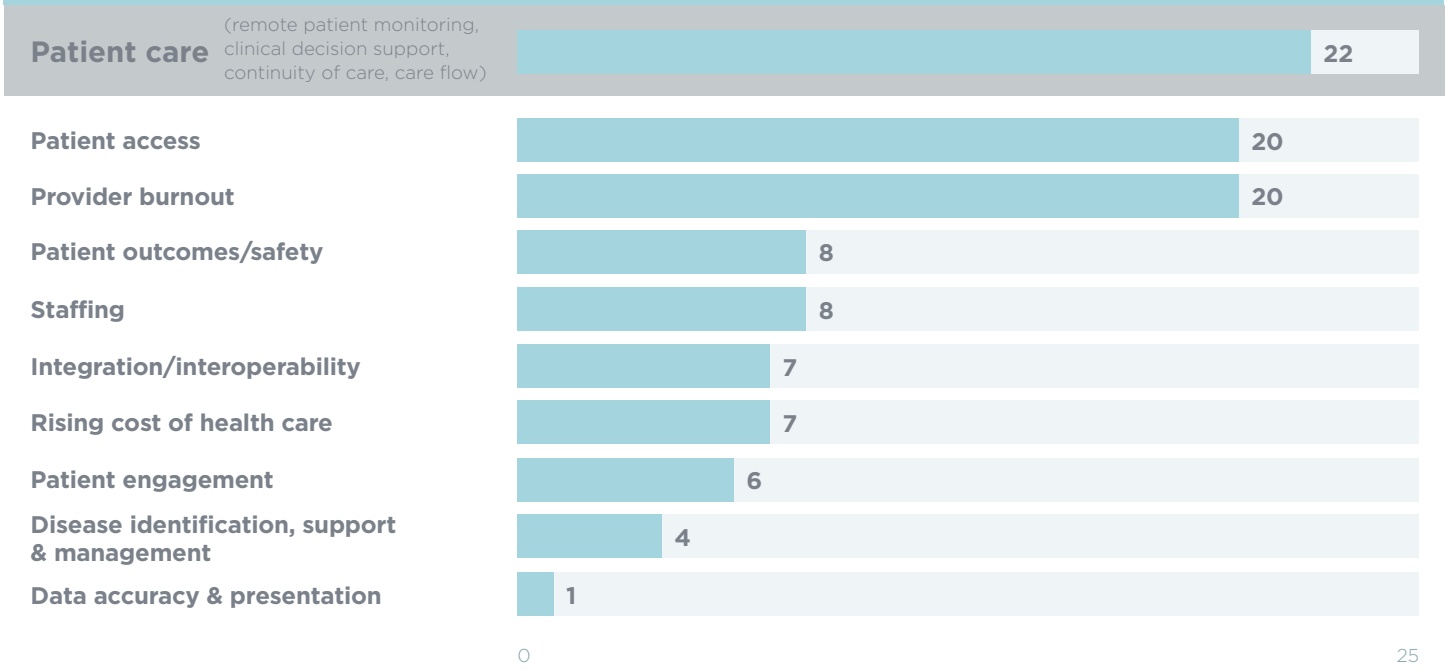
## What is remote patient monitoring?

**While there is some debate in health care about what constitutes RPM, KLAS defines RPM as solutions that acquire, store, or transmit patient health data, most often outside of conventional care settings. This usually entails patients using devices at home to monitor chronic conditions and send data to their provider. While the data is typically captured episodically, there is growing interest in continuous monitoring solutions and hospital-at-home technologies.**

# Increased Focus on Challenges with Patient Care, Provider Burnout, and Operations

While patient access is an important challenge that continues to be tackled with technology, this year's survey also showed increased focus on other types of challenges. Improving patient care was the top answer from health care executives, a broad problem that can be addressed through the use of solutions such as RPM for proactive care and other tools like clinical decision support (CDS) to guide physicians in effectively treating high-risk patients. Amid significant financial constraints, health care organizations are looking for sustainable ways to provide excellent care to the sickest patients with fewer resources. On a related note, health care executives also highlight challenges of patient outcomes/safety and disease recognition, support, and management as issues to tackle with technology.

## What Problems in Health Care Can Best Be Solved with Technology? (n=80)




Another top problem to be addressed with technology is provider burnout, a category that includes documentation and efficiency burdens. With industry-wide staffing shortages and increased workloads for providers, technology can be a vital way to support caregivers and allow them to focus on what they are best at: treating and caring for patients. Software solutions that health care executives expect will help address staffing challenges include patient self-scheduling, IT task automations, scheduling platforms, revenue cycle automation, ambient speech recognition software, release of information solutions, RPM platforms, and EHR optimization/automation tools.

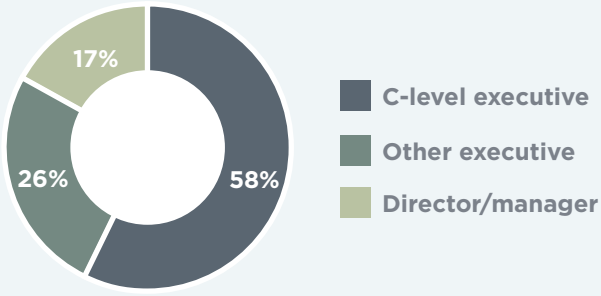
In past KLAS research, RPM, release of information, ambient speech recognition, and scheduling tools have been found to make a difference in provider burnout in some cases. However, most health care leaders can't point to common technologies having a sizeable impact today. When it comes to combatting staffing shortages, technology's potential impact is tied to automations and the ability to effectively use data to schedule and orchestrate care.

# Methodology and Respondent Demographics

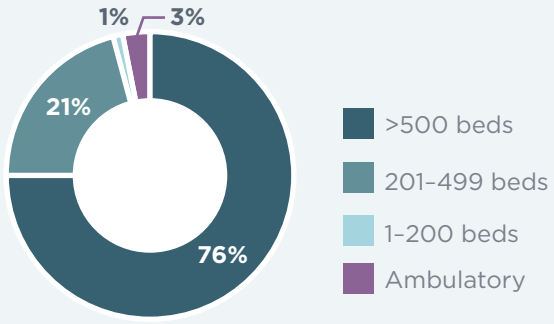
The Top of Mind 2024 survey was administered to 80 executives and other leaders at US hospitals and health systems. Respondents were asked to answer three questions:

1. What do you see as the most exciting emerging technology in the next two years?
2. What area of health care technology has seen the greatest progress or improvement in the last two years?
3. What problem in health care has the greatest potential to be improved with digital health technology and innovation?

## Respondent Job Level (n=78)




## Respondent Organization Size (n=78)




Note: Two respondents did not share their job level or organization size.

Note: Due to rounding, percentages may not add to 100%.

## About the Center for Connected Medicine

The Center for Connected Medicine (CCM) at UPMC is defining the future of the modern health system through programming that informs, connects, and inspires leaders and innovators in health care. Collaborating with a network of experts from across the health care ecosystem, the CCM focuses its research and events on consumer-centered solutions, digital transformation, and scientific and medical innovation. Learn more at connectedmed.com.

## About KLAS

Driven by a mission to improve the world's health care, KLAS is a health care–focused research firm whose data helps provider, payer, and employer organizations make informed software and services decisions. Powered by insights and experiences discovered in the 25,000+ interviews with health care organization leaders and end users that KLAS conducts each year, KLAS' work creates transparency in the health care market and acts as a catalyst for software vendors and services firms to improve their offerings.

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