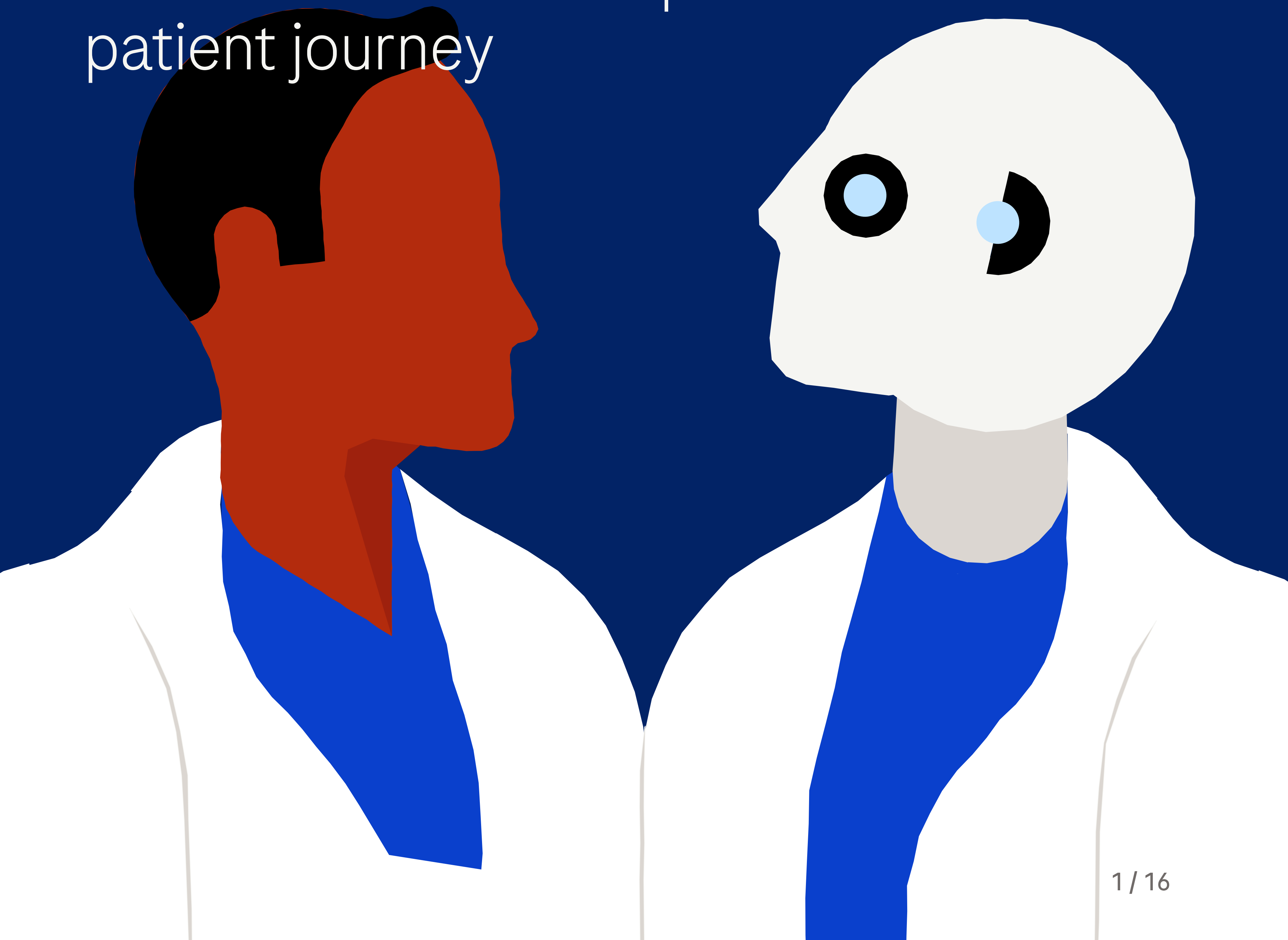


What healthcare leaders said about AI at Reuters Digital Health 2025

Reflections on the impact of AI on the
patient journey



What we aim to answer

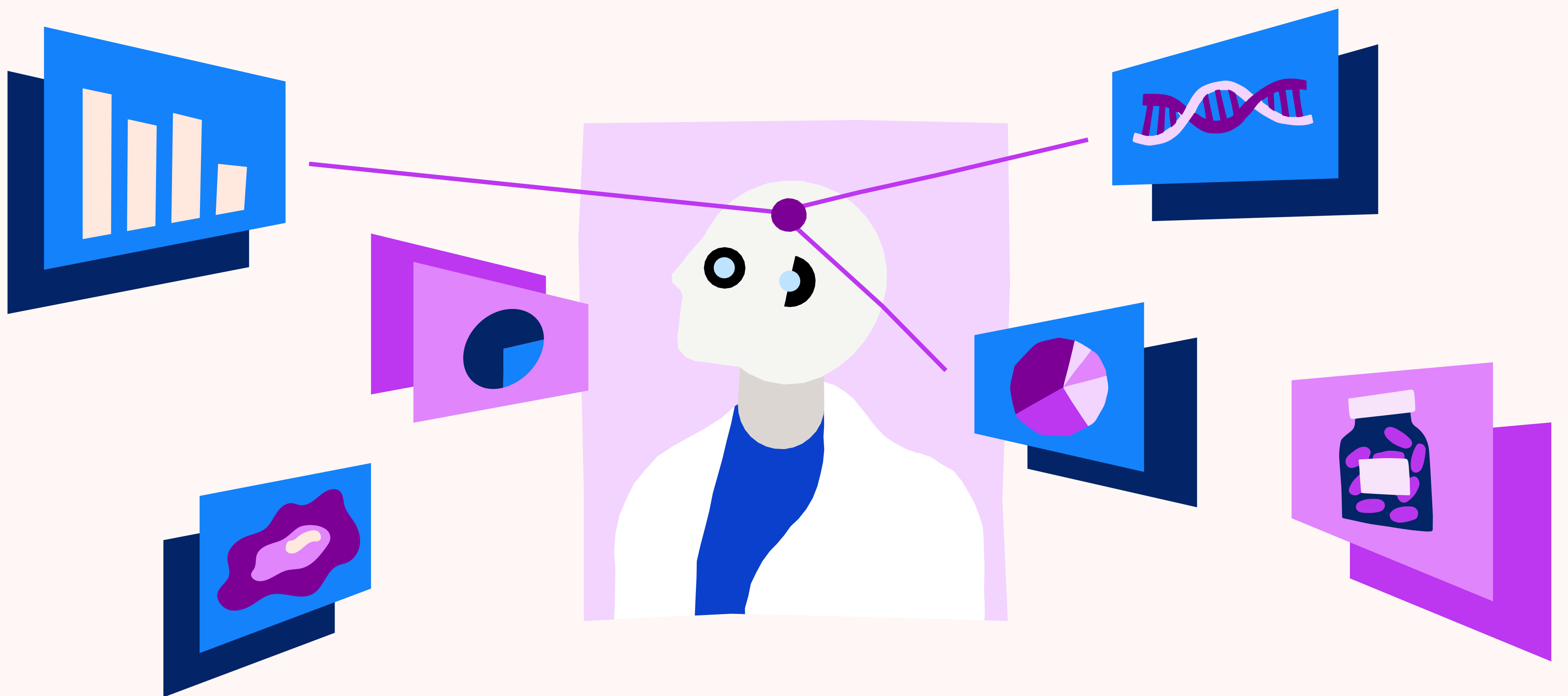


- How do healthcare leaders perceive the current impact of AI on healthcare?
- What are the AI applications that healthcare leaders are adopting, and what are the impacts of their use?
- What kinds of AI applications are healthcare systems struggling to implement and adopt?

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Gathering perspectives on AI technologies in healthcare

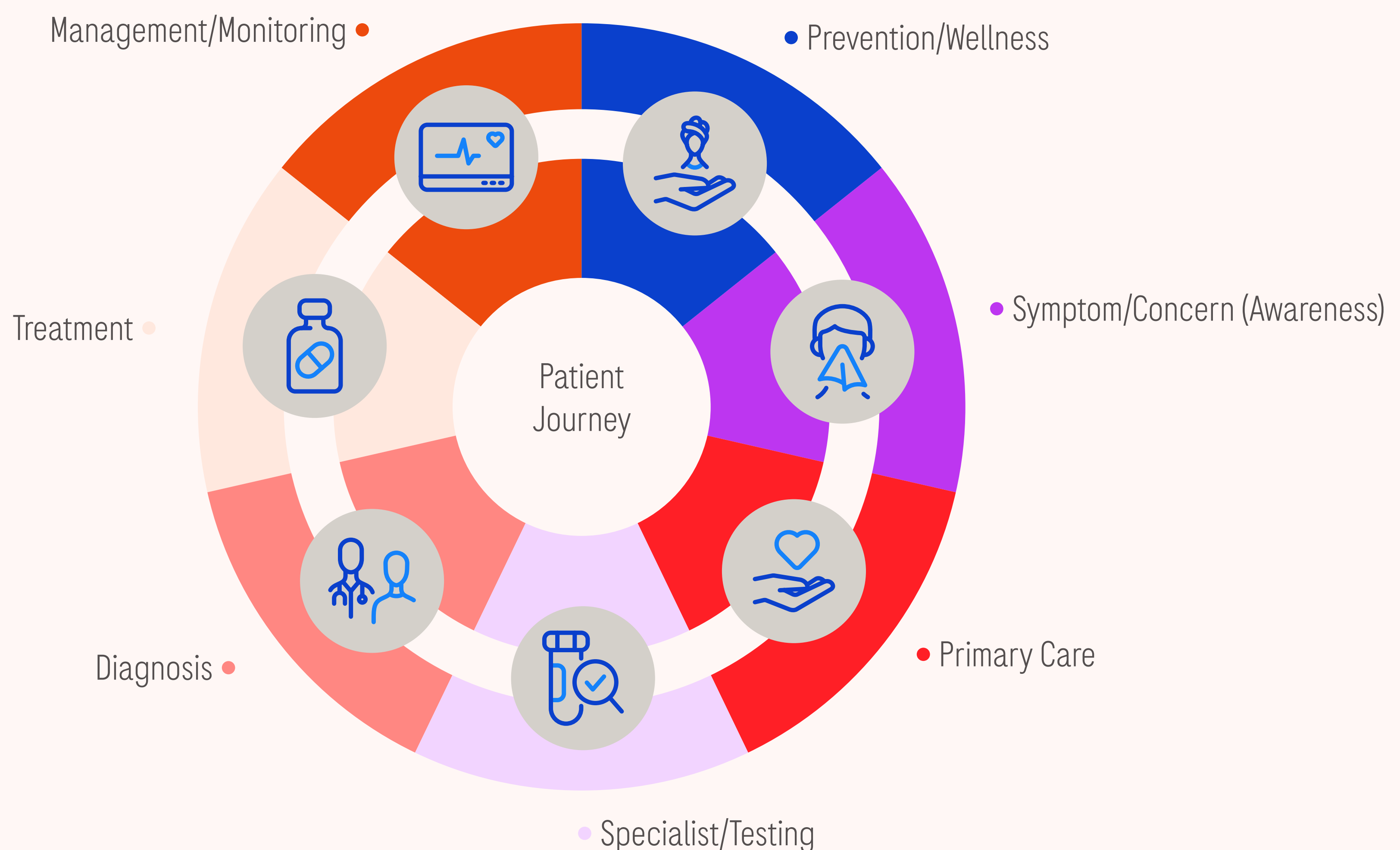


As artificial intelligence (AI) technology continues to evolve, healthcare systems are increasingly adopting AI applications as part of a digital patient journey to enhance patient experience, improve operational efficiency, and reduce clinician burden.¹ Recently, Healthcare Transformers attended Reuters Digital Health 2025 on May 12-13, 2025 in Nashville. At the conference vendors and healthcare systems came together to talk about what is and isn't working in digital healthcare today. While the promise of ambient and agentic AI featured prominently in discussions, the barriers to implementing other types of AI technologies were a concern on everyone's mind.

To gain deeper insights into these perceptions, **Healthcare Transformers conducted an interactive data collection session with 36 C-suite and upper management healthcare leaders** at the conference. Their collective wisdom provides a unique perspective on where AI is currently making the most impact, where it has the greatest untapped potential, and where it faces the biggest implementation challenges across the digital patient journey. Participants also reflected on the AI solutions that are currently on the market, assessing their strengths and weaknesses in addressing modern healthcare's deepest challenges.

Digital health along the patient journey: An overview

While the patient journey varies to some degree across healthcare systems, we defined a generic patient journey with the following key stages:

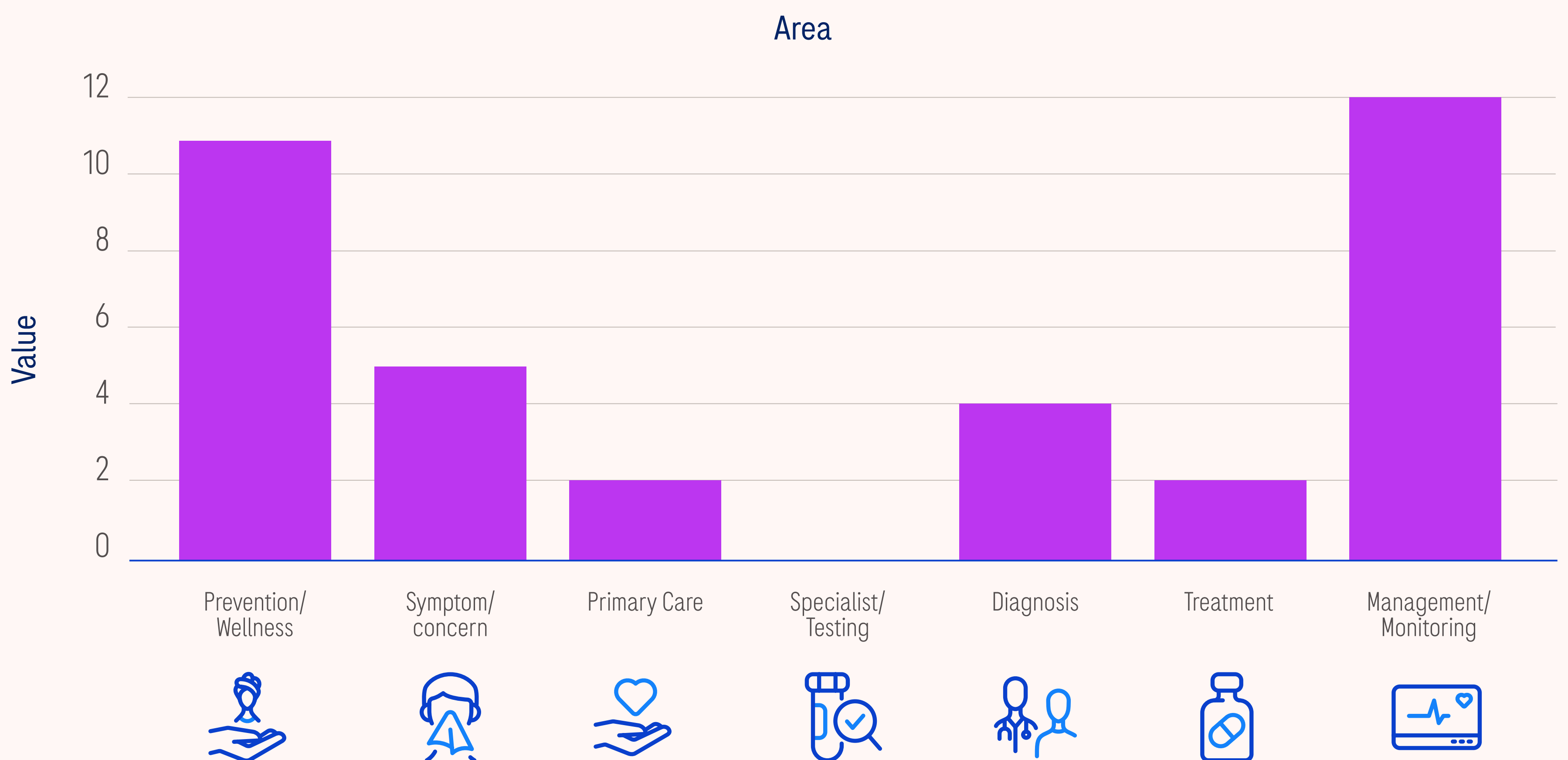


In the first part of the session, **participants were asked to engage in a “human barometer” exercise.** After asking each question, participants moved to the part of the patient journey they thought best answered the

question—a kind of physical survey. Once there, we spoke with the participants to understand the “temperature” in the room, and participants reflected on the reasons for the distributions.

Results: Human barometer exercise²

Question 1: Where in the patient journey is AI currently making the biggest positive impact?

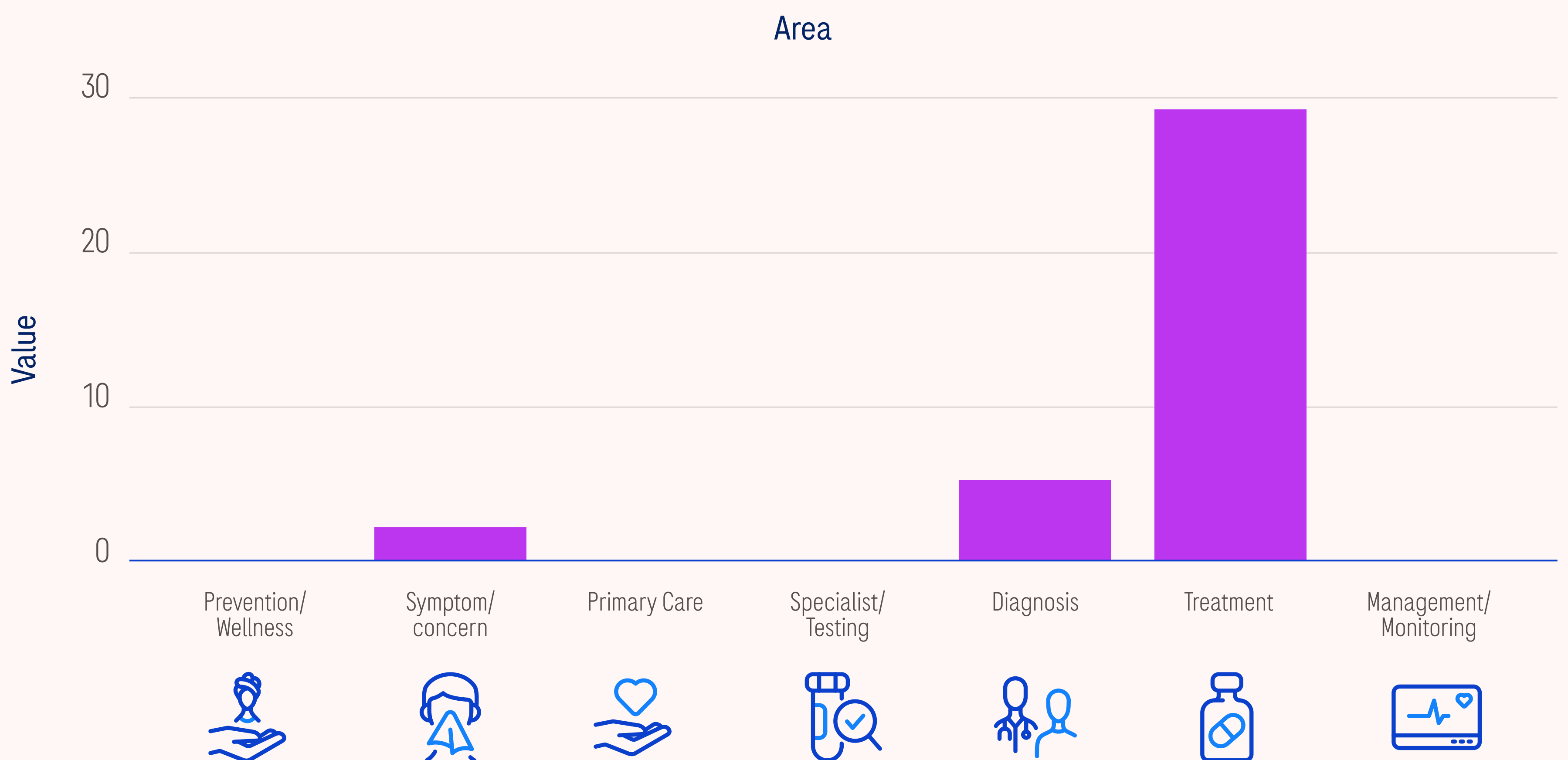


Participants moved to the parts of the patient journey that take place outside of the clinical setting, either before or after the clinical encounter. When probed as to why the room gravitated towards those parts of the journey, participants noted the at-home monitoring devices that are shifting disease management away from the clinician and towards the patient.

AI applications that they mentioned as part of this rationale included smart watches, mobile apps, and self-testing and self-monitoring technologies. Participants hypothesized that patients currently seem to be more comfortable utilizing AI technologies when they are in control of their use.

Results: Human barometer exercise²

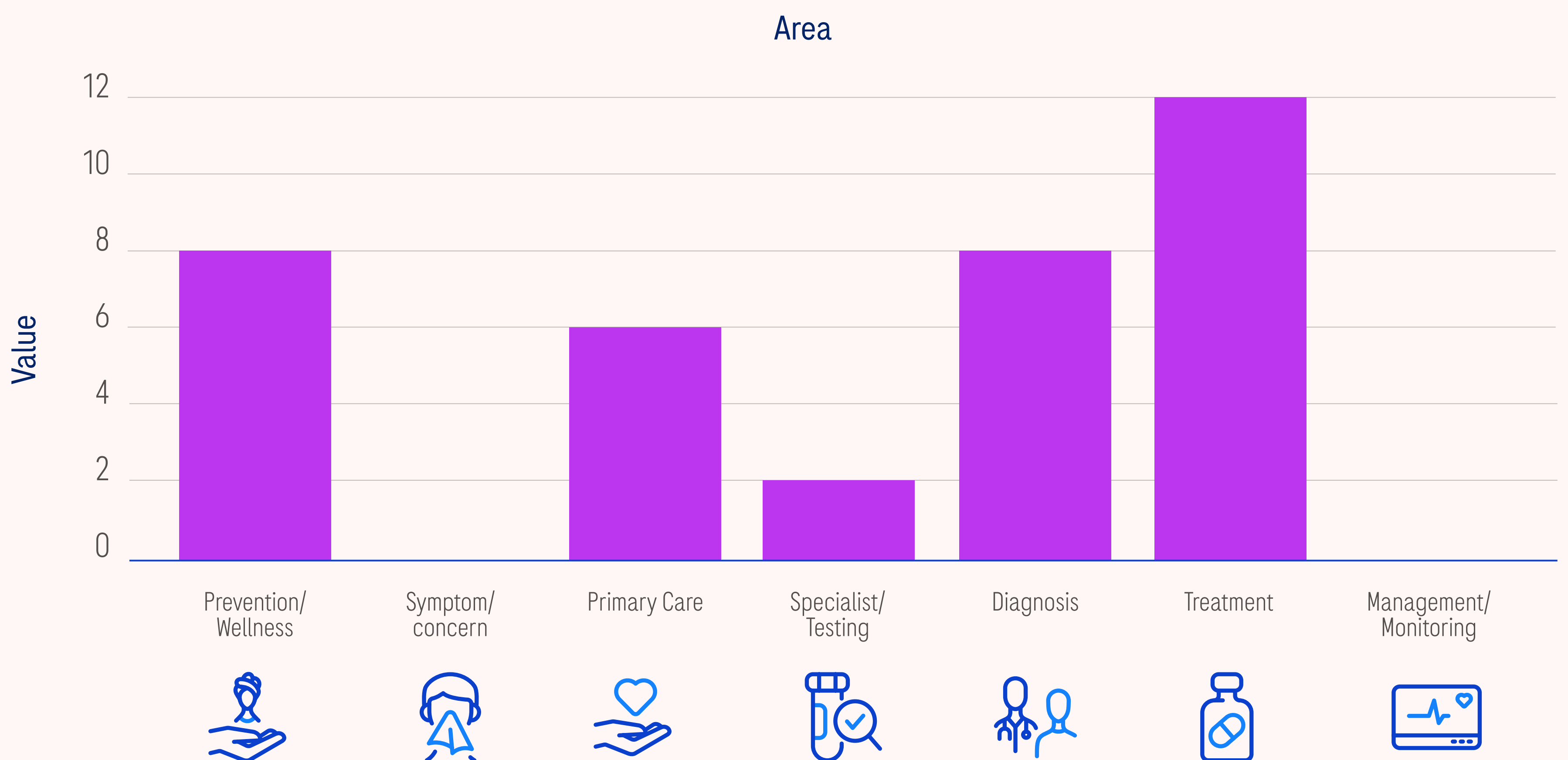
Question 2: Where does AI have the biggest untapped potential within the patient journey?



Results showed that participants felt AI held great promise for diagnosis and treatment, but was not yet being used to its full potential in those stages of the patient journey. Participants voiced that barriers around trust in AI technologies prevented both doctors and patients from utilizing AI solutions, citing relatively slower adoption for technologies like AI clinical decision-making tools and AI-enabled diagnostic technologies.

Results: Human barometer exercise²

Question 3: Where does AI face the biggest implementation challenges?

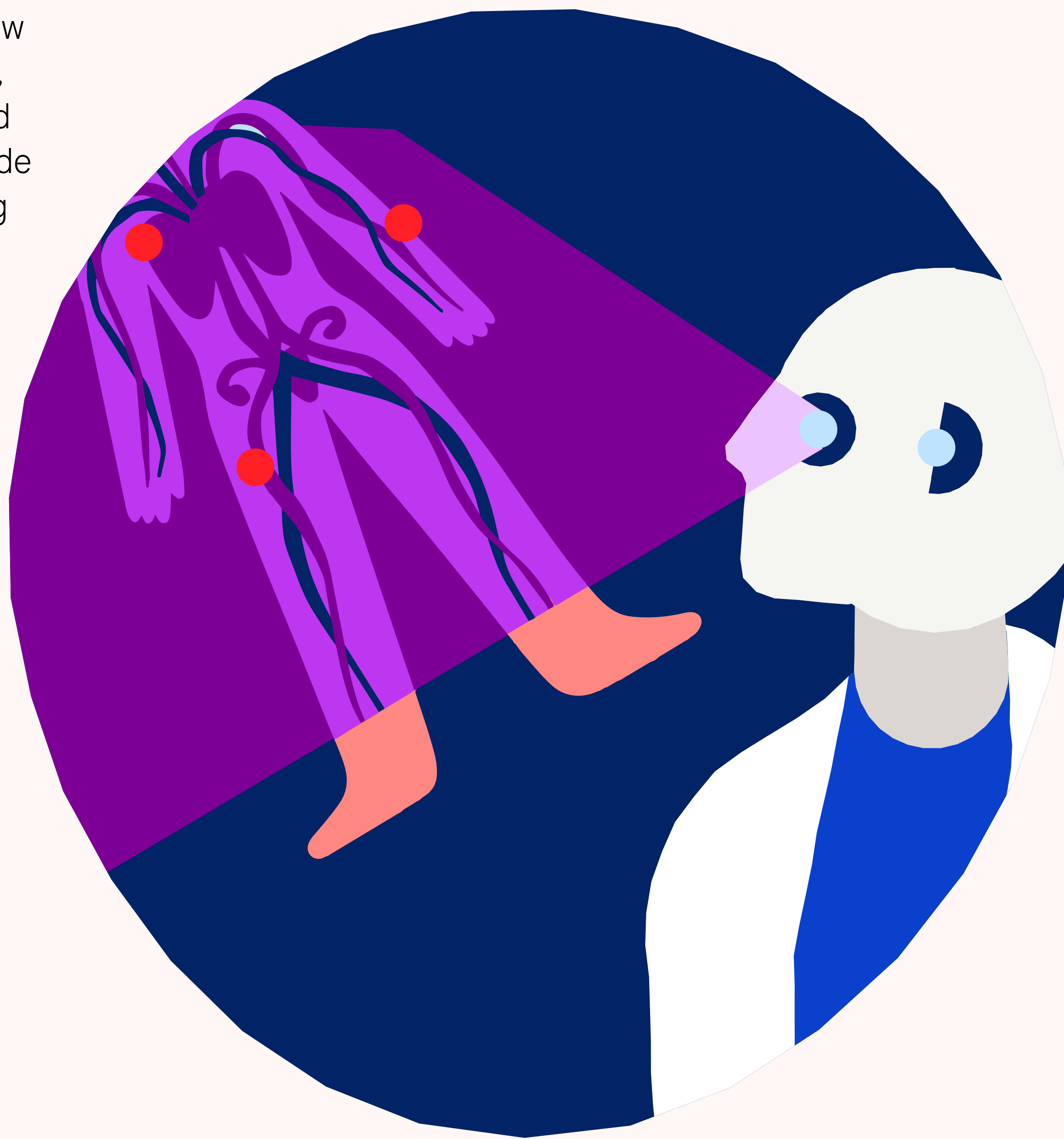


For this question, there was a wider distribution of responses. In keeping with the previous question, most participants felt that the diagnosis and treatment part of the journey suffered from a lack of trust, contributing to reluctance for healthcare systems to implement AI technologies. However, others argued that the biggest problems were in connecting individual prevention/wellness data collected through consumer digital health

apps with primary care services. Still another group felt that a lack of resources in primary care is prohibiting wider adoption of AI technologies that could increase the number of touchpoints between patients and providers.

Assessing current AI technologies in the digital patient journey

In the second part of the session, **participants were asked to split up into 7 groups to take a deep dive into the types of AI applications currently on the market** and how they seek to solve problems at different stages in the patient journey. After identifying various applications, participants were asked to reflect on how big of an impact these applications are likely to make, and score them from 1-5, with 1 being low impact and 5 being high impact. Participants were asked to provide a rationale for especially high or low scores, including pitfalls they anticipate might prevent an application's widespread adoption



1. Prevention and wellness: Proactive health management

In the initial stage of the patient journey, digital health technologies promise to empower individuals to take a more proactive approach to their health. Wearable devices and health apps have become ubiquitous, allowing users to monitor vital signs, track physical activity, and manage nutrition. These technologies hope to promote healthier lifestyles and generate valuable data for predictive analytics, data that could potentially be leveraged by primary care services.³

Overall, participants in the session saw significant potential in this area. They highlighted applications such as smartphone/watch data, period tracking apps, fitness apps, and medication adherence apps as having a high impact score of 5. Additionally, diet suggestion applications were noted, although with a lower impact score of 3, indicating room for improvement in tackling the elusive problem of individual behavior change.

Interestingly, participants also pointed out the future potential of [digital twins](#) for covering low-income or uninsured populations, and the promise of technologies focused on aging, highlighting the industry's need to expand access to preventative care.

2. Symptom awareness: Digital symptom checkers and triage tools

The current digital health market is churning out technologies in the form of AI-powered triage tools, such as chatbots. These technologies use sophisticated large-language models (LLMs) to assess reported symptoms, provide preliminary information, and guide users on appropriate next steps—whether it's self-care, scheduling a primary care visit, or seeking emergency services.⁴

Participants reflecting on this part of the journey shared anecdotal stories about using ChatGPT to diagnose themselves, but overall expressed less familiarity and experience with AI applications for this purpose. Some participants recalled they had seen such tools during the COVID-19 pandemic, but seemed to feel their prominence had waned. Given their limited experience with the applications, participants were uncomfortable with providing impact scores.

3. Primary care: Enhancing access and efficiency

With a huge staffing shortage globally, the primary care landscape has a [great need for digital health solutions to fill the care gap](#).⁵ During the COVID-19 pandemic, [telemedicine saw unprecedented adoption](#), which enabled virtual consultations, especially for patients in rural or underserved areas.⁶ This trend only seems to be growing as the mantra of the conference seemed to be “The patient will see you now,” a play on the standard expression “The doctor will see you now.” A case in point, Sanford Health gave a presentation about setting up a physical hospital to provide digital health services in an area of the United States serving a large land area with low population density.⁷

Participants in this session highlighted ambient and agentic AI as promising technologies for primary care. Ambient AI listens during patient intake, taking notes while the doctor speaks face-to-face with the patient without needing to look at a computer to take notes. Ambient AI was given an impact score of 3, noting that this technology can make doctors' lives easier, feed data downstream, and allow for more meaningful patient interactions on top of combatting clinician burnout.

Agentic AI received the highest impact score of 5. Participants noted that while it is a very new technology, “if we get it right, it opens up capacity.” Agentic AI has the potential to take on administrative tasks (e.g. managing schedules, processing insurance claims,

or handling patient inquiries) and treatment planning, recommending personalized treatment plans based on patient history and previous communications with the AI agent. Agentic AI may also engage in tracking patient vital signs and alerting staff to potential issues, essential functions that could prevent larger, more expensive health complications.

Participants also identified AI-enabled patient engagement applications, and gave them an impact score of 4. They highlighted the potential of these apps to provide more personalized approaches that could encourage medical adherence and healthy behaviors. Participants were less confident in risk scoring and stratification applications for clinical decision-making, assigning these technologies an impact score of 2. They cited the need for upskilling and training to ensure the best team members are involved to oversee and maintain the algorithm's efficacy and integrity.

4. Specialist care: Testing and diagnosis

In specialist care, AI is making significant strides in enhancing diagnostic accuracy and efficiency. AI-assisted imaging analysis is being increasingly adopted across US healthcare systems, particularly in radiology and pathology. These tools can quickly analyze medical images, flagging potential abnormalities for human review and often detecting subtle changes that might be missed by the human eye alone.⁸

Similar to our earlier results during the “human barometer” exercise, participants who chose to reflect on this part of the patient journey felt that specialist AI testing and diagnosis technologies suffered from trust issues in the current healthcare landscape. They reasoned that the significant implementation barrier of getting patients and clinicians to feel comfortable with these technologies rendered their current impact at a score of 0 or 1. However, technologies like these were also considered to have great untapped potential, indicating a need for change management solutions in this area of digital health.

5. Diagnostics: Leveraging AI for improved accuracy

The diagnostic process is being enhanced by AI algorithms capable of analyzing complex medical data from various sources, including EHRs, imaging studies, and genetic information.⁹ These systems can identify patterns and correlations that may not be immediately apparent to human clinicians, potentially leading to faster and more accurate diagnoses.

Participants who chose to consider this part of the patient journey brought up AI diagnostic applications for malnutrition (impact score 4), and sepsis diagnosis (impact score 4). They highlighted the advantages of leveraging data from multiple sources to engage in risk stratification and problem list generation, potentially improving the accuracy of diagnosis. Interestingly, participants noted higher trust in AI-enabled diagnostic tools that relied more on compiling and summarizing data provided by the patient or derived from conversations between the patient and the clinician, as opposed to AI-enabled diagnostic technologies that rely more on training from population-level data.

6. Treatment: Personalized care plans and clinical decision support

Once a diagnosis is made, AI-powered clinical decision support systems (CDSS) are playing an increasingly important role in treatment planning. These systems can analyze a patient's medical history, current condition, and the latest clinical guidelines to suggest evidence-based treatment options. Some advanced CDSS even incorporate genetic information to recommend personalized treatment plans aligned with precision medicine initiatives.^{10,11}

Healthcare leaders were excited about the prospect

of what AI might be able to do in the future regarding treatment, whilst acknowledging that they are not yet seeing these technologies implemented in their own healthcare systems. Participants discussed the potential of a national data lake for AI training, envisioning how LLMs might eventually identify new options for treatments, analyze case studies, improve clinical trials, etc. They also discussed the potential to utilize an LLM for family history analysis.

Care plan coordination was another technology discussed within this group, rated with an impact score of 5. Participants noted that AI applied to care plan coordination breaks down siloed communication, streamlining processes to create a single touch point for each patient.

AI applications that performed medication reminders and remote patient monitoring received an impact score of 3. Similarly, AI applications that could identify patients for outreach activities received an impact score of 3, with participants remarking that this type of technology is highly burdensome when done manually.

7. Management and monitoring: Continuous care beyond the clinic

In the management and monitoring phase, self-testing technologies, remote patient monitoring (RPM) systems, and other AI-enabled chronic disease management technologies are enabling patients and healthcare providers to track health status outside of clinical settings. These systems, often integrated with wearable devices or smartphone apps, can continuously and/or regularly collect and analyze a patient's biological data, which can be used both for sharing with a physician and for better self-management.¹²

Participants who chose to reflect on this part of the patient journey highlighted several AI applications. Agentic AI received a high impact score of 5 for its ability to engage in training, education, and outreach with patients. At the same time, there was a concern that this application could be expensive and require frequent rebuilding of the model.

AI application scores summary²

Patient Journey Stage	AI Application	Impact Score
Prevention and wellness	Smart phone/watch data	5
Prevention and wellness	Period tracking apps	5
Prevention and wellness	Fitness apps	5
Prevention and wellness	Medication apps	5
Prevention and wellness	Diet suggestion applications	3
Prevention and wellness	Digital twins	Potential
Prevention and wellness	Technologies focused on aging	Promise
Symptom awareness	AI-powered triage tools (chatbots)	Uncomfortable to provide
Primary Care	Ambient AI	3
Primary Care	Agentic AI	5
Primary Care	AI-enabled patient engagement applications	4
Primary Care	Risk scoring and stratification applications for clinical decision-making	2
Specialist testing and diagnosis	AI-assisted imaging analysis	0 or 1
Diagnostics	AI diagnostic solutions for malnutrition	4
Diagnostics	AI diagnostic solutions for sepsis diagnosis	4
Treatment	Care plan coordination	5
Management and monitoring	Agentic AI (for training, education, outreach)	5
Management and monitoring	Medication reminders	3
Management and monitoring	Remote patient monitoring (RPM) systems	3
Management and monitoring	AI applications for identifying patients for outreach activities	3

Change management and the future of the digital patient journey

The integration of digital health technologies is reshaping the patient journey. From prevention and wellness to long-term management and monitoring, these innovations have the potential to create a seismic shift in healthcare delivery.

Our session with healthcare leaders was a window into the perception of AI's current and future impact across the patient journey. While participants were overwhelmingly excited about the potential of AI technologies to reduce burden on healthcare systems and enhance patient experience, they also expressed trepidation about implementing AI technologies that require higher technical expertise to maintain and regulate.

These sentiments are aligned with a larger study conducted with physicians by the American Medical Society, which showed that most respondents' use cases for AI applications are concerned with reducing administrative burden, with significantly less respondents reporting AI use cases in assistive diagnosis, triage, or surgical simulation/guidance.¹³

Where digital health and AI solutions are encountering barriers to adoption, healthcare leaders in this session

admitted a lack of knowledge and acumen regarding change management at the institutional level and facilitating individual behavior change towards AI among patients. They wondered, “How do we get doctors to like using the innovations that increase the capacity of healthcare systems to provide care?” and “How do we enroll patients in trusting AI solutions that can provide more accurate diagnosis and treatment?”

As we look to the future, answering these burning questions will be critical for digital health to realize its full potential.

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