



Closing the healthcare workforce gap

Three routes to transforming healthcare productivity

Foreword

The workforce is now a defining constraint on healthcare performance. Across health systems, shortages of skilled clinicians, increasing administrative burdens and persistent workforce burnout have created a cycle that cannot be solved simply by recruiting more people or expecting existing teams to work harder.

This report argues that healthcare productivity is, at its core, a design challenge. Today’s operating models were created for a very different environment and are no longer equipped to meet the demands of modern healthcare. Improving productivity requires fundamental redesign — rethinking how work is organized, how clinical and operational teams collaborate and how technology can be embedded to support the workforce.

Encouragingly, this moment of challenge is also one of extraordinary opportunity. Advances in digital technologies, particularly agentic AI, automation and intelligent workflows, offer the potential to transform how care is delivered. By enabling humans, agentic AI and robots to work together, healthcare organizations can release valuable clinical capacity, reduce administrative workload and improve access to care while enhancing workforce wellbeing.

The problem is that this transformation will not be achieved through isolated digital initiatives or incremental efficiency programs. It requires enterprise-wide transformation workforce strategies that place the workforce at the center of redesign, with technology serving as

a powerful enabler rather than an end in itself. Organizations that embrace this approach will likely be better positioned to improve productivity, build resilience and deliver more sustainable healthcare for the populations they serve.

At KPMG, we believe that the decisions made over the next few years will shape the future of healthcare delivery for decades to come. That is why we developed this report: to encourage policymakers, health system leaders and healthcare executives to start thinking more boldly about the change they must undertake in order to truly unlock workforce productivity.

On behalf of our global network of Healthcare professionals, we hope this report provides useful insights, strategic perspectives and practical next steps on how to approach this challenge based on our work with leading organizations. To learn more about how your organization can start to take a fundamentally different approach to workforce productivity to deliver better outcomes for patients, staff and the communities you serve, we encourage you to get in touch with your local KPMG member firm.



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The workforce constraint: The defining challenge for healthcare leaders

Today, the availability and productivity of healthcare professionals has become the primary constraint on health system performance. Whether the objective is reducing waiting lists, improving patient outcomes, increasing access or achieving financial sustainability, every improvement ultimately depends on having sufficient workforce capacity.

Yet the reality is that — in most regions and systems — an imbalance between demand and workforce supply is widening, creating a structural challenge that incremental improvements will not solve.

Demand for health services is rising

In part, that comes down to demographics. As demographic trends continue to evolve, healthcare organizations are likely to encounter greater demand for services that address complex and long-term health needs, requiring innovative and sustainable care approaches.

At the same time, patient needs are also becoming more complex. Advances in medicine mean more people survive conditions that were previously fatal but often require lifelong care management across multiple specialties. Mental health needs are also rising, placing additional pressure on already stretched services.

Patient expectations have also changed. Healthcare users increasingly expect their care to be timely, convenient and digitally enabled, reflecting experiences in other sectors. Health systems are therefore expected to deliver more care, to more people, with greater responsiveness than ever before.

Workforce supply is moving in the opposite direction

The problem is that healthcare labor supply is becoming increasingly constrained. As healthcare needs become more complex, providers are navigating workforce pressures that affect both clinical and

operational functions. These challenges are driving renewed focus on workforce planning, productivity, and innovative approaches to care delivery. While shortages are most acute in low- and middle-income countries, almost every developed nation is experiencing significant workforce gaps.

COVID-19 accelerated an already fragile situation. Burnout, early retirement and workforce attrition increased sharply during the pandemic, while recruitment has struggled to keep pace. International migration has intensified competition for skilled clinicians, leaving many lower-income countries vulnerable to losing experienced professionals to wealthier health systems.

Health systems cannot expect to hire the gap away. Nor will they be able to squeeze much more from their existing employees without losing them. **You can’t think of this as a temporary workforce shortage; it is a productivity issue.**

Productivity unplugged

The good news is that the tools, models and technologies now exist to radically transform healthcare workforce productivity. And examples of leading practices are emerging from those health systems around the world taking bold steps to fundamentally address their workforce constraints.

In the following chapters, KPMG professionals explore three key paths to transforming healthcare workforce productivity — the data route, the scheduling route and the AI enablement route.

The data route

If you are like most healthcare executives, you already know the importance that integrated data and electronic health records (EHRs) will play in driving transformative change in workforce productivity. Indeed, in the recent *KPMG 2025 Healthcare CEO Outlook* report, more than seven-in-ten CEOs categorized these two areas as being ‘very important’ to their digital transformation over the next three years.¹

No wonder. Healthcare is fundamentally an information-driven industry. Every clinical decision depends on patient data: history, medications, allergies, diagnostics and prior encounters. In fragmented or paper-based systems, this information is scattered across locations and formats with clinicians spending significant time searching, reconciling and re-entering data (often after hours in what many now call their ‘pajama-time’).

This creates two major inefficiencies. First, administrative duplication consumes clinical time and contributes to burnout. Second, coordination breaks down when data does not move smoothly across care settings.

By integrating data and enhancing EHRs, healthcare leaders can create a structured, shared record of truth. They can also increase efficiency and eliminate key bottlenecks while helping reduce the need to hire additional coders and informaticians as demand rises.

However, the productivity benefit is not simply digitization. It comes from interoperability. When systems connect across hospitals, primary care, laboratories, pharmacies and community services, the record becomes operational infrastructure — more like electricity — than static documentation.

“Electronic health records are often less about the record itself and more about the productivity it unlocks,” says Kelan Daly, Managing Director and Head of Healthcare Consulting at KPMG in Ireland. “EHRs should be considered an enabler as fundamental as light, heat and power at this stage because health systems simply can’t do the things they need to do to improve productivity across care settings without having EHRs in place.”

Data is at the heart of this approach. It is what enables automation. It allows orders to flow directly to downstream systems. Alerts can be triggered in real time. Documentation can be generated from structured data. Care pathways can be embedded into workflows instead of recreated manually. And that means that clinicians are able to spend their time providing more and better care to patients rather than furiously scribbling notes and rekeying data.

Overcoming the barriers

Despite considerable advances in technology, EHR implementation continues to rank among the most complex transformation programs undertaken in healthcare. The principal challenges are organizational rather than technical.

Public health systems often face extended investment cycles driven by funding constraints, competing priorities and understandable caution following previous large-scale program failures. Private providers encounter different pressures, with investment decisions frequently assessed against demanding financial return thresholds.

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¹ KPMG 2025 Healthcare CEO Outlook (<https://assets.kpmg.com/content/dam/kpmgsites/xx/pdf/2026/02/ceo-outlook-healthcare-report.pdf>)

Experience also demonstrates that implementation success depends far more on program execution than software selection. At KPMG, we have helped dozens of organizations successfully deploy EHR platforms and our experience suggests that outcomes are often shaped by governance, operating model design, stakeholder engagement and adoption.

“The reality is that most health systems have implemented medical records whilst retaining existing operating models and processes. Now they are looking at the technology to see how it can transform how healthcare is delivered,” says Jonathan di Michiel, Partner, Digital Health Practice, KPMG Australia. “Technology is but one leg of the stool — the people element and the process element really haven’t been tackled yet.”

Clinical adoption is also a defining success factor. Early user experience influences long-term confidence in the platform. Practical issues such as access rights, workflow design, training quality and frontline support often have greater impact than technical functionality. Organizations frequently invest heavily in technology while underestimating the resources required to prepare people, redesign workflows and sustain change.

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5 key action items

Based on KPMG professionals’ global experiences, here are five action items to help healthcare leaders unlock workforce productivity through the data route:



The scheduling route

When facing scarcity and constraint, there is a lot to be said for making better use of what you already have. Not surprisingly therefore, many leading health systems and organizations are looking at modernizing their scheduling and rostering as a rapid path to unlocking additional workforce productivity.

“Until we achieve greater efficiency in how we use our existing resources, we can’t really say we don’t have enough people,” argues Dimitris Papageorgiou, Global Payroll and Workforce Management Practice Leader and Partner with KPMG in the US. “We need to start by fixing the inefficient processes and better managing how we task and manage our resources — human, agent and robot — in order to really maximize our healthcare workforces.”

Modern workforce management platforms enable organizations to match workforce demand with available skills in near real time. Staff can nominate availability, manage shift preferences, swap shifts digitally and be automatically matched to vacancies based on credentialing, competencies and regulatory requirements. That not only helps ensure that spare capacity and rostering teams are being utilized appropriately, it also removes a common ‘pebble in the shoe’ that comes from battling against outdated rostering systems in order to balance employees’ work and life.

Getting a clearer view of the workforce

Yet despite growing investment in workforce technology, relatively few organizations have realized its full value.

One reason is that workforce visibility remains fragmented. Most hospitals continue to manage permanent employees, casual staff and agency workers as completely separate labor pools. When vacancies arise, managers often default to premium agency staff because internal alternatives are difficult to identify quickly and compliance or credentialing boxes can’t be ticked fast enough to remove safety risk. That leads to avoidable expenditure and the underutilization of existing workforce capacity.

The more fundamental challenge, however, is that most healthcare organizations and systems tend to organize work around professions rather than the work itself. Organizations determine how many nurses,

doctors or allied health professionals are required before considering the activities that need to be delivered. Scheduling systems can often act to reinforce this approach by allocating individuals to fixed positions within departments rather than dynamically matching skills to workload and the complexity of patients receiving care.

“The healthcare leaders I talk to tell me they need lower-cost resources that can work to the top of their license. The goal is to ensure every clinician is doing the work that only they can do,” notes Rachel Silverman, a Director in the Healthcare Advisory Services practice at KPMG in the US. “At the same time, leaders should be looking at the workforce with a clear view to the future and starting to plan accordingly.”

Moving towards task-based planning represents the next stage of workforce maturity. Rather than asking which profession should perform an activity, organizations should ask which activities require specialist expertise, which can be delegated safely and which can be automated altogether. This creates opportunities to redesign care pathways while allowing clinicians to practice ‘at the top of their license’.



Taking a new approach

While technologies and ambition may exist, many healthcare organizations struggle to achieve transformational outcomes from their workforce transformation approaches.

In part, that is because healthcare workforce planning remains heavily influenced by annual budgeting cycles, departmental structures and historical staffing models. Many organizations also worry about the potential impact of industrial agreements, nursing ratios, union contracts or other policies and regulations that may influence guardrails on schedules. That means workforce decisions are frequently framed as replacing ‘like with like’ without consideration or modelling alternatives. This mindset limits opportunities to redesign work and optimize resource allocation.

“Organizations really need to flip the annual workforce planning paradigm on its head,” adds Dan Jefferson, National Sector Leader, Health, Ageing & Human Services at KPMG Australia. “The annual process should be integrated with the agile day-to-day orchestration that is often missing today, with insights flowing in both directions. Better task driven redesign on the ground can uncover ways to think differently at the organization and even system level.”

At the same time, workforce redesign can sometimes encounter understandable resistance from professional groups, industrial representatives and clinical leaders concerned about changes to established scopes of practice or perceived threats to occupational boundaries. That once again reinforces the need to communicate openly with clinical staff to ensure they understand that moving towards task-based models can improve quality, help maximize their skills and enhance patient safety rather than diminish it.

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5 key action items

Shifting workforce models and strategies to maximize productivity and flexibility isn't easy. To help, here are five action items leaders may want to consider.



The AI enablement route

AI has the potential to transform healthcare workforce productivity. And, according to healthcare executives, adoption of AI and automation has been strong. Indeed, our recent KPMG CEO Outlook report suggests that 72 percent of healthcare CEOs think they are ‘keeping pace’ with the speed of AI development and its impact.²

Significant productivity benefits are rapidly being realized. Healthcare organizations are deploying generative and agentic AI to support administrative tasks such as clinical documentation, referral management, patient communications, claims processing and information retrieval, thereby helping to reduce the burden of repetitive work that contributes to healthcare workforce attrition and clinician burnout. And they are deploying the technology in the back office to, for example, reduce HR’s reporting burden and speed workforce decision-making.

Consider, for example, the introduction of ambient voice technology (AVT). By capturing conversations between clinicians and patients, ambient AI systems automatically generate clinical notes, update records and produce documentation in the background, allowing clinicians to focus their attention on the patient rather than the computer.

At the same time, leading health systems are now developing agentic-led patient prep tools that could help ensure patients are properly prepared for their surgery visit, following up and checking in appropriately, and showing up to outpatient appointments, for example. This improves patient outcomes and removes frictional inefficiencies that erode system productivity.

“The biggest piece of feedback we get from clinicians is that they are not spending half as much time outside of hours having to write this stuff down and get it into their EHR,” says Chris Gibbons, Digital Health Solutions and AI Lead, KPMG in the UK. “At the same time, we’re hearing from patients that the quality of the interaction went up. It’s a win-win.”

The good news is that many of these technologies and productivity enhancers are already being embedded into the healthcare sector. Electronic health record (EHR) vendors are rapidly integrating AI and AVT capabilities into their platforms while some clinicians are beginning to develop bespoke AI applications to address workflow challenges that traditional systems have been slow to solve.

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From isolation to orchestration

While the pace of AI adoption is encouraging, dig a little deeper and you quickly find that most AI adoption in the healthcare sector is largely focused on augmenting existing workflows rather than replacing or redesigning them. Yet the greatest value is likely to come not from isolated use cases, but from integrating AI across clinical and operational workflows to create a more productive, responsive and patient-centered healthcare system.

Instead of simply integrating new use cases in siloes, leaders should be looking at AI and automation as a way to redesign operating models around a more appropriate combination of humans, robots and agentic AI. The result is a more deliberate operating model in which clinicians focus on high-value, human-centered care while AI handles repetitive, administrative and information-intensive work.

² KPMG 2025 Healthcare CEO Outlook (<https://assets.kpmg.com/content/dam/kpmgsites/xx/pdf/2026/02/ceo-outlook-healthcare-report.pdf>)

“You’ve got to get quite granular in understanding what work people are doing,” notes KPMG in the UK’s Chris Gibbons. “That gives you the information you need to not only identify where automation might make the existing process more productive, but also how the existing processes can be reimaged in order to radically transform the productivity equation.”

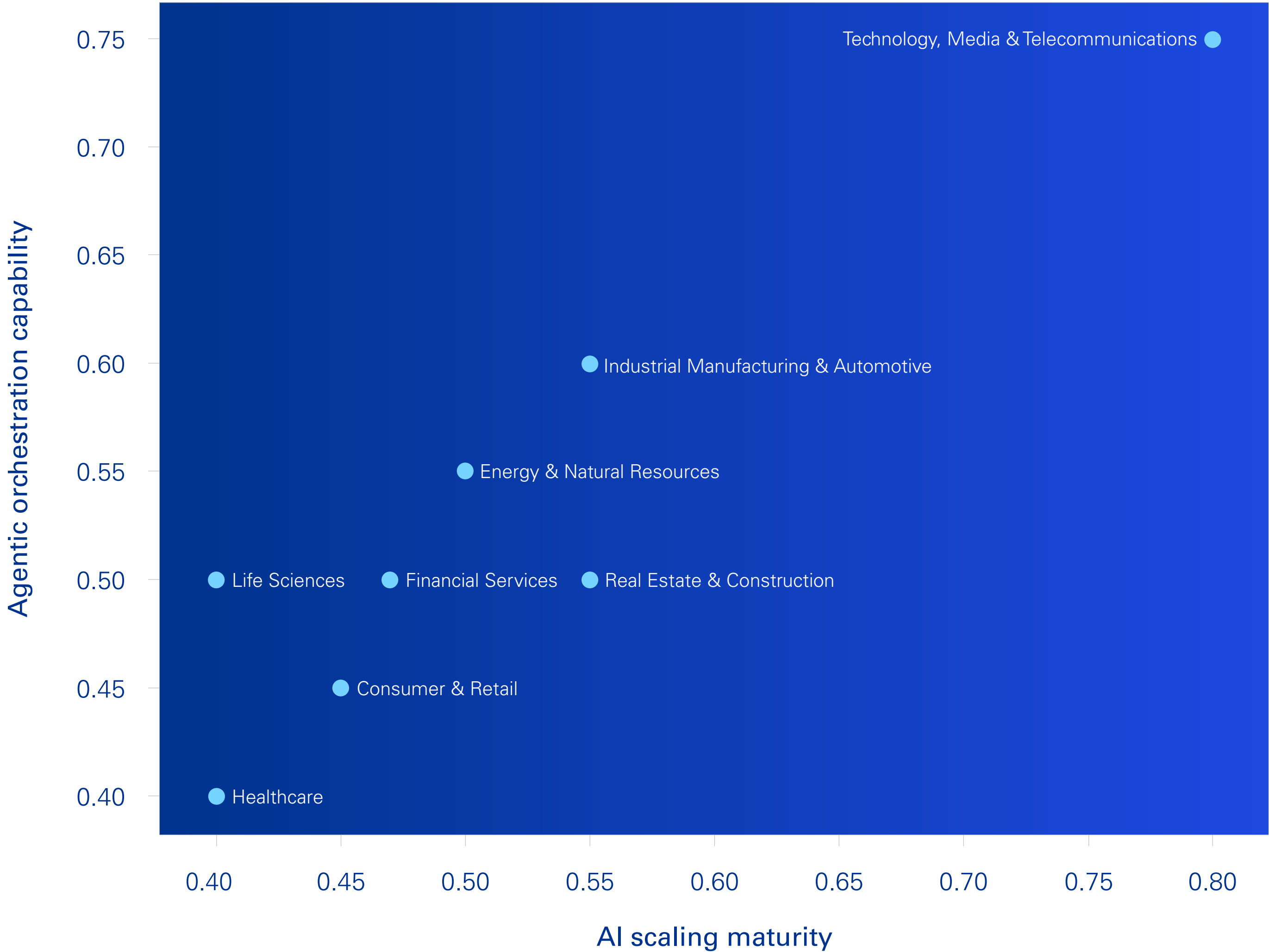
With agents becoming part of the productivity solution, organizations will need to think differently about workforce planning. AI agents will need to be managed much like employees, with defined roles, ongoing training, performance monitoring and, when appropriate and as needs change, retirement. That speaks to the need for strong governance, shared architecture and clear ownership of AI capabilities and tools.

Humans will also need to be prepared for new ways of working. Rather than training staff to navigate fixed software interfaces, organizations need to build confidence in working with AI through natural language interactions, critical evaluation of AI outputs and effective prompting. This creates a culture of continuous capability and capacity development, where employees are empowered to explore new ideas within appropriate organizational guardrails.

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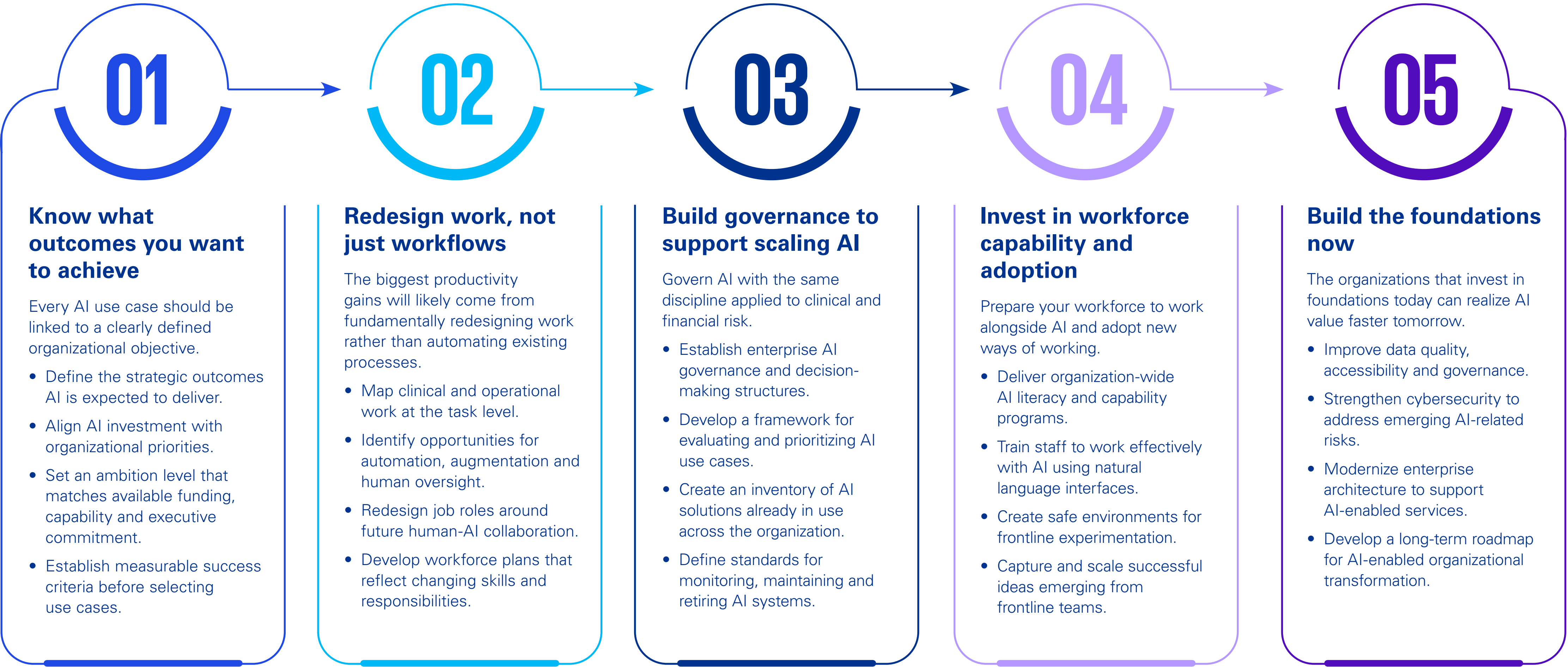
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Sector positioning: AI maturity vs orchestration



5 key action items

What actions can healthcare leaders take in order to help maximize the value of automation on healthcare workforce productivity? Here are five action items to consider.



Conclusion

What is clear is that healthcare organizations cannot solve tomorrow’s workforce challenges using yesterday’s operating models. Improving workforce productivity requires more than incremental efficiencies or isolated technology investments — it demands a fundamental redesign of how work is organized, how care teams collaborate and how digital technologies are embedded across the enterprise.

At KPMG, we believe that the opportunity to transform healthcare has never been greater. The organizations that start redesigning

today will likely be the ones best positioned to deliver better outcomes for patients, support and retain their workforce, and create lasting value for the communities they serve.

We hope this report provides practical insights and a framework for action as healthcare leaders begin this journey. To learn how your organization can take a fundamentally different approach to workforce productivity, we encourage you to connect with your local KPMG member firm.

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I’ve seen firsthand how enabling technologies can transform clinicians’ working lives. An ED clinician might spend hours juggling multiple patients, relying on scraps of paper and memory to capture critical details. Later, when writing up notes, there might be the question: did I capture everything? With technologies like AVT, a detailed summary of the conversation is available instantly, giving clinicians greater confidence and freeing up valuable time. The visible relief I’ve seen from reducing the cognitive load on busy clinicians is incredibly powerful.”

Beccy Fenton
Global Head of Healthcare
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How KPMG can help

Around the world, governments, insurers and commercial healthcare providers turn to KPMG firms because of our wide breadth and depth of sector knowledge.

KPMG uses a multi-disciplinary approach which allows us to pull resources from across geographies, disciplines, and areas of expertise from a network of 5,000 dedicated professionals focused on healthcare in more than 70 countries, territories, and jurisdictions. This network also includes almost 200 clinicians who have a wealth of frontline health and care experience from work as physicians, nurses, paramedics, social workers and other professions.

By collaborating globally, we are able to help ignite transformative change by leveraging a “global-local” approach that combines knowledge of domestic healthcare systems and their stakeholders with global insights, leading industry practices and subject matter experts, and a suite of market-tested digital health solutions.

Contact your local KPMG member firm to find out how we can help your organization.

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