Future of health 6 /
The AI (r)evolution in health

Roland
Berger

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Every year, Roland Berger's *Future of health* study focuses on a topic of particular relevance for the healthcare sector. For this year's study – the sixth in our series – we consulted 100 managers and board-level executives in 12 countries,[1] combining detailed interviews with a broader survey of attitudes and expectations. Our focus was on a topic that has dominated the public discourse across healthcare sectors in recent times: artificial intelligence (AI), including generative artificial intelligence (GenAI).

AI is expected to bring a range of benefits: Some commentators are predicting groundbreaking quality improvements in care, while others foresee unparalleled economic benefits. AI is likely to impact business models and processes across the healthcare sector. But will the new technology cause a *revolution* in healthcare or a gentler process of *evolution*? How are players applying the new technology today across the industry – and how do they see it impacting different healthcare sectors and types of healthcare organizations over the next five years?

In our investigation we conclude that, overall, AI will cause what can best be described as the **rapid evolution of healthcare**. This fast-paced process of evolution will bring substantial changes, but it will allow enough time for players to formulate careful strategic responses. Some areas of healthcare are already seeing rapid transformation: In hospitals, for example, 52 percent of respondents report using AI at least partially in their standard medical diagnostic operations, with another 32 percent currently piloting such solutions. However, other areas are progressing more slowly: In the field of therapy, 36 percent of hospitals have not started using AI at all. The patient journey will improve through personalized treatment rather than new products. Job landscapes are shifting, with technical roles facing the most disruption. However, a number of organizations are lagging behind, with only 29 percent feeling prepared to exploit AI for competitive advantage. To bridge this gap, strategic partnerships with tech giants are favored by 87 percent of respondents over in-house development.

The message for stakeholders across the industry is clear: Embrace the reality of an AI-driven future or risk being left behind. Action is needed and it is needed now, while there is still time for carefully considered planning and execution.

Contents

Revolution or evolution

How will AI transform healthcare?

1/

H ealthcare systems are facing pressure on multiple fronts, from a shortage of skilled workers to increasingly strict regulation and ever-expanding complexity in areas such as information management. Intensifying cost pressure, partly the result of aging populations in many countries around the world, is forcing players in the healthcare ecosystem to adapt and find new ways to boost their productivity.[2] One solution that has the potential to be a game-changer lies in the widespread application of technology based on artificial intelligence (AI). Within the broader category of AI, generative artificial intelligence (GenAI – see Definitions) stands out as a particularly promising subfield that can offer innovative approaches to tackle these challenges.

Many healthcare executives are already exploring the possibilities of using these new technologies in their operations.[4] According to a joint statement by three global leaders in healthcare published at the World Economic Forum, advancements in data analytics and AI are highly promising and AI will likely transform healthcare delivery, drive groundbreaking innovations in health research and improve overall health outcomes.[5] It is clear that AI will cause major disruption in the industry. What is less clear, however, is whether it will cause a sudden revolution or more of a steady evolution.

Our detailed research and consultations with industry insiders lead us to believe that, overall, AI will cause what can best be described as the **rapid evolution of healthcare**. AI is developing both disruptively (a revolution) and incrementally (an evolution), depending on the specific area that the new technology is applied in. Already, it is evident that AI will have a major impact on players' business models, requiring an urgent response. Yet most organizations are still approaching AI from the perspective of how they can use it to improve their own operations, neglecting the broader perspective of how it will transform the ecosystem beyond their own organizational boundaries in ways that will ultimately benefit patients.

AI is relevant for all types of players in the healthcare value chain, from pharmaceutical companies to individual healthcare professionals. We are seeing a wide range of responses from those players, from health insurance companies that already digitalized their analyses and internal processes five years back[6] to medical technology (medtech) players that are just starting their AI journey. The past 12 to 18 months have seen a major surge in activity, with numerous projects and feasibility studies underway, such as the implementation of AI-driven diagnostic tools in partnership with large tech providers and personalized treatment plans.

There can be little doubt that now is the time for players to act, not simply for the sake of doing something but to ensure that they reap the full benefits of the AI transformation. For instance, companies using AI for predictive analytics in patient care are already seeing

DEFINITIONS

AI (artificial intelligence)

A branch of computer science that aims to create machines capable of performing tasks that would normally require human intelligence, such as visual perception, speech recognition, decision-making and language translation.

GenAI (generative artificial intelligence)

A type of artificial intelligence that can generate new content (text, images, videos) and is associated with the rise of large language models and chatbots, such as ChatGPT.[3]

Note: Our investigation covers a broad spectrum of AI, including GenAI, machine learning, deep learning, agents and multimodal AI.

improved outcomes and operational efficiencies. One might even ask: Do companies in the healthcare sector need to embrace AI in order to stay competitive? The answer is an emphatic yes: Businesses that fail to adopt AI risk falling behind on innovation and effectiveness.

In this, our sixth *Future of health* study, we again take a cross-sectoral approach. We examine the potential of AI across the entire healthcare ecosystem, offering a broader perspective than that typically provided by studies. In Chapter 2, we examine how AI is being applied in the sector and what potential solutions it offers. In Chapter 3, we take a closer look at its impact on the patient journey and different parts of the healthcare value chain. Next, we examine its implications for healthcare organizations (Chapter 4) and determine which scenario for the adoption of AI over the next five years is most likely (Chapter 5). We conclude our study with a series of recommendations for how stakeholders should prepare themselves for the transformation – a transformation that in many areas is already well underway.

Now is the time for players to act, not simply for the sake of doing something but to reap the full benefits of the AI transformation.

Standing still means going backward

AI provides a way forward

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One of the main factors putting pressure on today's healthcare systems is the **increasing prevalence of obesity**. Global life expectancy increased by six years over the last two decades, while healthy life expectancy grew by just five years.[7] This means that people on average are experiencing more years of ill health than in the past. Another contributing factor is the increasing prevalence of obesity worldwide. Preventive healthcare is therefore becoming more important than ever – and this is an area where AI is a powerful tool to systematically reduce rates of illness. For example, AI can help identify chronic conditions such as cardiovascular disease and diabetes. ▶ A

In parallel with the growing demand for healthcare services, the sector is beset by a **lack of human and financial resources**. Healthcare organizations are facing a projected shortfall of ten million health workers worldwide by the year 2030, mostly in low and lower-middle income countries.[8] This shortage of skilled workers and hence overworking of staff creates an imbalance between supply and demand. AI may hold the key to making systematic improvements here, by making routine tasks redundant, but its application in this area is still in its infancy.

Furthermore, **patients' expectations of health-care** are increasing as they become accustomed to convenience in other areas of life. Yet patients continue to face unequal access to quality care and inconsistent healthcare outcomes. In the United States, for example, people living in rural areas die at rates 20 percent higher than those living in urban areas, a gap that has been widening over the past two decades.[9] Globally, these disparities are often influenced by socioeconomic

A People are living longer lives, but not healthier ones
Global prevalence of obesity rises
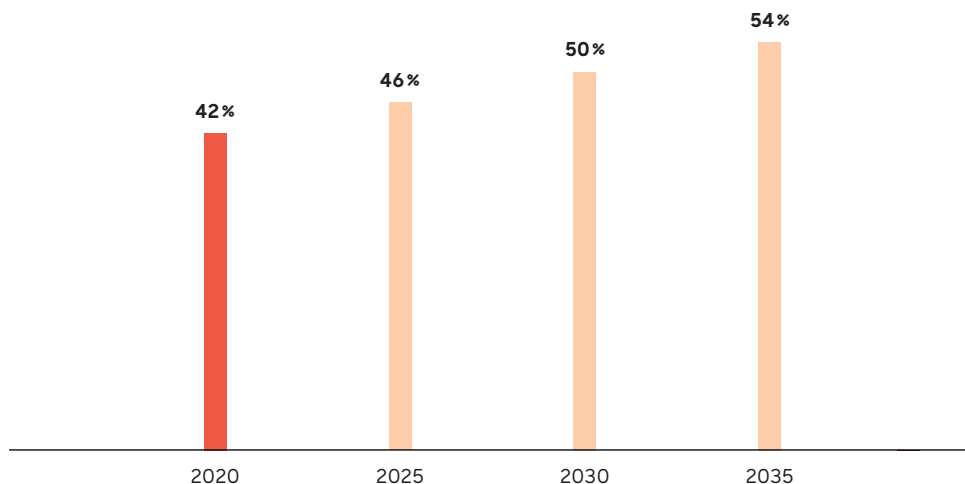
Source: Statista

factors, discrimination, bias and uneven distribution of healthcare resources. Different sectors also face specific challenges: Research and development (R&D) faces rising costs, for example, while medtech and pharmaceutical companies suffer from supply chain vulnerability. Here, AI could contribute to better planning and distribution of resources.

In conclusion, it is apparent that **the healthcare system is often working inefficiently and failing to meet populations' needs in an optimal fashion**. The situation is worsening over time, so standing still actually means going backward. AI could be the solution – but the question remains, how?

WHAT CAN AI DO?
Over the next five to six years, the healthcare system is expected to undergo a major transformation thanks to advancements in AI technology and the adoption of AI solutions. Already, in the past three years, **investors have injected more than USD 30 billion into healthcare AI companies**, making this one of the most heavily funded sectors.[10] In fact, the global healthcare AI market is expected to be worth up to USD 187.7 billion by 2030.[11]

According to analytics firm Research and Markets, healthcare spending on AI-related hardware (such as specialized processing chips and devices that use them) and software for diagnostics, image analysis, remote patient monitoring and the like amounted to around USD 26 billion in 2024. This figure is projected to rise to an impressive USD 59 billion by 2028.[12] Analysts at CB Insights estimate that over half of the 1,500 health AI vendors currently operating have emerged over just the past seven years.[13]

Large language models (LLMs) and AI systems already serve as the backbone for many healthcare-specific applications. For example, they are widely used for medical research, chatbots, image recognition, administrative tasks, data analysis, diagnostics and

● Currently, we see a
● growing trend of major healthcare and pharmaceutical companies developing their own AI technologies, often in close partnership with tech giants.
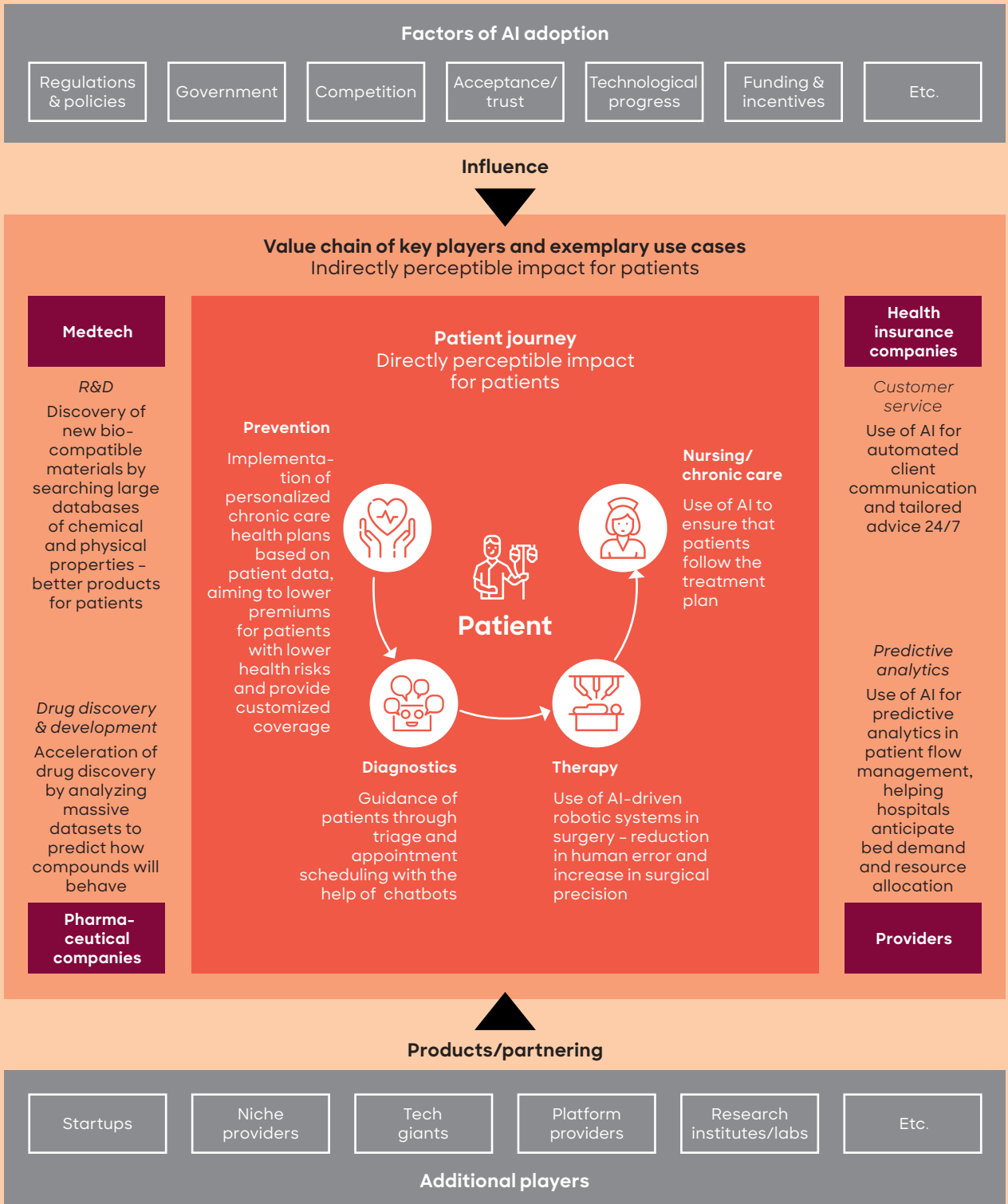
treatment planning. Similarly, multimodal AI healthcare models can process and integrate data from multiple sources such as text, images, audio, video and sensor data. Medical imaging analysis, for instance, combines data from medical imaging with the patient's history, genetic information and clinical notes to generate more accurate diagnoses and effective treatment decisions. One leading European medtech company has taken just this approach, developing proprietary AI solutions that enhance the quality of medical image analyses. Initially built on traditional machine learning techniques, the pioneering company's solution has evolved to incorporate sophisticated AI (and GenAI) algorithms, significantly improving diagnostic accuracy and treatment efficacy.

The healthcare AI startup market is developing rapidly, with hundreds of startups emerging worldwide, a significant portion of which are based in the United States.[14] Established healthcare enterprises have also started incorporating AI into their operations and are now trying to scale up these efforts. For example, modern prosthetics can use AI to provide more natural movements and functions, learning and adapting to the user's muscle movements and providing improved control and dexterity.

A crucial question for healthcare players is whether to "make or buy" AI capabilities and assets. Currently,

Changes in the value chain and patient journey

Factors of AI adoption

| Regulations & policies | Government | Competition | Acceptance/ trust | Technological progress | Funding & incentives | Etc. |

Influence

▼

Value chain of key players and exemplary use cases
Indirectly perceptible impact for patients

Medtech

R&D
Discovery of new bio-compatible materials by searching large databases of chemical and physical properties – better products for patients

Drug discovery & development
Acceleration of drug discovery by analyzing massive datasets to predict how compounds will behave

Pharma-ceutical companies

Patient journey
Directly perceptible impact for patients

Prevention
Implementa-tion of personalized chronic care health plans based on patient data, aiming to lower premiums for patients with lower health risks and provide customized coverage

Patient

Nursing/ chronic care
Use of AI to ensure that patients follow the treatment plan

Diagnostics
Guidance of patients through triage and appointment scheduling with the help of chatbots

Therapy
Use of AI-driven robotic systems in surgery – reduction in human error and increase in surgical precision

Health insurance companies

Customer service
Use of AI for automated client communication and tailored advice 24/7

Predictive analytics
Use of AI for predictive analytics in patient flow management, helping hospitals anticipate bed demand and resource allocation

Providers

▲

Products/partnering

| Startups | Niche providers | Tech giants | Platform providers | Research institutes/labs | Etc. |

Additional players

Source: Roland Berger

we see an increasing tendency for large healthcare and pharmaceutical companies to develop their own AI technologies, often in close collaboration with tech giants. Examples include the partnership between AWS and a large American multinational pharmaceutical company. Google Cloud, on the other hand, has established several partnerships with significant health systems and health plans over the last few years, with the aim of developing generative AI solutions and tools to reduce administrative burdens. In both cases, the companies have tailored the technology to their specific use case and so carved out a competitive advantage for themselves; indeed, their impact on efficiency is even measurable at task level now.[15] Small and mid-sized firms, on the other hand, are more likely to collaborate with specialized AI providers or purchase AI solutions, allowing them to tap into external expertise and technology without making significant internal investments.

The huge commitment and level of investment is evidence that **AI has the potential to address the systemic challenges facing the healthcare system, leading to a paradigm shift in the sector.** The revolution that will take place in some areas will be highly visible for patients, while the more gradual evolution that will occur in others will often go unnoticed – especially if players do not necessarily want their customers to know that they are using AI. ▶ **B**

However, the changes to healthcare systems caused by AI vary by region due to local regulations, data privacy laws and infrastructure. For instance, the European Union's strict General Data Protection Regulation (GDPR) impacts how healthcare providers handle AI-related data in Europe, while in the United States the regulatory landscape is evolving more rapidly, enabling faster implementation of AI solutions.[16] Patient preferences and behavior also differ by region: For example, customers in the Middle East are generally more open to digital patient solutions.[17]

USE CASES FOR AI

Potential use cases for AI are found across the entire patient journey and in all parts of the healthcare value chain. AI has the potential to **address many of the most pressing issues** in the current healthcare system. For example, it can **mitigate the skills shortage** by replacing jobs and allowing employees to retrain for other tasks. It can **reduce the cost of healthcare** by detecting illnesses early and prompting proactive intervention. It can **improve efficiency** in simple administration tasks, such as claims management, patient scheduling and billing, freeing up staff for other tasks. And it is expected to unlock significant **quality improvements** – by enabling better, faster decisions in diagnoses and treatments, say.

Thanks to AI, **patient journeys are expected to be transformed.** Often, they will become hybrid, combining traditional in-person care with digital services enhanced by new technology. AI enables 24/7 availability of healthcare services, regardless of patients' geographical location. For example, the "AI hospital" being piloted in China is a virtual hospital run to a large extent by AI physicians and nurses, showcasing the potential of AI-based solutions for continuous high-quality care.[18] AI-generated physicians could potentially treat 10,000 patients in just a few days (excluding, of course, more advanced diagnostic cases and cases requiring a physical treatment), whereas their human equivalents would need at least two years.

AI also opens the door to personalized medicine by analyzing patient-specific data and tailoring treatments, improving outcomes and minimizing unnecessary interventions. Its ability to integrate data from various sources, such as electronic health records, genomics and wearables, means that it can offer cross-functional insights to improve patient care. Not only that, AI-driven decision support systems can help clinicians choose optimal therapies and create comprehensive care pathways. Indeed, at a more basic level, healthcare can become preventive rather than reactive.

AI – SAMPLE USE CASES IN HEALTHCARE

Along the patient journey

Prevention: Analyzing patient data (medical history, lifestyle factors, genetic information) to predict the risk of developing conditions such as diabetes and heart disease

Administration: Transcribing and summarizing patient consultations using voice-to-text programs; producing clinical documentation to automate the administrative burden

Diagnostics/diagnosis: Enhancing medical image quality in radiology; improving quality in diagnosis based on EHR data

Therapy choice: Analyzing genetic data, medical history and lifestyle factors to recommend therapies tailored to individual patients (for example, in oncology for targeted cancer therapies)

Therapy: Performing surgery using high-precision AI-driven robotic systems; employing AI coaches for therapy

Research and education: Advancing research through better clinical trials and synthetic data generation

For different healthcare players

Health insurance: Enabling GenAI chatbots to generate human-like text for real-time customer interaction; developing individualized AI coaches for coaching and steering patients; enabling prediction models with recommendations for customers

Hospitals: Improving hospital operations by automating administrative tasks, optimizing patient flows to reduce wait times and streamlining data management; enhancing telemedicine services

Pharmaceuticals: Speeding up drug discovery using GenAI, thus reshaping the future of medicine; improving commercial processes and marketing

Medtech: Enhancing supply chain performance with GenAI-driven dynamic simulations; supporting diagnostic decisions through imaging

Government: Detecting fraud; forecasting healthcare needs, such as potential outbreaks of diseases; streamlining administration

The box **AI – Sample use cases in healthcare** lists a wide range of potential use cases for artificial intelligence right across the healthcare industry – and there are many more. However, the question remains: Which areas of healthcare will be the most strongly affected by AI? In other words, where will the use of AI establish itself as the *de facto* standard?

Experts and healthcare professionals are divided on this question. To find out how they feel about this and related issues, we consulted more than 100 board-level executives and a large number of healthcare experts in 12 different countries: the United States, Germany, the United Kingdom, the United Arab Emirates, China, Norway, Japan, France, Sweden, Austria, Saudi Arabia and Switzerland. Our respondents represented a cross-section of the industry: 31 percent worked for pharmaceutical companies, 24 percent for healthcare providers, another 24 percent for medtech firms and 20 percent for health insurance companies. The organizations that they worked for were of a range of different sizes. Two-thirds of respondents were male, one-third female, and their average age was 44.

In the following two chapters we present some of the most striking results of this survey, focusing first on the impact of AI on the patient journey and different parts of the healthcare value chain (Chapter 3), and then turning to the implications of the AI transformation for healthcare organizations (Chapter 4).

AI paves the way for the future of personalized medicine, using patient-specific data to tailor treatments that boost outcomes and cut down on unnecessary interventions.

Impact on patient journey and sectors

What lies ahead?

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The arrival of AI technology will change the patient journey and the healthcare value chain permanently. However, AI will not affect all parts of the healthcare industry equally. For example, pharmaceutical companies will experience the AI transformation differently from health insurance firms. In this chapter, we set out to find out which areas are already benefiting from AI-based technology, and which areas are likely to benefit the most going forward. These insights can help companies focus on those areas where the most value will be added – and start preparing themselves now for the opportunities ahead.

IMPACT OF AI ON THE PATIENT JOURNEY – MANY COMPANIES ARE MORE ADVANCED IN THEIR AI JOURNEY THAN COMMONLY PERCEIVED

Although AI technology still has something of a novelty value for the general public, healthcare players have in fact been using it in parts of their operations for some time now. In the survey, all respondents said that they currently use AI, with **74 percent** saying that they do so frequently. However, just **15 percent** said that they have at least partially employed AI solutions in their operations across their company. To date, the impact of AI has been evolutionary rather than revolutionary in many parts of the patient journey, its main contribution being the optimization of processes and costs. Thus, **81 percent** of respondents believe that the biggest benefit of using AI is that it speeds up processes, **79 percent** that it enhances the quality of the work they do and **77 percent** that it reduces costs.

IMPACT OF AI ON THE PATIENT JOURNEY - COMPANIES LARGELY CATEGORIZE AI AS A SUPPORT OPTION AND DECISION MAKER FOR PHYSICIANS

Most respondents believe that AI will significantly assist physicians in daily tasks. Specifically, 82 percent believe that AI will reduce decision-making time, which is particularly valuable in acute care settings. Another

C Adoption of AI varies along the patient journey in hospitals

Where and to what degree is AI used along the patient journey in hospitals?

AI adoption within patient journey in hospitals

— Partially employed in standard operations
— Pilot phase
— No initiation
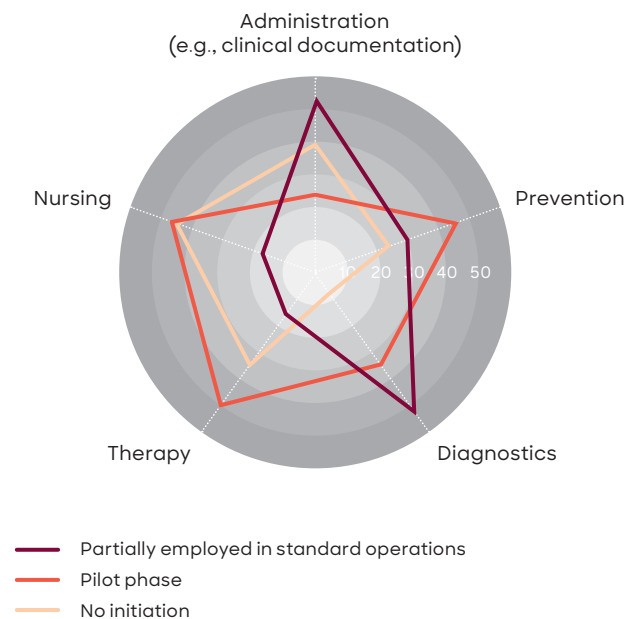
Source: Roland Berger

72 percent view AI as a useful aid in supporting diagnostic and treatment decisions. Furthermore, 78 percent anticipate that AI will make autonomous decisions in specific areas, such as image interpretation, indicating a generally low barrier to AI making certain medical decisions.

UNDERSTANDING THE ADOPTION OF AI

To determine the extent to which AI (including GenAI) has been adopted across the patient journey and in the various parts of the healthcare value chain, we asked executives to specify their organization's progress in integrating AI. We use three labels to categorize the results:

→ **No initiation:** AI is not used or deployed in any form in the part of the value chain or patient journey in question.
→ **Pilot phase:** Initial proofs of concept (PoCs) that use AI, including GenAI, have been developed or are currently in progress.
→ **Partially employed in standard operations:** AI has been integrated into active operational solutions. This does not imply that the part of the value chain or patient journey in question is entirely run by AI, but rather that AI is at least used in some capacity within a functional solution.

IMPACT OF AI ALONG THE PATIENT JOURNEY IN HOSPITALS - DIAGNOSTICS WITH HIGHER ADOPTION, THERAPY LAGS BEHIND

To gain a more detailed understanding of the impact of AI, we asked healthcare providers (hospitals) about the current **level of adoption of AI technology along the patient journey in hospitals** and what they foresee happening in the future. The picture they paint is a varied one. Thus, in areas such as diagnostics, the use of AI is widespread and the technology mature, while in others, AI is in its infancy or still being piloted. ▶ **C**

This finding requires some explanation. Before looking at the different parts of the patient journey in hospitals in turn, it is interesting to see that in **administration**, 52 percent of surveyed healthcare providers state that AI is partially employed in standard operations, 28 percent are not using it at all and 20 percent are currently piloting first use cases. One reason for this variation in adoption rates is that technical affinity and acceptance of new technology varies greatly across medical staff in hospitals, often depending on the age of employees. When it comes to the patient journey and **diagnostics** in particular, 52 percent are using AI in working solutions and 32 percent are currently piloting its use. Increased use of AI here is partly driven by the trend towards outsourcing and by high demand in outpatient and inpatient contexts as a means to increasing efficiency, especially in radiology and laboratory work. In the area of **prevention**, deployment of AI is moderate, with 44 percent of respondents piloting AI-driven technology and 24 percent not using it at all. This may well be because longevity, the desire for which drives prevention, is still a relatively new field and expertise is limited, although growing. The areas of **therapy and nursing** exhibit a low adoption rate for AI technology: In therapy, 48 percent of respondents are piloting its use, while 36 percent have not started using it at all; in nursing, 44 percent are piloting its use, while 40 percent have not started using it yet. The low adoption rates in both fields are not surprising, as they require more human or physical intervention. Consequently, the impact of AI is expected to remain comparatively limited, at least in the foreseeable future.

Regional differences in the acceptance of AI along the patient journey are also worth considering. Our study *Future of health 5 – A long and healthy life* showed, for instance, that regarding technical advancements and innovations in drug and other therapies, respondents in the Middle East are more open to ideas such as interacting with their health insurance company via a digital platform or using apps from digital providers, whereas participants from Asia are rather more skeptical.[19]

Looking to the future, hospital respondents expect to see AI playing an even stronger future role and becoming the industry standard in diagnostics (88 percent of respondents mentioned this option), followed by prevention (36 percent). However, some physicians remain skeptical about the reliability of diagnoses given by AI technology, and issues of liability still need to be resolved. AI will play a medium- strong future role in therapy (36 percent), administration (20 percent) and nursing (14 percent) and a weak future role in overhead functions (four percent).

IMPACT OF AI ALONG THE HEALTHCARE VALUE CHAIN – PLAYERS INVEST IN THE AREAS MOST RELEVANT FOR THEIR OWN BUSINESS
Next, we asked respondents about the **adoption of AI technology in specific sectors**, that is to say, along the healthcare value chain. In **health insurance**, adoption is high due to the scalability of the technology and its efficiency in handling mass processes and document classification. Accordingly, 75 of respondents note that they are using AI to some degree in active solutions in customer service and 50 percent do so in claims management, with a further 45 percent piloting its use. ▶ D

Looking to the future, **health insurers** expect the main impact of AI to remain in the area of customer service (90 percent), claims management (75 percent) and IT (50 percent). In IT, respondents can imagine AI functionalities particularly paired with cloud solutions. The future impact of AI in increasing laboratory productivity, mentioned by 65 percent of respondents, has an important knock-on impact on IT and claims management.

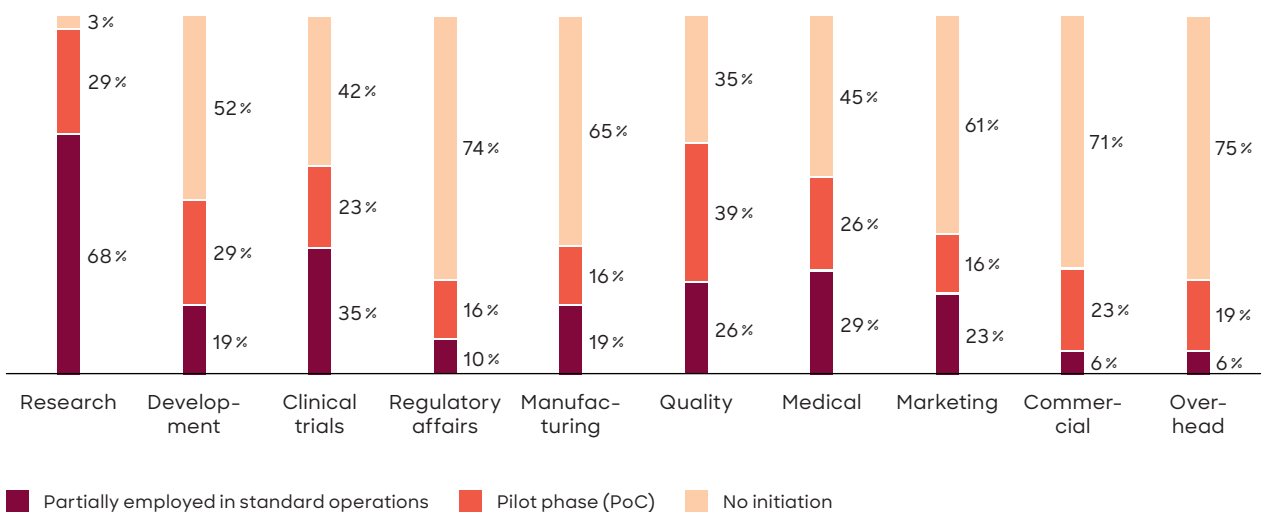**D Adoption of AI technology in health insurance**
Where and to what degree is AI technology used in the area of health insurance?

	Partially employed in standard operations	Pilot phase (PoC)	No initiation
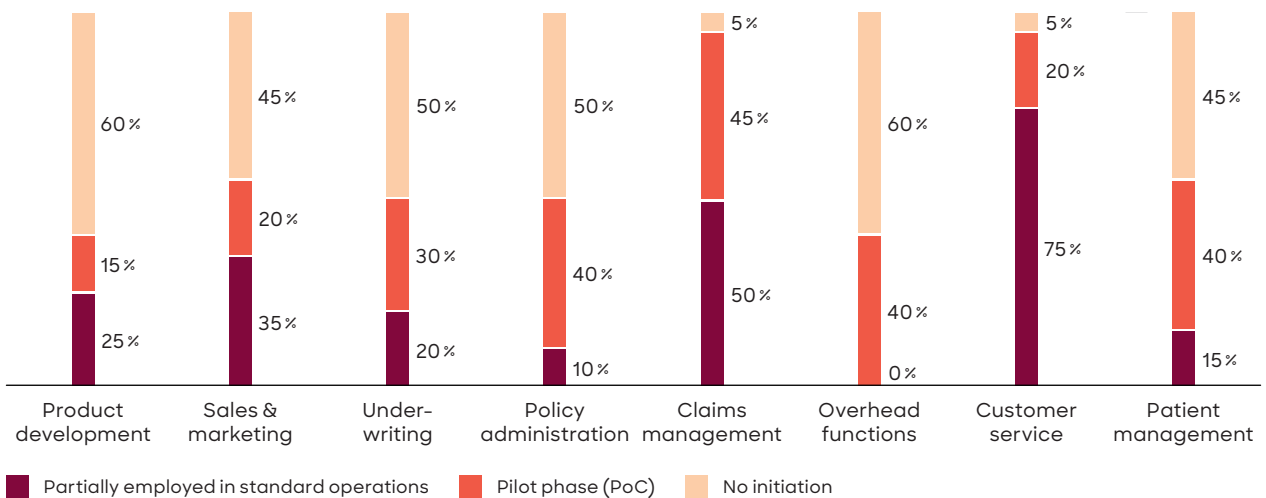
Source: Roland Berger

E Adoption of AI technology in the pharmaceutical industry

Where and to what degree is AI technology used in the pharmaceutical industry?

Category	Partially employed in standard operations	Pilot phase (PoC)	No initiation
Research	68%	29%	3%
Development	19%	29%	52%
Clinical trials	35%	23%	42%
Regulatory affairs	10%	16%	74%
Manufacturing	19%	16%	65%
Quality	26%	39%	35%
Medical	29%	26%	45%
Marketing	23%	16%	61%
Commercial	6%	23%	71%
Overhead	6%	19%	75%

■ Partially employed in standard operations   ■ Pilot phase (PoC)   ■ No initiation

Source: Roland Berger

Pharmaceuticals is another sector where AI technology enjoys a varied level of adoption. ▶ E

Research is a strong area of value creation in the pharmaceuticals industry, and here the survey found an extraordinarily high level of adoption of AI (68% having AI partially employed in standard operations and additional 29% piloting). Applications are quite mature, and many companies already started drawing up digital roadmaps five years ago. **Clinical trials** are a subsequent area of value creation. This is the most expensive part of development, in which medicines are tested on human beings to prove tolerability and efficacy. However, here deployment is less extensive also due to strict regulatory requirements. Regulatory affairs is a critical process for drug approval. Although many tools are available here to consolidate data

and prepare assessments as well as communications with authorities, it remains ultimately managed by humans at least as long until full confidence is built for the validity of AI generated data on the side of the company and the authorities. A collaborative approach between companies and regulators could help in this area.

Looking to the future, respondents from the pharmaceuticals sector expect to see widespread use of AI (77 percent).

In **medtech,** AI technology has a high level of adoption, with 79 percent of respondents in this sector using it actively in the area of research and development (R&D) and 54 percent doing so in manufacturing. Manufacturing has high costs and involves multilayered, broad, complex processes, both factors that drive the deployment of AI

F Adoption of AI technology in medtech

Where and to what degree is AI technology used in medtech?

	Partially employed in standard operations	Pilot phase (PoC)	No initiation

R&D: 79% / 21% / 0%
Sourcing and procurement: 0% / 67% / 33%
Regulatory affairs: 50% / 42% / 8%
Manufacturing: 54% / 33% / 13%
Supply chain: 46% / 37% / 17%
Sales & marketing: 38% / 33% / 29%
Support: 29% / 25% / 46%
Overhead: 25% / 29% / 46%
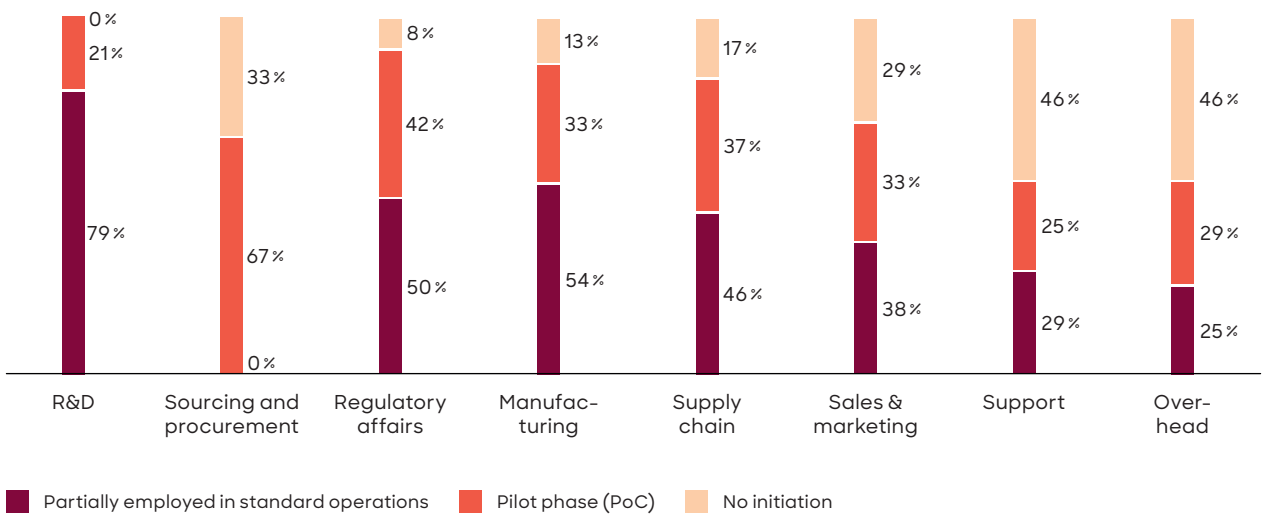
Source: Roland Berger

solutions. At the same time, AI in procurement is still in a pilot stage, with no respondents confirming operational deployment, but 67% piloting. ▶ F

As far as the future is concerned, respondents in the medtech sector are expecting to see a high level of use of AI technology in R&D (71 percent) and manufacturing (67 percent) as a way of reducing high production costs and facilitating complex production processes. As many medtech products work at the human interface and already feature digital components, they can potentially employ AI as a separate, extra feature facilitating their use.

AI optimizes the supply chain in the medical devices industry by improving demand forecasting and inventory management, which helps reduce waste and ensure timely availability of products. Additionally, AI algorithms enhance logistics and transportation efficiency, enabling better tracking and management of shipments, ultimately leading to cost savings and improved service delivery. In the area of servicing medical devices, by contrast, AI may be seen as less critical as many service tasks rely heavily on human expertise and hands-on technical skills that AI cannot fully replicate. Also, the regulatory environment in the medical sector often prioritizes compliance and safety over automation. In development, the impact of AI may be limited in certain areas due to regulatory constraints and the need for rigorous testing and validation. Traditional engineering and design processes also often prioritize established methodologies, which can slow down the integration of AI technologies into the early stages of device development.

IMPACT OF AI ON PEOPLE

We next asked the healthcare providers if it was **likely that human beings would be replaced in AI**, and if so, where? Their responses indicate that they think it more likely in specific sectors than in the patient journey. AI can play a significant role in primary prevention at every age – for example, through the use of an AI coach. The reason they think this is because patients lack information about the potential of AI in prevention and also because older patients are less likely to accept the new technology. In the area of physicians' visits, around half of respondents again think AI will play a very small or no role. But AI will actually have a significant impact on the number of patient visits in the future and on day-to-day operations, for example, through the automation of diagnostic processes or creation of treatment plans. In the long term, this could free up capacity in medical practices and lead to better management of medical and healthcare provision.

AI is thought more likely to replace humans in some specific parts of the value chain. Thus, in medtech, AI is considered most likely to replace humans in R&D (mentioned by 80 percent of respondents) and manufacturing (also 80 percent).

Our next survey question was about the **possible impact of AI on patients, medical staff and others working in healthcare**. For **patients**, respondents said it could mean better outcomes thanks to faster and more accurate diagnoses and treatments: AI reduces human error, facilitates diagnoses and decreases intra-operational and post-operational complications when used for robotic surgery. It is also effective in early risk detection, enabling preventive action to be taken and again ensuring better long-term health outcomes. AI can likewise be used for personalized prevention and therapy, with individually tailored prevention strategies and treatment plans based on comprehensive patient data. Moreover, it improves patient satisfaction thanks to its faster, more accurate diagnoses and improved communication between healthcare providers and patients via AI-driven platforms. And it can reduce the amount of time spent on administration by physicians and nurses, enabling them to spend more time with patients and enhancing the quality of care.

For healthcare sector **employees**, the improved work efficiency and better task management resulting from AI could lead to increased work satisfaction. The administrative burden is lightened and workflow efficiency enhanced. Streamlined processes reduce bottlenecks and improve overall job efficiency in healthcare settings. Healthcare employees can now concentrate on complex, high-value activities that require human expertise, such as patient interactions and clinical decision-making. Lastly, decision-making is also enhanced by the valuable insights and data analysis offered by AI, helping healthcare employees make more informed and more accurate clinical decisions.

This sounds very positive – but is there a potential downside, too? AI could also lead to greater pressure on employees as greater efficiency becomes the norm. People may worry that their jobs will become obsolete in the future.[20] The workplace may also change, shifting towards more technical and AI-focused roles and potentially reducing traditional roles. But at the same time, AI will enable employees to access personalized, up-to-date advanced training programs and so is key to professional development and employee education.

The integration of AI into the workplace will likely be more of an evolution than a revolution. This is partly because of the current limitations of the AI technology itself,[21] which still relies heavily on human oversight. And it is partly because people are only cautiously adopting AI across healthcare systems: Radical, system-wide transformations are rare, as healthcare organizations face significant challenges in reengineering processes and overcoming regulatory barriers. Incremental advances, however, continue to reshape the industry and should not be underestimated. Even small shifts may lay the groundwork for more profound change later on.
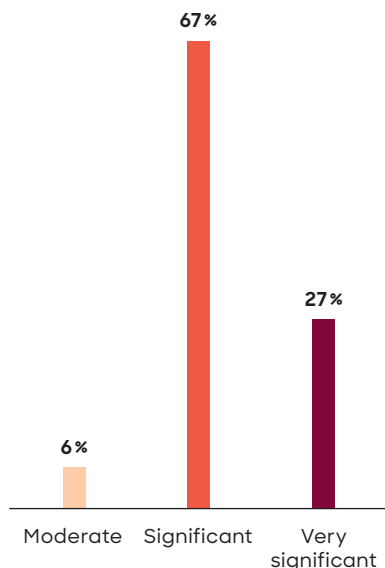
Implications for organizations

Adaptation and investment

4

More than just a technical challenge, **AI is a transformational topic for the whole organization**. Healthcare players operate today against a background of evolving regulatory requirements and advancements in medical technology, both of which call for agile, AI-enabled responses. AI can act as an enabler for the whole organization, improving its ability to respond to these external challenges. As the healthcare system evolves, shifting in the direction of more patient-centered approaches, organizational processes must align with these trends, and that means healthcare players rethinking their traditional structures and carefully evaluating their business models. This view is shared by industry insiders: Our survey respondents said that AI will have a significant impact on their company's operations in the future. ▶ **G**

However, the changes we are seeing are also driven by the increasing digital expectations of patients and the demand for more personalized, efficient care. Healthcare organizations need to develop new processes and reevaluate existing processes to make sure that they can cope with the external pressure on the industry.

The changes that AI brings about in the healthcare system impact companies along three dimensions. The first is the company's organizational setup: AI is a C-level topic and requires proper governance. The second is people and skills, where AI will drive shifts in demands on the workforce and affect job profiles. The third is data and infrastructure, where organizations are called upon to critically assess their current infrastructure and invest in AI technology.

ORGANIZATIONAL SETUP: AI IS A C-LEVEL TOPIC AND ORGANIZATIONS MUST ENSURE THAT IT IS GOVERNED PROPERLY

Our respondents believe that AI is very much a leadership topic, requiring attention from the board (C-level). Organizations must ensure that they have proper governance in place for AI-related matters. Indeed, the decision about where to position AI will significantly impact its integration into the organization and the scale of its impact. For instance, anchoring it solely with the CIO (Chief Information Officer) might give the topic of AI a technical bias, while locating it cross-functionally with a multi-disciplinary board, say, will ensure a more multifaceted, strategic perspective. ▶ **H**

G Executives think AI will have a significant impact on their company

How big an impact do you think advancements in AI will have on your company's future operations?

67%

27%

6%

Moderate   Significant   Very significant

➔ **The majority believe that AI will have a significant impact on their company** —

Source: Roland Berger

H Responsibility for AI should be at C-level

Who in your organization is primarily accountable for actions and decisions relating to AI?

➔ **The majority believe that the CTO/CIO/CDO should be accountable for AI actions and decisions**

CTO/CIO/CDO	CEO/CFO	COO	Company that developed or trained the AI model	Organization & employer collectively	Chief Sales Officer/ Business Unit Leader	Employee using the AI
89%	38%	18%	14%	11%	6%	0%

Multiple responses possible

Source: Roland Berger

In our survey, 76 percent of respondents said that decisions about AI-related budgets are also taken at C-level in their organization. This further underpins the importance of positioning AI close to the leadership. However, it inevitably means that any AI-related initiatives are somewhat further away from market demands. ▶❘

Organizations should begin by evaluating their current capabilities. This involves a comprehensive assessment of technological infrastructure, talent and processes. In many industries, and in healthcare in particular, legacy infrastructure remains a challenge, talented individuals working in the area of AI are scarce and difficult to recruit, and AI-related processes are often complex due to regulatory and stakeholder involvement. Identifying gaps in these three key areas is critical for organizations looking to maintain a competitive edge. And organizations have to be fast: Common AI principles, from US state laws to the EU AI Act, are evolving fast and affect every aspect of implementing AI in organizations – from transparency and fairness to human oversight and privacy.[22]

Once the organization has assessed its capabilities, it should then draw up a roadmap for achieving AI readiness. The roadmap should detail the required strategic investments in infrastructure, talent acquisition and process reengineering. For example, one leading American health insurance firm embarked on a multiyear transformation to address the increasing complexity in healthcare: Faced with outdated infrastructure and significant regulatory hurdles, the company restructured its operations, integrating AI and data-driven solutions.

I Budget responsibility for AI usually lies at C-level
At what level in your organization are decisions made about AI-related budgets and solutions?

76%

→ **Generally, AI-related budgets are initiated at C-level, with only 6% initiated at business unit/ department level**

17%

6%

1%

C-level

VP level

Business unit/ department level

Product level
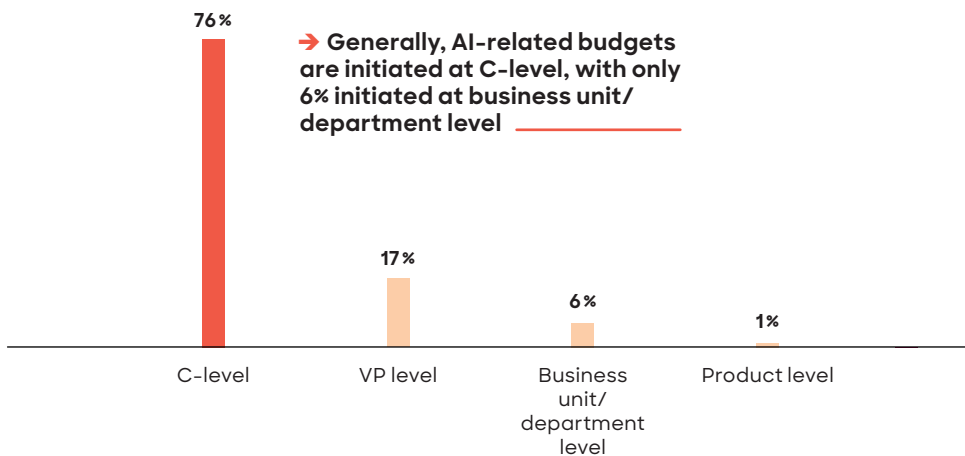
Key initiatives included securing board-level engagement, identifying high-impact use cases, ensuring data security at scale and reimagining core architecture.

As organizations integrate AI into their operations, establishing effective governance is essential to ensure that their AI initiatives align with their strategic goals and uphold their ethical standards. The core tasks of AI governance are to define clear responsibilities for decision-making, to outline the processes for ensuring compliance with regulatory frameworks, and to integrate AI into the broader risk management strategies of the organization. Policies around data usage, transparency and accountability must be firmly established to ensure that AI systems are not only effective but also fair, transparent, compliant with applicable regulations and aligned with the

company's values. For instance, one global pharmaceutical leader introduced a standardized AI Risk Assessment tool in early 2024 to mitigate risks across its AI initiatives and ensure adherence to both regulatory and ethical standards. It has since applied the tool to more than 50 AI systems across the company, guaranteeing a structured approach to identifying and managing potential biases in AI models.

Organizations can choose from different governance models depending on their size, complexity and the adoption of the AI technology in their organization. Some may opt for a centralized governance structure, whereby a dedicated AI leadership team oversees all AI-related decisions; others may adopt a more distributed model, in which individual departments manage AI initiatives while all adhering to a unified strategy. The right governance

model will depend on the organization's goals, ensuring both control and flexibility in how AI is deployed.
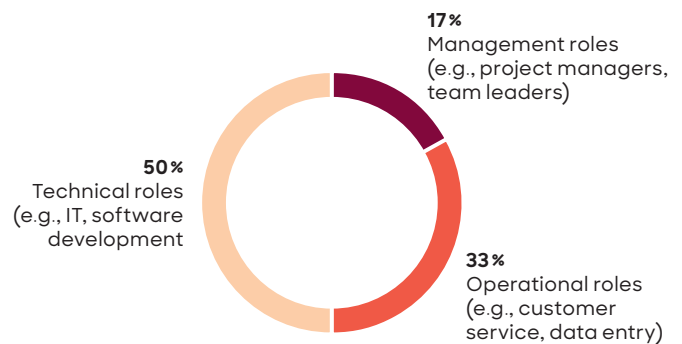
PEOPLE AND SKILLS: MANAGING SHIFTS IN THE WORKFORCE

The executives surveyed believe that AI will have a significant impact on the demands placed on the workforce and that it will alter job profiles. Some positions will become obsolete, while others will change substantially. In hospitals, for instance, the rise of AI-assisted diagnostics is already changing the roles of radiologists and pathologists as AI systems take over repetitive tasks such as image analysis. At one major academic medical center in New York, for example, AI systems assist radiologists by flagging anomalies in medical imaging, allowing them to focus on more complex diagnostic tasks. Similarly, in the pharmaceutical sector, AI tools are transforming the role of medicinal chemists, enabling them to analyze chemical structures faster and more accurately than they could using traditional methods. In the medtech industry, large companies are hiring AI specialists to work on AI-powered imaging systems, creating new job profiles such as AI Software Engineers and Medical Data Scientists. Health insurance companies are also adapting, retraining claims assessors to collaborate with AI systems that automate claim approvals and detect fraud. These shifts highlight the broader trend across healthcare, where AI is not only altering existing roles but also creating entirely new ones as organizations integrate advanced technologies into their operations.

Interestingly, although AI is expected to have a significant impact on jobs over the next five years, not every type of job will be affected equally. For example, just 17 percent of respondents see management roles as being the most affected by GenAI, while 50 percent predict that the greatest influence will be on technical roles in the organization, such as jobs in IT and software development. ▶ J

J AI will not affect everyone equally
Which job profiles do you foresee being the most affected by GenAI in the coming years?

17%
Management roles (e.g., project managers, team leaders)

50%
Technical roles (e.g., IT, software development

33%
Operational roles (e.g., customer service, data entry)

→ **Only 17% of respondents see management roles as being most affected by GenAI**

K Entry-level positions will be the most strongly impacted by GenAI
Which job levels will be the most affected by GenAI in the coming years?

6%
Senior-level positions

7%
Mid-level positions

6%
Executive-level positions

81%
Entry-level positions
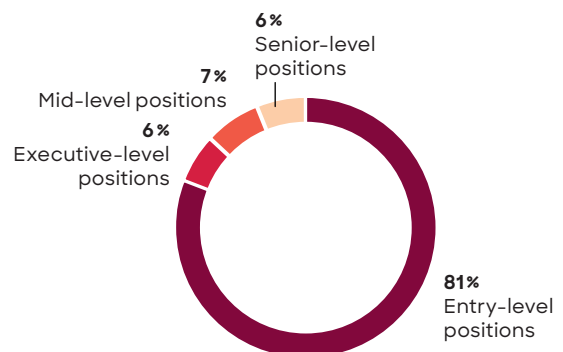
→ **Entry-level positions will be the most affected by GenAI**

Source: Roland Berger

In terms of the organizational hierarchy, it is likely that entry-level positions will be the most affected by AI. Indeed, 81 percent of respondents believe that this will be the case. This raises the further question of what happens to university graduates: How will they be able to gain real experience in the industry? ▶ K

When we asked our industry insiders how many current jobs in healthcare will be obsolete as a result of AI in five years' time, the average answer was 11 percent. Given that the sector has for many years been suffering from a shortage of qualified staff, if AI can perform some of the tasks that human employees currently carry out, this may resolve part of that shortage and free up staff for other jobs.

The speed at which AI is influencing the workforce in the healthcare sector is unprecedented. This led us to ask the executives how open current employees in the sector are towards AI. Some 72 percent said that their employees are "somewhat receptive" or "very receptive" to AI being implemented. ▶ L

Given the coming transformation, organizations need a plan or strategy for dealing with the change – in other words, a change management concept that integrates well with their planned AI efforts. Crucially, the leadership must be engaged in driving the organization forward for the change to be successfully managed. Communication with the workforce about how AI will change processes, departments and job tasks is also of central importance. A notable example of AI-driven change management and workforce upskilling comes from one leading pharmaceutical company, where over 10,000 employees have participated in GenAI upskilling initiatives through its dedicated Data & Digital Academy.

L A large majority of employees are open to AI
How receptive do you think your employees are to the implementation of AI?

→ **82% of respondents believe that their employees are receptive to AI implementation**

| Not receptive at all	Not very receptive	Somewhat receptive	Very receptive	Extremely receptive
0%	1%	27%	55%	17%
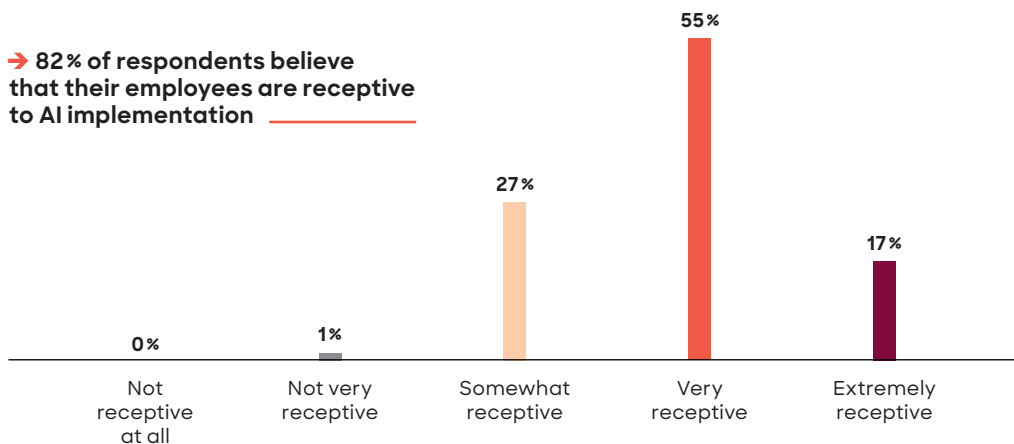
Source: Roland Berger

DATA AND INFRASTRUCTURE: READINESS OF THE IT INFRASTRUCTURE IS A DETERMINING FACTOR FOR SUCCESS

Dedicated AI divisions within the organization have become more widespread in the healthcare industry. In our survey, 90 percent of respondents said that their organization has such a division or a unit specifically focused on AI. Naturally, in some cases this is integrated into existing structures such as a "digital factory" or analytics department. ▶ M

It will be impossible for healthcare organizations to do everything around the topic of AI on their own. A variety of startups, scale-ups, established tech companies and "hyper-scalers" can assist them with dedicated solutions and infrastructure components.[23] Given the complexity of implementing AI, many organizations have already chosen
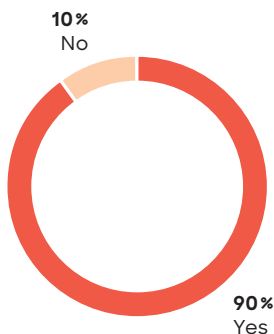
to collaborate with such external partners rather than trying to build AI solutions themselves. These partnerships are particularly useful where the organization lacks the necessary infrastructure, AI expertise or data management capabilities. They also enable companies to implement the solutions more quickly in their organizations.

Despite significant investments in AI, only 29 percent of the executives surveyed consider their organization adequately prepared to gain competitive advantage by using GenAI. They are mainly worried about their lack of technical expertise, followed by concerns over other technical and infrastructure issues. ▶ N
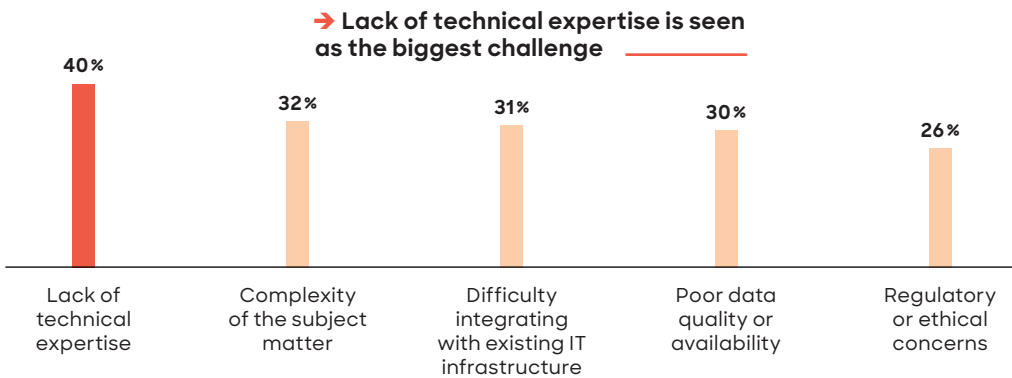
To address these challenges, forming partnerships is a natural strategy for gaining expertise that may not exist internally. Indeed, 87 percent of respondents indicated that they would prefer to collaborate with major tech companies such as Google, Microsoft and Amazon rather than develop their own AI solutions. While this approach can offer a faster path to implementation, our interviewees also highlighted the risks of becoming dependent on external partners for critical capabilities. ▶ O

As we have already seen, many companies have set up their own AI unit. At first sight, this seems to conflict with their preference for working with external tech partners. However, on closer examination it turns out they generally use their internal units for specific projects within the organization that are tailored to the organization's particular needs; for larger, more complex or innovation-driven projects, they work with large tech companies. This is to some extent no doubt related to the two main concerns respondents have about working with external partners: data protection and protecting business secrets. ▶ P

Given these concerns about data protection and business secrets, effective data management has become more critical than ever, especially as healthcare data volumes surge. Medical devices in medtech, clinical trials in pharmaceuticals, claims processing in health insurance

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M Having a dedicated AI division is the industry standard

Does your company have a dedicated division or unit specifically focused on AI?

10%
No

90%
Yes

➔ **90% of respondents already have a dedicated division/unit focusing on AI**

Source: Roland Berger

N Players are mainly worried about their technical expertise in AI

What do you see as the biggest challenge for your organization in implementing AI?

→ **Lack of technical expertise is seen as the biggest challenge**

Lack of technical expertise	Complexity of the subject matter	Difficulty integrating with existing IT infrastructure	Poor data quality or availability	Regulatory or ethical concerns
40%	32%	31%	30%	26%

Multiple responses possible

O Players prefer to work with external AI solution providers

Would you rather partner with companies such as Google, Microsoft and Amazon or build your own AI solution?

→ **87% of respondents would rather partner with companies such as Google, Microsoft and Amazon than develop their own solution**

- 3% Both
- 10% No partnering
- 87% Partnering
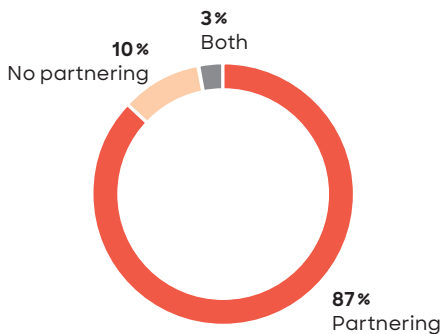
Source: Roland Berger

P Data protection and protecting business secrets is an issue for partnerships

What are your main concerns about partnerships, or the main hurdles that they face?

→ **Respondents' main concerns are around data protection and protecting business secrets**

Data protection (laws)	External effect (e.g., loss of reputation with customers/patients)	Protection of business secrets
72%	43%	70%
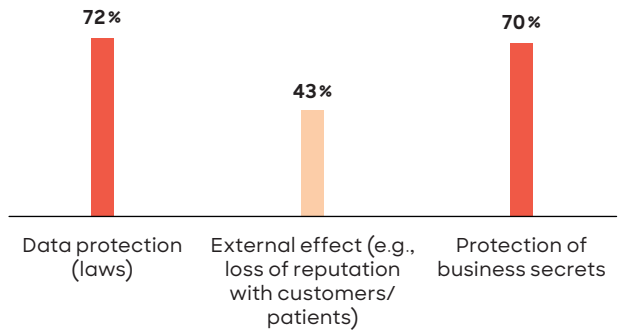
Multiple responses possible

and patient records in hospitals all produce vast amounts of data, and that data needs to be managed.

Over the past one to two years, we have seen widespread investment in proofs of concept (PoCs) – small-scale test versions of potential solutions. In the long term, however, companies will need to make larger, central investments in the new technology and relevant infrastructure. Respondents consider this the most important step that healthcare organizations must take in order to become AI-ready. ▶ **Q**
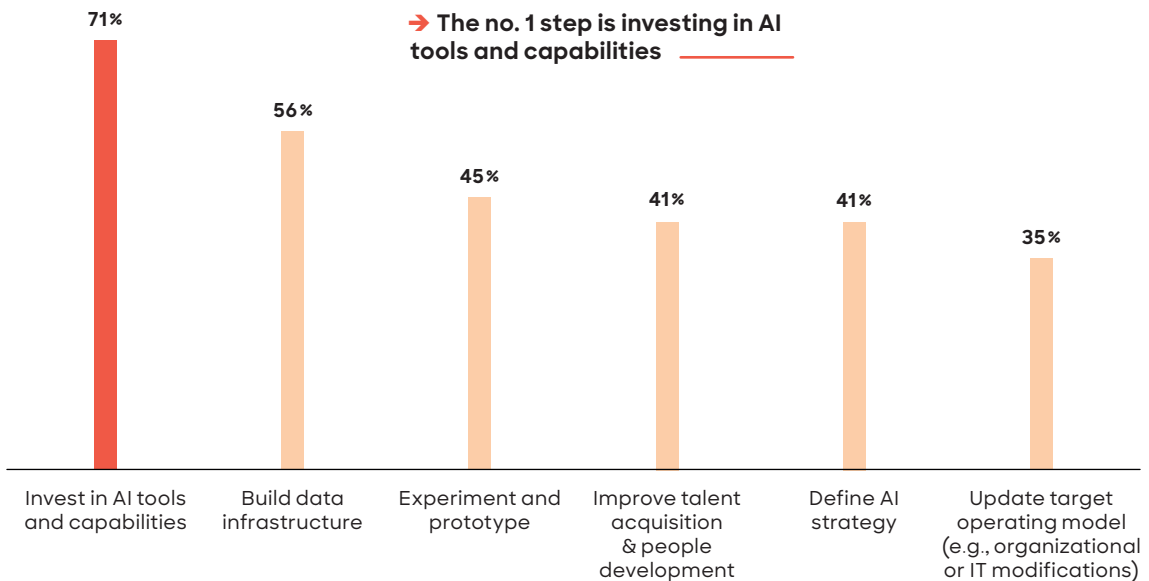
In conclusion, our executive survey indicates that AI is viewed as a central, important topic for the coming years. Healthcare organizations that have already laid the groundwork for AI, such as having a robust cloud infrastructure, sufficient data, in-house tech and AI skills or strong partnerships with established players and startups, will find it significantly easier to make themselves AI-ready and reap the benefits as part of a natural evolution.

Conversely, organizations that are not yet technologically advanced, where AI is not a priority at C-level and where AI talent is lacking will feel the impact of a world changing around them much more acutely.

Q Major investments in technology and infrastructure are needed

What specific actions does your company need to take in order to become AI-ready?

➔ **The no. 1 step is investing in AI tools and capabilities**

Invest in AI tools and capabilities	Build data infrastructure	Experiment and prototype	Improve talent acquisition & people development	Define AI strategy	Update target operating model (e.g., organizational or IT modifications)
71%	56%	45%	41%	41%	35%

Multiple responses possible

Source: Roland Berger

Future scenarios

The next five years

One of the key reasons we set out to investigate in this study whether AI will cause a *revolution* in healthcare or a gentler process of *evolution* is because we wanted to establish how urgently players in the healthcare industry need to act. How much time is left to respond to the coming AI transformation? The speed of adoption of AI over the coming five years will depend on a number of factors, mainly regulation, the acceptance by providers and patients, funding, but also the development of a reliable technology with proven outcomes. With this in mind, in our view, the most likely outcome is the "realistic scenario" – a path of rapid evolution with partial adoption of AI in specialized areas and mixed outcomes. However, there remains a considerable chance of other possible futures in AI adoption. This is why we have also developed two alternative scenarios: an "accelerated scenario"(mass adoption and transformation) and a "conservative scenario" (slow adoption with limited impact).[24]

Realistic scenario

Partial adoption of AI in specialized areas with mixed outcomes

• In this scenario, AI is adopted in certain areas, especially where it has measurable advantages, such as improvements in efficiency and precision in medical imaging, as demonstrated by Stanford University's Center for AI in Medicine and Imaging,[25] predictive analytics and personalized treatments. Human involvement remains central to direct patient care and emotional support. The efficiency gains are uneven across the healthcare sector: AI-driven departments experience significant improvements in efficiency and accuracy, while other departments lag behind, leading to a fragmented tech landscape and potential internal imbalances. Interoperability issues also arise, as some processes rely heavily on AI and others use manual processes, complicating unified data usage and security. Consequently, great care must be taken to account for the bias and issues that integrating AI into healthcare operations can bring, as recognized by the National Health Service (NHS).[26]

• This scenario includes some revolutionary aspects, but AI is not yet adopted with full force. Generally, large tech companies have adopted AI technology, while smaller companies have begun integrating some AI technologies. However, smaller players are struggling with hurdles in cross-border projects such as language barriers, differences in national legislation and so on.[27]

• In terms of organizational structure, companies have set up specialized departments focused on implementing and managing AI solutions, particularly in areas such as diagnostic support, patient management and data analysis. Roles have shifted, with increased demand for AI specialists, data scientists and digital health experts, while traditional roles such as administrative and diagnostic tasks are now supported by AI.

• With the help of the new technology, patients are living a little longer and paying lower healthcare costs in this realistic scenario. Enhanced diagnostics (thanks to AI analysis of medical images and patterns), proactive intervention and personalized treatment plans (thanks to the use of individual health data) have led to improved health outcomes.

Accelerated scenario

Mass adoption of AI and transformation

- In our accelerated scenario, AI is well established with regard to personalized medicine and administration tasks, meaning that physicians no longer need to carry out administrative tasks but can instead focus on patients. Drug design and development have been redesigned, with more drug targets, more therapeutical solutions without testing on humans, and shorter times to market. Patients enjoy consistent and ongoing improvements in care thanks to AI-supported systems, which might be soon available everywhere – a vision that has already come close to fruition in an AI hospital in China.[28] Patients have better access to services (including reduced wait times), live longer and enjoy lower healthcare costs.

- In this scenario, AI has mitigated the shortage of skills in healthcare, replacing many jobs and freeing up employees to retrain for other jobs. It has also lowered costs by reducing the amount of misdiagnoses and resulting treatments.

- A number of factors would make this optimistic scenario more likely, including rapid advancements in AI technologies, companies and patients agreeing to make full use of the available data pools (for example, electronic health records) and increased investment in health-tech innovation by both the private and public sector.

- While this scenario may seem far-fetched to some, there is evidence to support its feasibility. For instance, the USD 150 million investment in Singapore's public health sector[29] suggests that, with sufficient backing from both private and public investors, this scenario could become a reality.

Cautious scenario

Slow adoption of AI with limited impact

- In our cautious scenario, integration of AI is slow or non-existent, healthcare costs continue to rise and innovation has stagnated. Only a few early adopters of AI exist, the majority of stakeholders hesitating to implement the new technology. Regulation is strict, with much variation between countries. In addition, the majority of patients do not know how to use AI properly and therefore distrust it: The technology cannot unleash its full potential and so the challenges facing the current system, such as cost pressure and the lack of skilled workers, increase over time.

- Some evidence for this scenario already exists. Thus, the World Health Organization stated in a recent report that more investments must be made in healthcare.[30] Some prominent public figures have said that they are worried about the regulation of AI being an innovation killer.[31] And recent academic research has found that, due to a lack of AI literacy, most healthcare professionals are not adequately prepared, creating a significant barrier to the adoption and implementation of AI.[32]

- A number of factors would make the cautious scenario more likely. They include high upfront costs, the need for specialized infrastructure and training, privacy and security issues (restricting access to essential health data, for instance), challenges in the area of trust and acceptance, lengthy or complex approval processes, and regulatory uncertainties.

Recommendations

Five strategies for stakeholders

6

Regardless of which of the three scenarios in Chapter 5 materializes, key players in the healthcare system, and in particular C-level executives, must embrace the reality of an AI-driven future. Organizations have limited influence over external factors such as politics and regulation, so they should prioritize internal areas where they can have a tangible impact.

We offer five key strategic recommendations for just such action below. As discussed throughout this study, AI will bring about a revolution in some areas of healthcare and evolution in others. In areas such as diagnostics, AI has already disrupted the market and sped up the pace of progress. In other domains, such as therapy, its potential remains underutilized. AI offers promising use cases, but organizations need time to integrate these technologies into existing processes, particularly in a highly regulated industry such as healthcare. Whether it causes a revolution or an evolution, the presence of AI in healthcare is undeniable and permanent. To successfully navigate the transformation, healthcare organizations need a clear roadmap for AI readiness. The five strategic actions below are essential for preparing for the future.

#1
Boost customer centricity
Adopt a patient-centered approach
Maintain a focus on the patient as the central figure. AI-powered systems can analyze patient-specific data to create tailored information and offers that are aligned with individual needs and preferences. You can use AI to create tailored treatment plans, predict patient needs and improve each individual patient's journey. Keep the patient outcome in mind when designing new tools and solutions. In addition, ensure that AI-driven interactions retain the human touch by integrating feedback loops where patients can express their preferences and concerns. This will keep them empowered and involved in their healthcare decisions.

#2
Think strategically
Assess the impact of AI on your business model
Assess how AI may disrupt – or enhance – your current business model and how it can help create a unique value proposition that differentiates your portfolio from competitors. Understand the potential of AI to challenge existing ways of doing business, drive new revenue streams and create efficiencies. Crucially, do not underestimate future advancements in data analytics and GenAI, which will transform healthcare delivery, drive groundbreaking innovations in health research and improve overall health outcomes. The key to success? Be prepared!

#3
Enable your workforce
Ensure employees leverage AI in their daily work
Integrate AI into your organizational culture. Empower your workforce with AI tools, allowing them to focus on higher-value tasks. Provide tailored training and resources at all levels, embedded in a true learning culture, so that employees know how to effectively integrate AI into their daily workflow. Strong governance and leadership are essential to establish clear guidelines for AI use, ensuring ethical practices and compliance with regulations. Open communication is also vital so that people do not worry that AI is about to steal their jobs. Overall, encourage a culture of innovation around AI that fosters collaboration and creativity, leading to better problem-solving and adaptability. Ultimately, enabling your workforce to use AI not only enhances individual performance but also drives overall organizational success.

#4
Secure the technical foundation

Systematically develop your current IT infrastructure
Be clear about what requirements must be met before implementing AI. The first step is to critically review, evaluate and scrutinize your current IT infrastructure. Many healthcare organizations find that their existing infrastructure – especially the infrastructure used for handling vast amounts of unstructured data and real-time analysis – is not sufficient for large-scale AI projects. Partnering with established tech companies rather than trying to do everything yourself can be useful here.

#5
Start now

Invest early and continuously in AI technologies
Identify which areas of your operations are most likely to benefit from AI and invest in technology in those areas, thereby giving yourself a competitive edge early on. Focus your pilot projects on financial returns as well as the overall impact on strategy, alongside patient experience and operational efficiency. Overall, take a long-term perspective when investing in AI, continuously revisiting and improving your AI capabilities.

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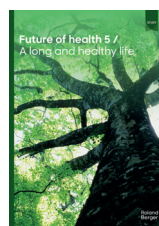**Oliver Rong**
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