#### **POLITICS & SOCIETY**

# Artificial intelligence (AI) in healthcare



#### Table of Contents

#### 01 Overview

Share of digital health funding on Al-focused companies worldwide 2015-2024
Investments in new technologies as share of annual revenue in medtech worldwide 2024
Cardiac Al monitoring and diagnostics market worldwide 2022-2032
Al-enabled medical imaging solutions market worldwide 2021-2032
Al products known and used by clinicians worldwide in 2024
Clinicians' familiarity with Al worldwide in 2024, by region
Clinicians who have used Al for their work worldwide in 2024, by region
Share of clinical decisions based on Al tools such as ChatGPT/Bard worldwide 2023
Adoption of Al in medical technology worldwide 2024, by area

#### 02 North American focus

Al/ML-enabled medical technology products approved by FDA in the U.S. 2015-2023
Change in budget allocated to Al projects in healthcare in the U.S. 2023-2024
Stage of generative Al adoption in healthcare organizations in the U.S. 2024
Uses of LLMs in healthcare organizations in the United States 2024
Perceived impact of LLMs in healthcare organizations in the U.S. 2024
Perceived limitations of generative Al in healthcare organizations in the U.S. 2024
Types of chatbots used in medical practices in the U.S. in 2023
Healthcare organizations' plans to use generative Al in the U.S. 2023-2024
Biggest challenges for healthcare organizations to use generative Al in the U.S. 2024

#### 03 European focus

04	Top 15 areas in healthcare impacted by Al in selected EU countries, by share of hours	24
05	Ability and services for advanced health technologies in Europe in 2022	<u>25</u>
<u>06</u>	Changes in AI use in healthcare in selected European countries as of 2024	<u>26</u>
07	Level of HCPs' trust in AI in healthcare Europe 2024, by AI use	27
<u>80</u>	Areas to apply Al in healthcare in Europe 2024, by specialty	<u>28</u>
09	Uses for time saved by AI in healthcare in Europe 2024	29
<u>10</u>		
<u>11</u>	04 Clincial attitudes towards Al use	
<u>12</u>	Attitudes of clinicians on Al in healthcare worldwide in 2024, by region	<u>31</u>
	Attitudes of clinicians towards the impact of AI on healthcare worldwide in 2024	<u>32</u>
	Clinician concerns on ethical implications of AI use worldwide in 2024, by region	<u>33</u>
<u>14</u>	Most common disadvantages of using Al by clinicians worldwide 2024	<u>34</u>
<u>15</u>	Most common reasons for clinicians not using Al worldwide in 2024	<u>35</u>
<u>16</u>	Healthcare areas believed to benefit the most from generative AI in the U.S. 2024	<u>36</u>
<u>17</u>	Comfort of nurses using AI in the U.S. 2024	<u>37</u>
<u>18</u>	Nurses' views on Al-based predictive analytics for patient outcomes in the U.S. 2024	<u>38</u>
<u>19</u>	Nurses' perception of AI on long-term job security in the U.S. 2024	<u>39</u>
20	Views regarding the effect of AI on select aspects of healthcare in the U.S. 2022	<u>40</u>
21	Trust in AI among healthcare professionals in Europe 2024, by country	<u>41</u>
22	Confidence of HCPs to use Al and other new tech in healthcare in Europe 2024	<u>42</u>



#### **Table of Contents**

#### 05 Patients' views on Al

Consumers who trust medical advice from generative Al worldwide in 2023, by country	44
Share of adults comfortable with AI in medical activities in the U.S. 2024	<u>45</u>
Share of patients comfortable with gen Al application in the United States in 2024	<u>46</u>
Comfort level of U.S. adults with using artificial intelligence in healthcare 2024	<u>47</u>
Top concerns about the use of AI in healthcare in the United States in 2024	<u>48</u>
Concerns of U.S. adults with the use of artificial intelligence in healthcare in 2024	49
Comfort levels with various uses of AI in health care system in Canada in 2023	<u>50</u>

#### 06 Future of AI in healthcare

expectations of clinicians regarding AI use in healthcare worldwide in 2024	52
expectations of clinicians regarding Al impact in healthcare worldwide in 2024	<u>53</u>
Clinicians' opinions on desirable features of healthcare in future worldwide 2023	54
Clinicians' opinions on the desirability of ChatGPT/Bard use in future 2023	55
Perception of NHS staff on the time-saving potential of AI in the UK 2024	<u>56</u>
How clinical staff would use time freed up by technology in the UK 2024	57
Clinicians' who believed clinical decisions will be based on AI by 2031. by region	58

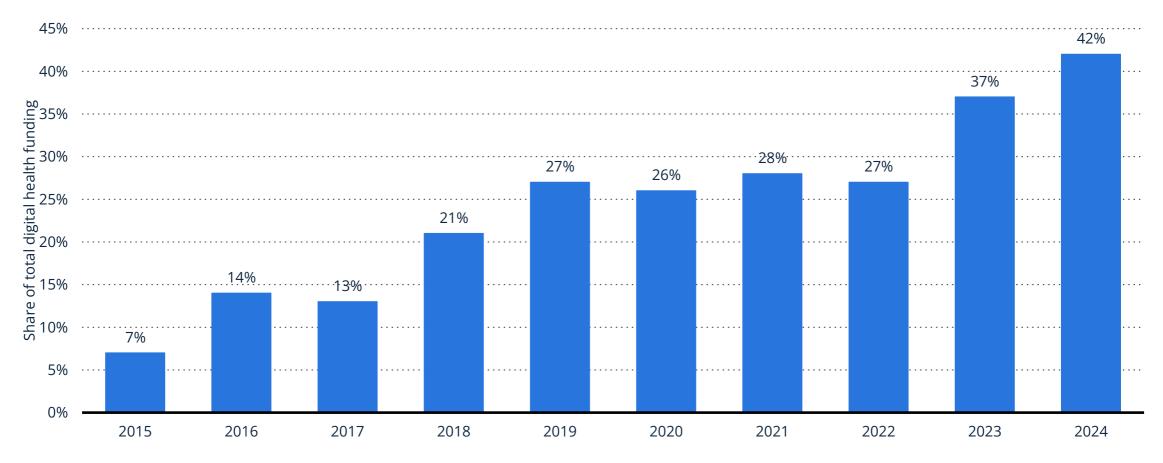


**CHAPTER 01** 

#### Overview

#### Share of funding in the digital health industry on Al-focused companies worldwide from 2015 to 2024

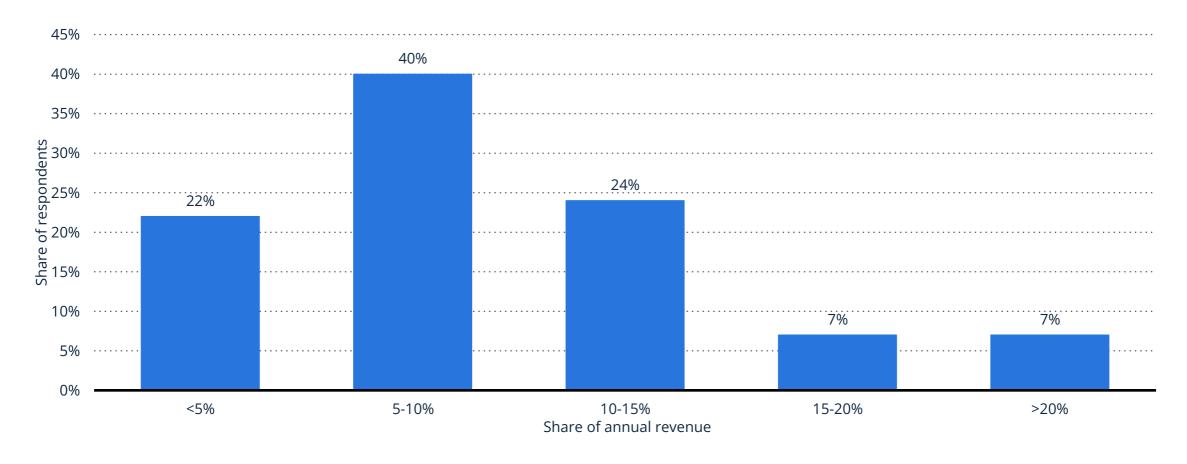
Share of digital health funding on Al-focused companies worldwide 2015-2024





## Investments in new technologies as a share of annual revenue in the near future in the medical technology industry worldwide 2024

Investments in new technologies as share of annual revenue in medtech worldwide 2024

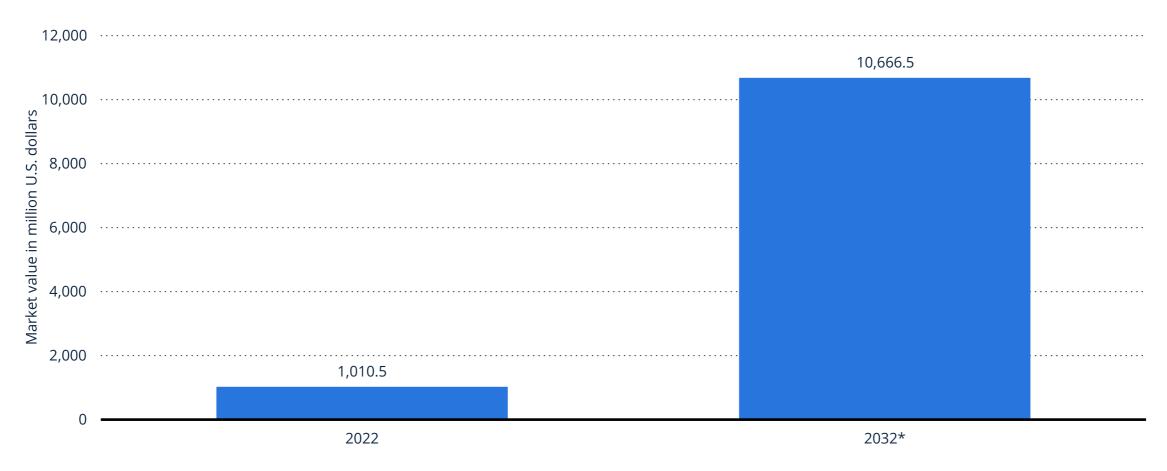




Source(s): Roland Berger

### Value of the cardiac AI monitoring and diagnostics market worldwide in 2022 and forecast for 2032 (in million U.S. dollars)

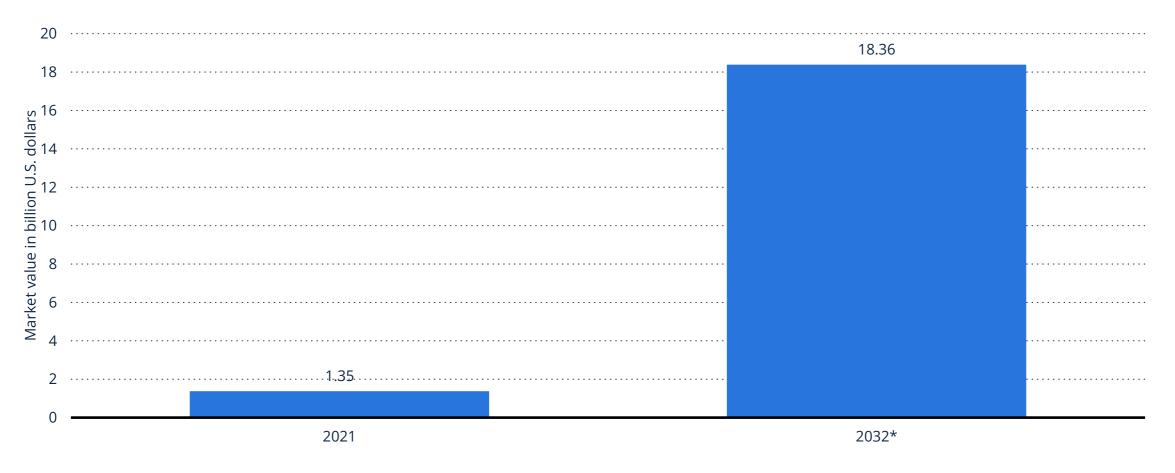
Cardiac AI monitoring and diagnostics market worldwide 2022-2032





## Al-enabled medical imaging solutions market value worldwide in 2021 and forecast for 2032 (in billion U.S. dollars)

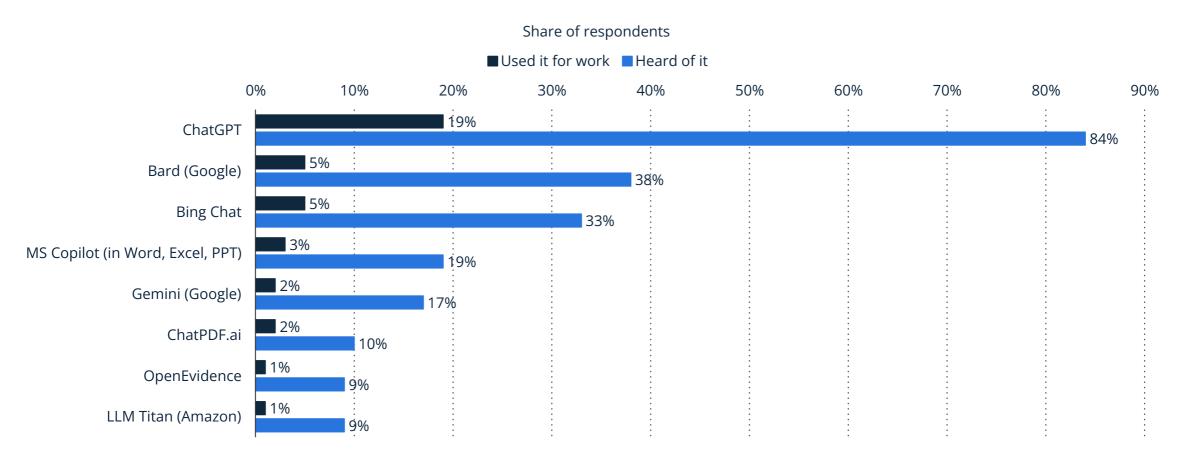
Al-enabled medical imaging solutions market worldwide 2021-2032





#### Share of clinicians who are familiar with and used the following Al products worldwide in 2024

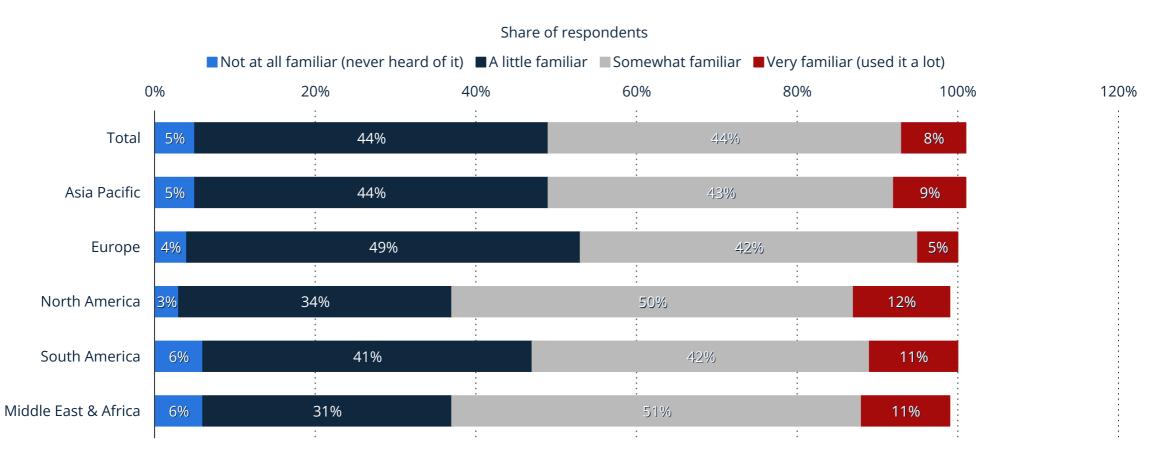
Al products known and used by clinicians worldwide in 2024





### Distribution of clinicians who expressed the following levels of familiarity with AI worldwide in 2024, by region

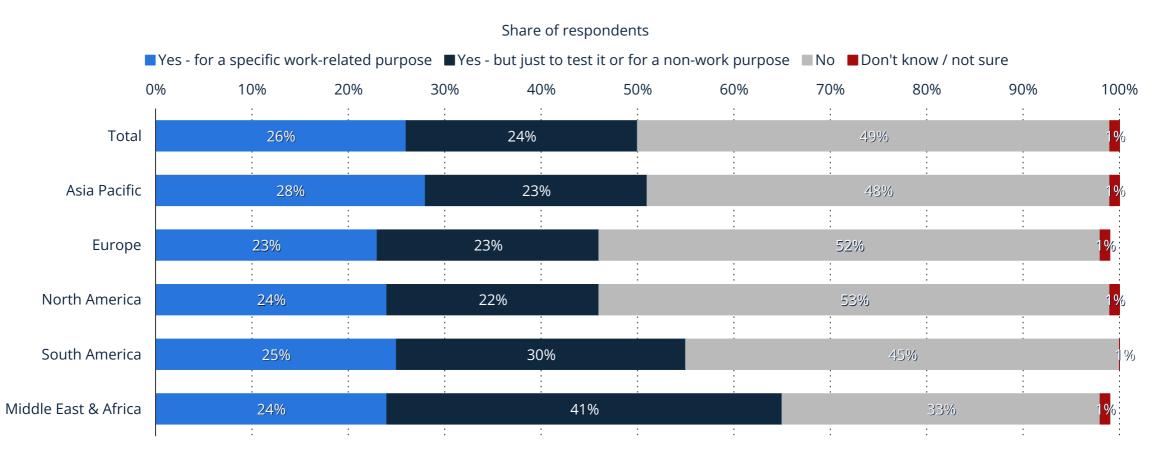
Clinicians' familiarity with Al worldwide in 2024, by region





#### Distribution of clinicians who have used AI for their work worldwide in 2024, by region

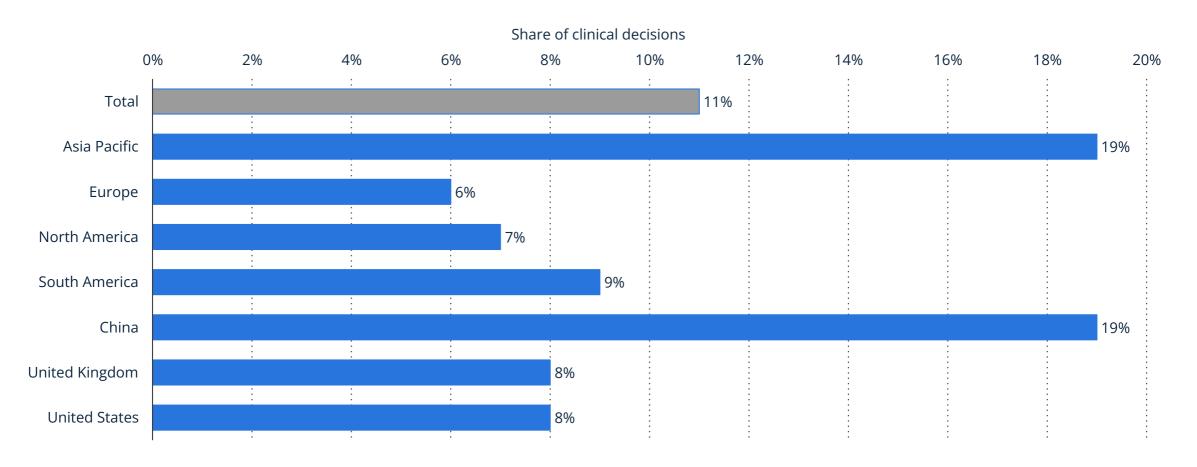
Clinicians who have used AI for their work worldwide in 2024, by region





#### Share of clinician's decisions based on AI tools such as ChatGPT/Bard worldwide as of 2023, by region/country

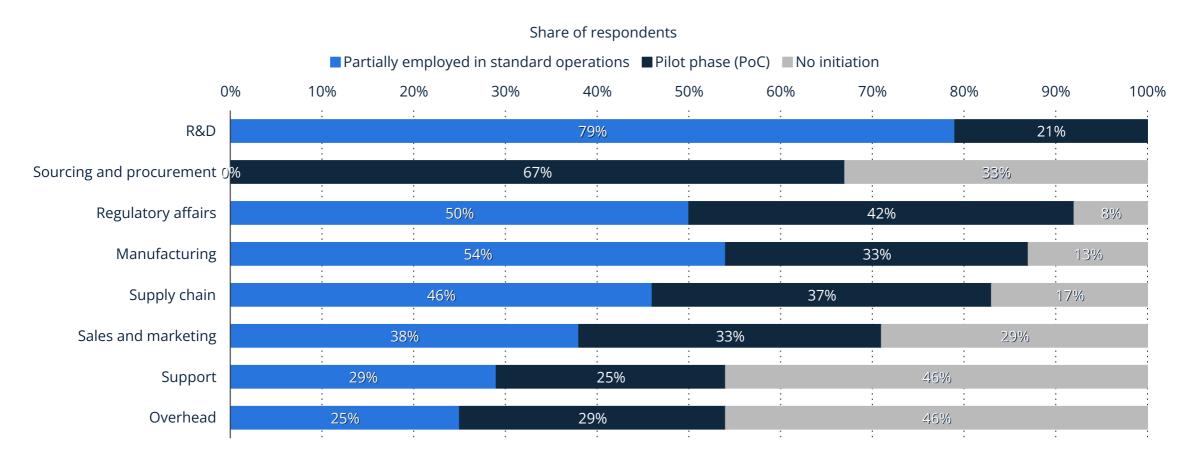
Share of clinical decisions based on Al tools such as ChatGPT/Bard worldwide 2023





## Distribution of AI technology adoption in the medical technology industry worldwide 2024, by area

Adoption of AI in medical technology worldwide 2024, by area



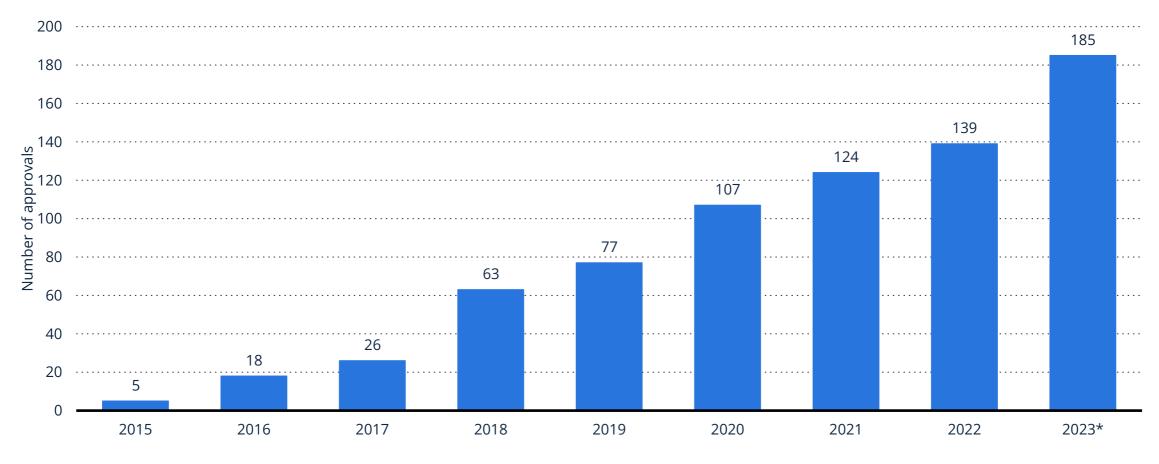


**CHAPTER 02** 

#### North American focus

### Annual number of AI/ML-enabled medical technology products approved by FDA in the Unted States from 2015 to 2023

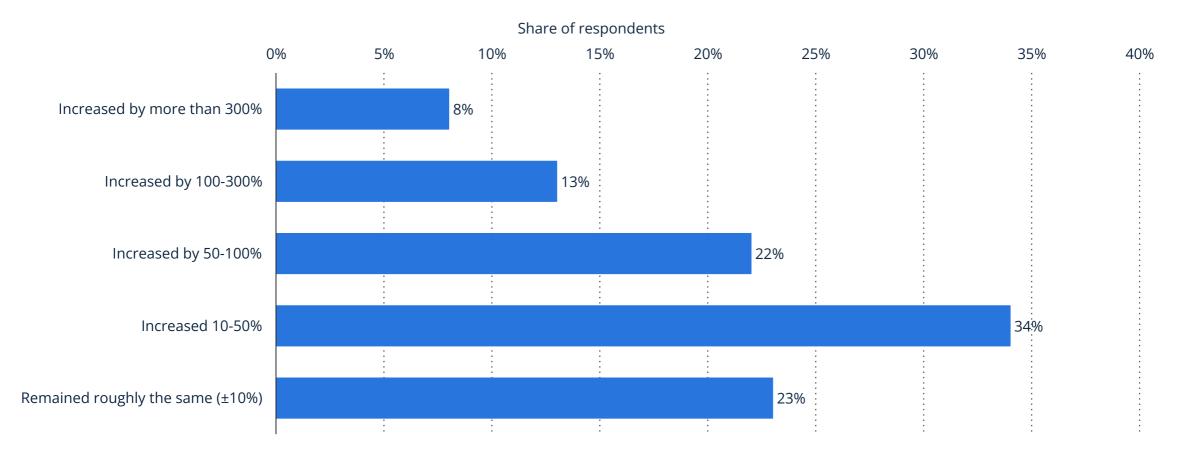
AI/ML-enabled medical technology products approved by FDA in the U.S. 2015-2023





#### Change in budget allocated to AI projects in healthcare organizations in the United States from 2023 to 2024

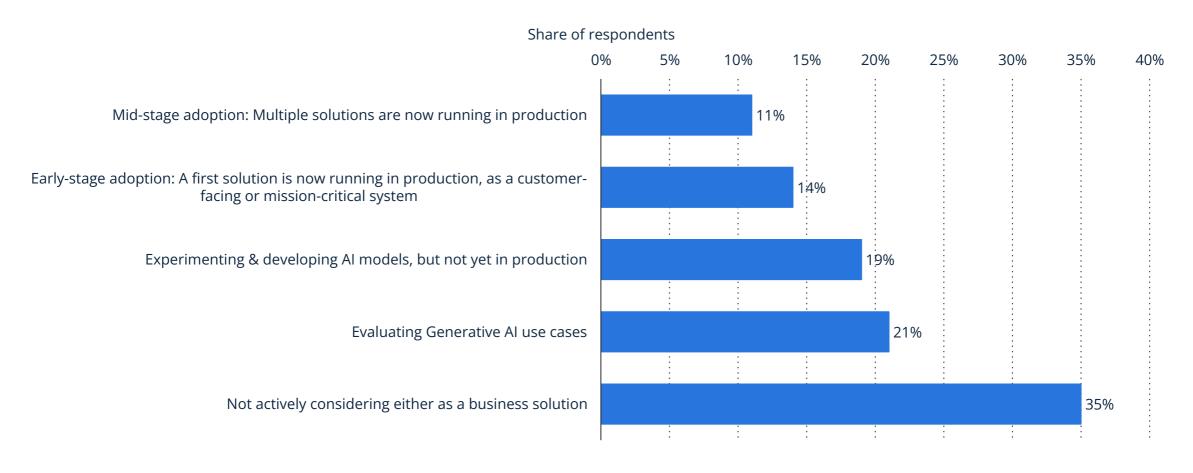
Change in budget allocated to AI projects in healthcare in the U.S. 2023-2024





### Stage of generative artificial intelligence adoption in healthcare organizations in the United States as of 2024

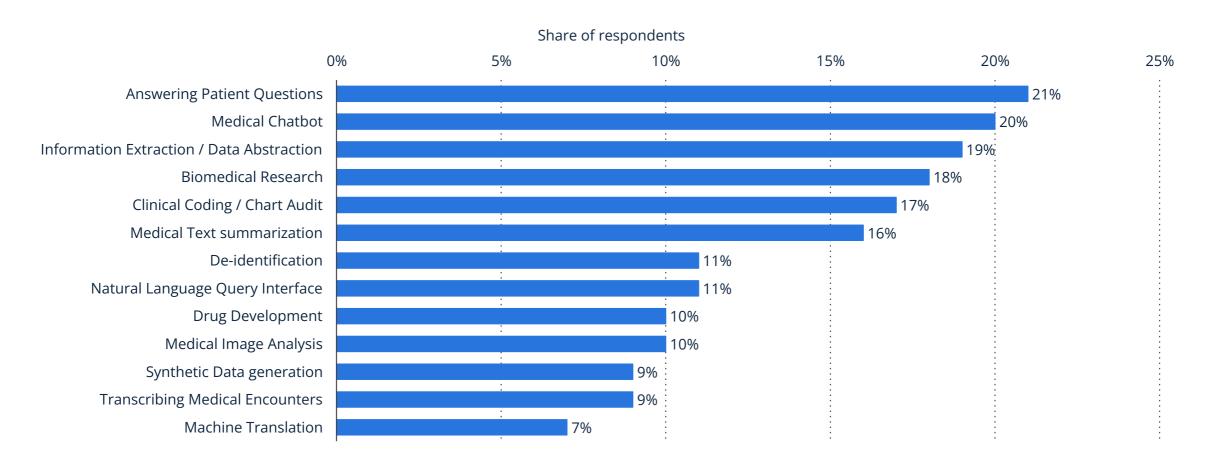
Stage of generative Al adoption in healthcare organizations in the U.S. 2024





### Cases for which healthcare organizations use large language models (LLMs) in the United States in 2024

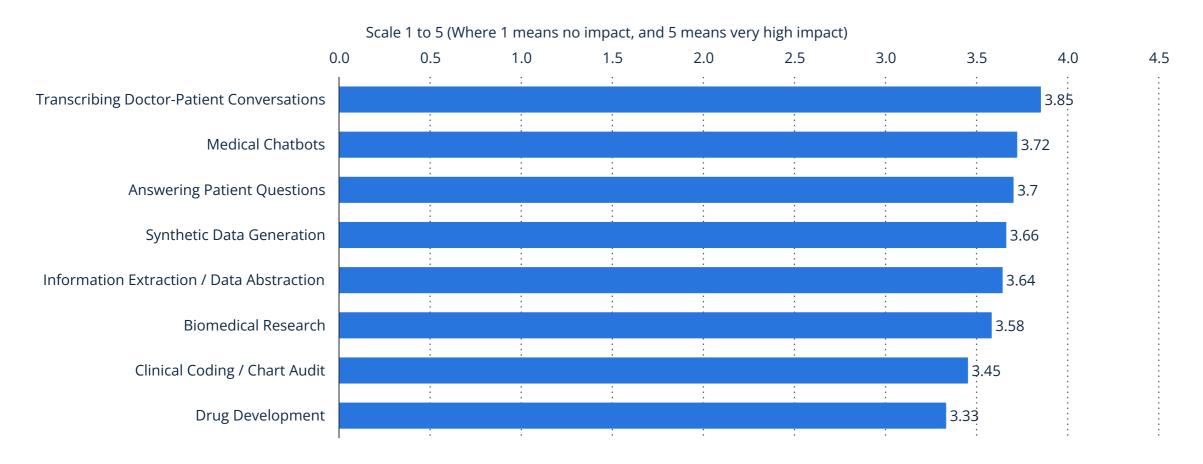
Uses of LLMs in healthcare organizations in the United States 2024





## Mean rating of large language models (LLMs) on use cases in healthcare organizations in the United States as of 2024

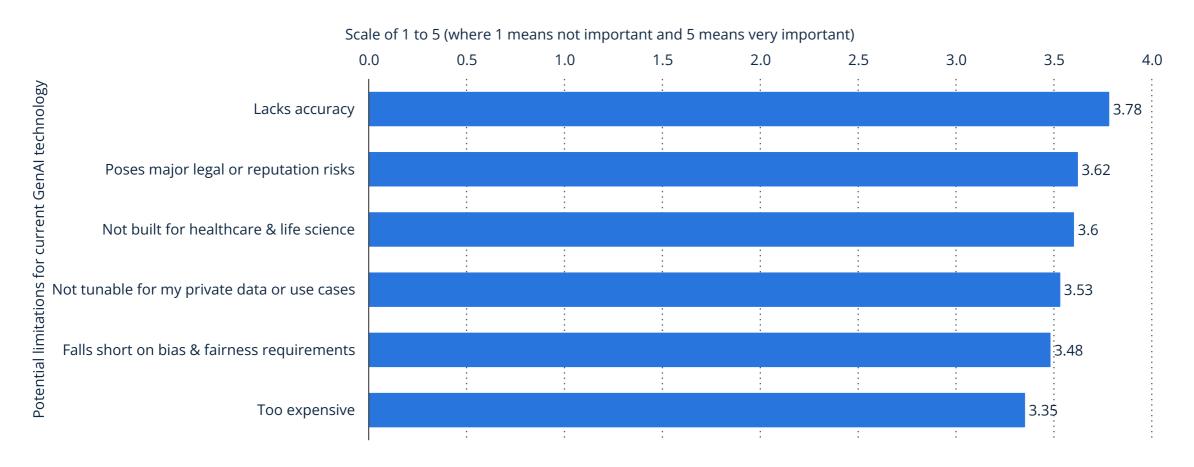
Perceived impact of LLMs in healthcare organizations in the U.S. 2024





#### Ranking of significance regarding limitations of generative artificial intelligence in healthcare organizations in the U.S. 2024

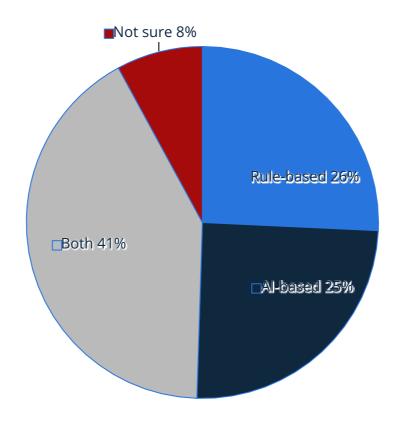
Perceived limitations of generative AI in healthcare organizations in the U.S. 2024





## Distribution of types of chatbots used in medical practices in the United States in 2023

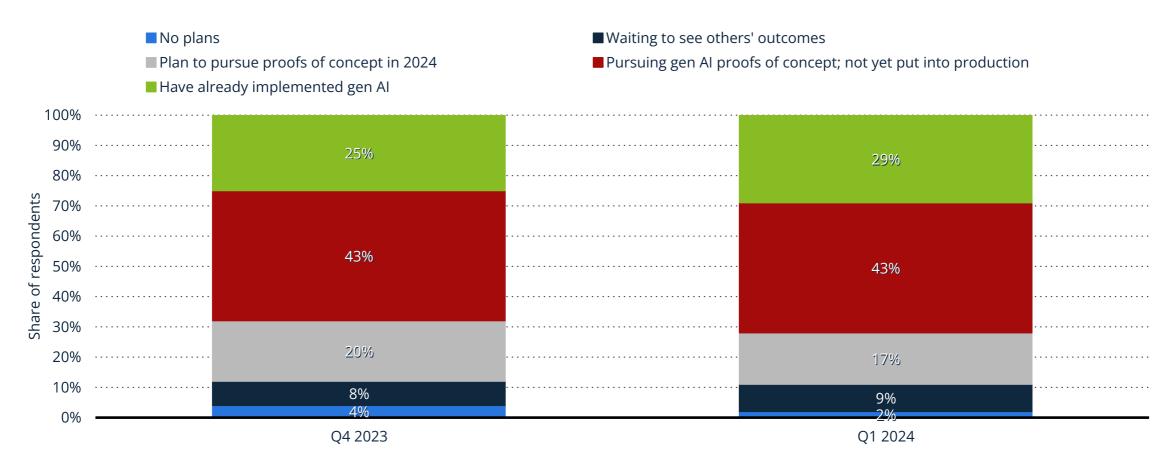
Types of chatbots used in medical practices in the U.S. in 2023





## Healthcare organizations' plans to use generative AI in the United States in Q4 2023 & Q1 2024

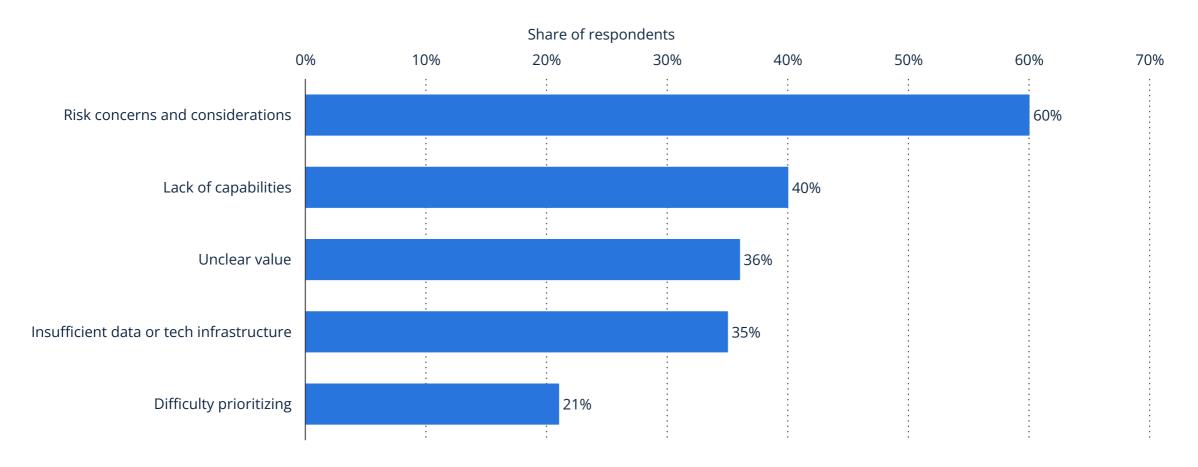
Healthcare organizations' plans to use generative AI in the U.S. 2023-2024





#### Biggest challenges for healthcare organization in implementing generative AI in the United States in 2024

Biggest challenges for healthcare organizations to use generative AI in the U.S. 2024





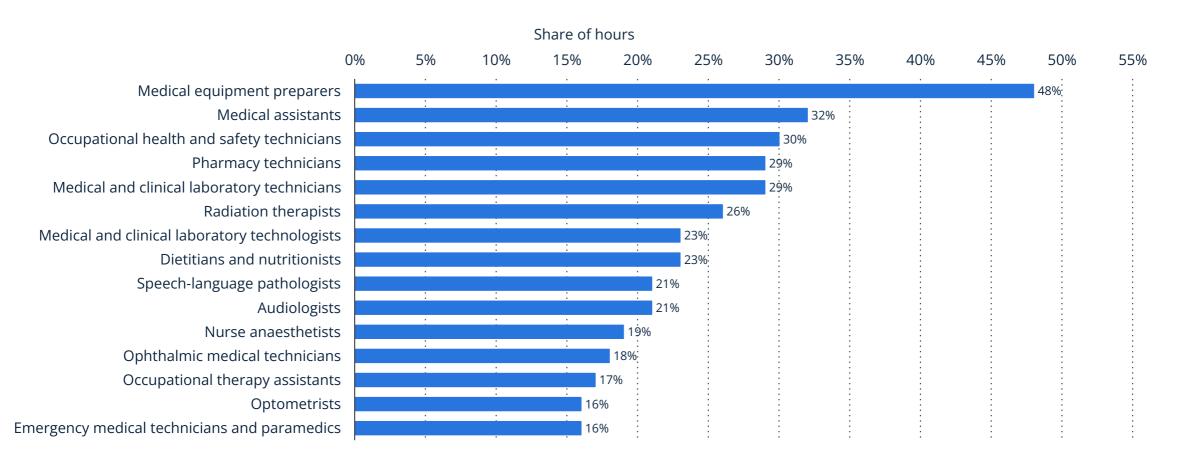
Source(s): McKinsey & Company

**CHAPTER 03** 

#### European focus

## Top 15 areas of impact for AI in healthcare in selected European countries, by percent of hours

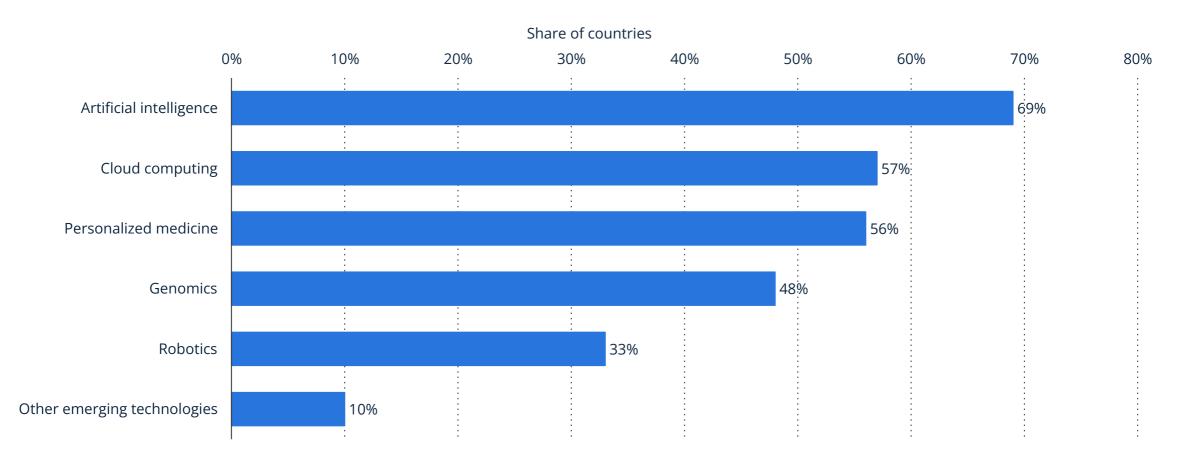
Top 15 areas in healthcare impacted by AI in selected EU countries, by share of hours





#### Share of countries that reported infrastructure, services, tools, and apps to facilitate the use of advanced health technologies in Europe as of 2022

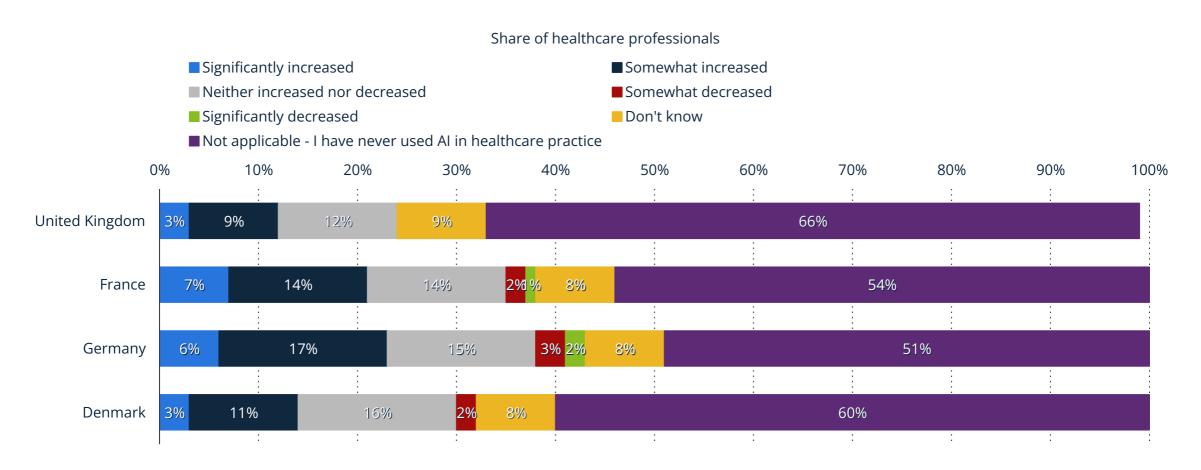
Ability and services for advanced health technologies in Europe in 2022





#### Distribution of changes reported by healthcare professionals in their AI use in the past year in Denmark, France, Germany, and the United Kingdom as of 2024

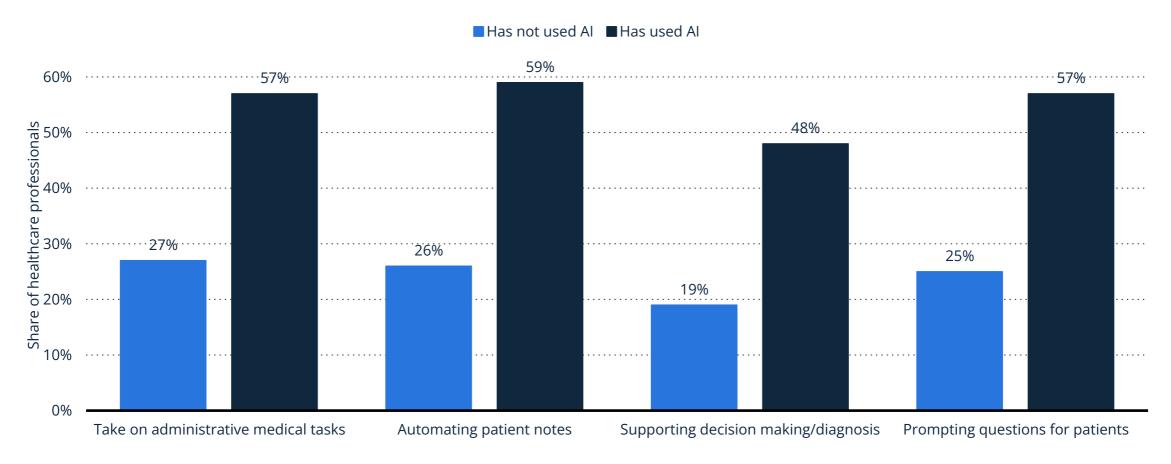
Changes in AI use in healthcare in selected European countries as of 2024





#### Share of health professionals who trust AI to do the following tasks in Denmark, France, Germany, and the United Kingdom as of 2024, by AI use

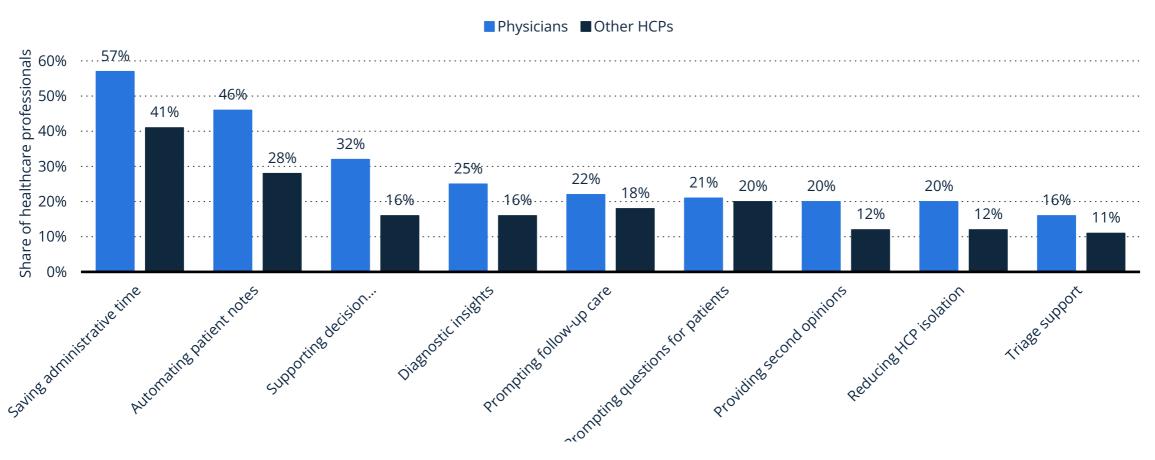
Level of HCPs' trust in AI in healthcare Europe 2024, by AI use





#### Share of health professionals who would apply AI in the following areas of healthcare in Denmark, France, Germany, and the United Kingdom as of 2024, by specialty

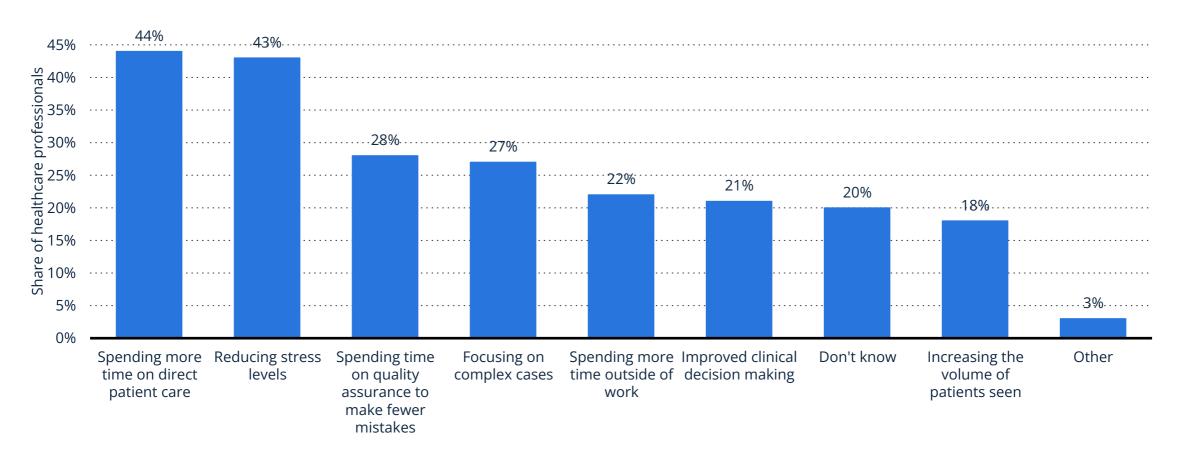
Areas to apply AI in healthcare in Europe 2024, by specialty





#### Areas where healthcare professionals would focus with time freed by AI use in Denmark, France, Germany, and the United Kingdom as of 2024, by specialty

Uses for time saved by Al in healthcare in Europe 2024



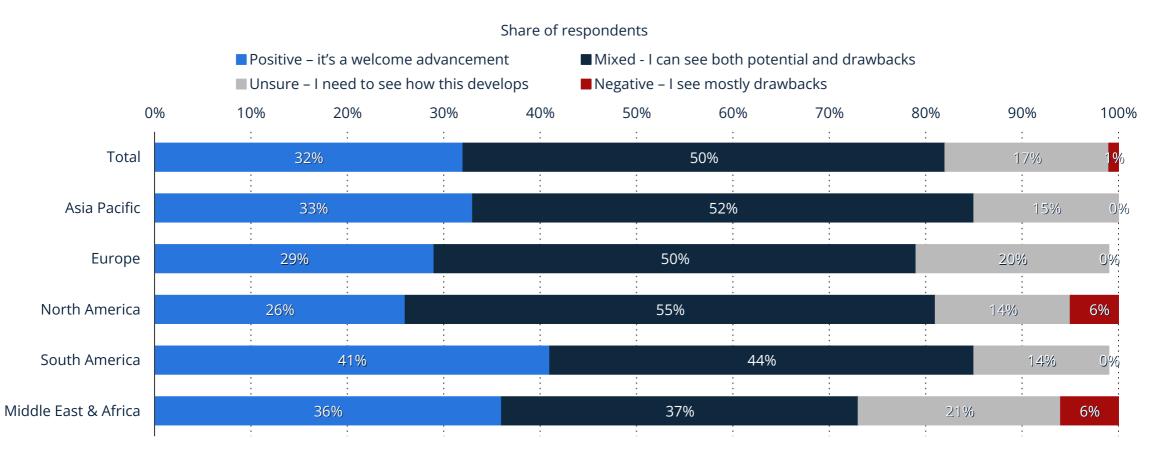


**CHAPTER 04** 

# Clincial attitudes towards Al use

### Distribution of clinicians who expressed the following attitudes regarding the impact of AI on their work worldwide in 2024, by region

Attitudes of clinicians on AI in healthcare worldwide in 2024, by region

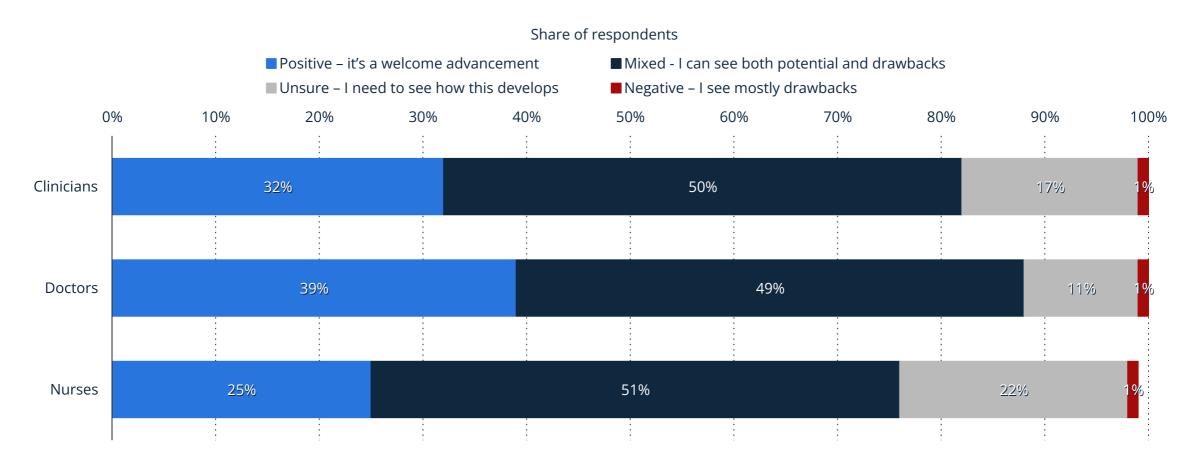




Source(s): Elsevier

#### Distribution of clinicians who expressed the following attitudes regarding the impact of AI on their work worldwide in 2024

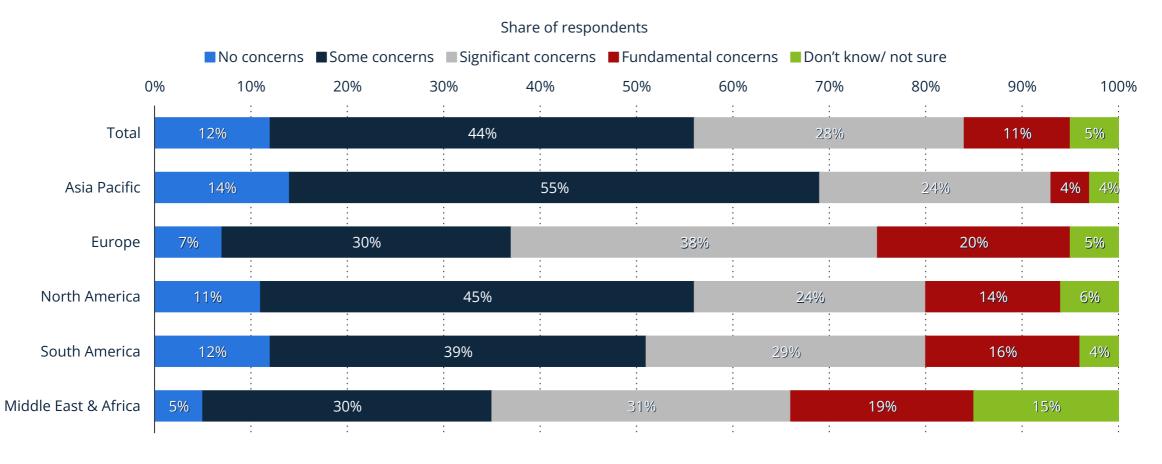
Attitudes of clinicians towards the impact of AI on healthcare worldwide in 2024





#### Distribution of clinicians who have the following levels of concern regarding the ethical implications of Al usage on their area of work worldwide in 2024, by region

Clinician concerns on ethical implications of AI use worldwide in 2024, by region

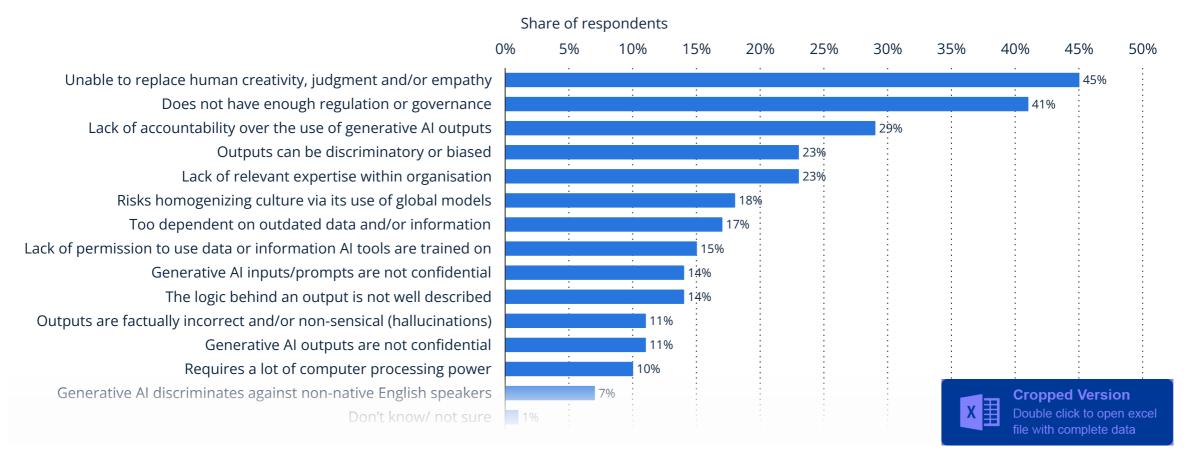




Source(s): Elsevier

#### Share of clinicians who listed the following disadvantages of using Al worldwide in 2024

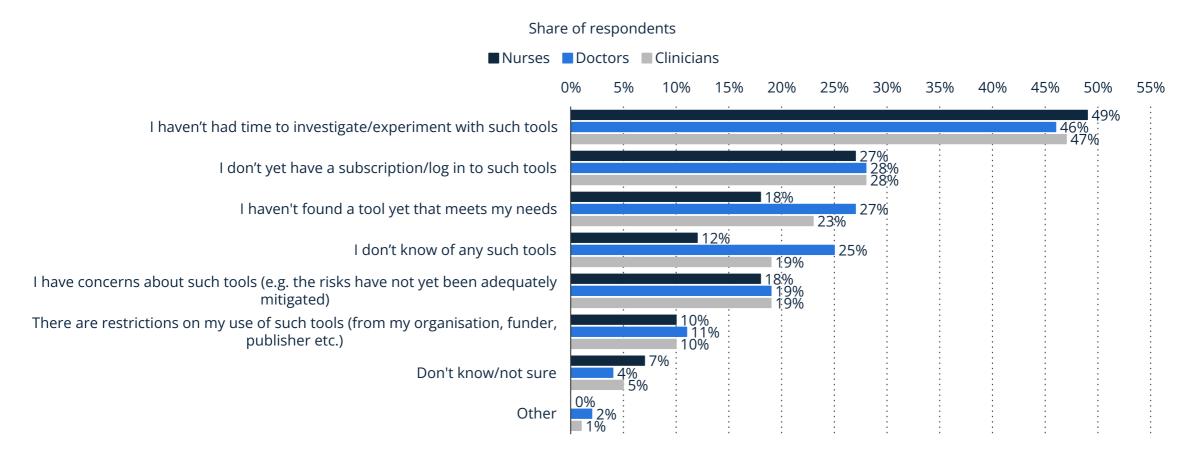
Most common disadvantages of using AI by clinicians worldwide 2024





#### Share of clinicians not using AI due to the following reasons worldwide in 2024

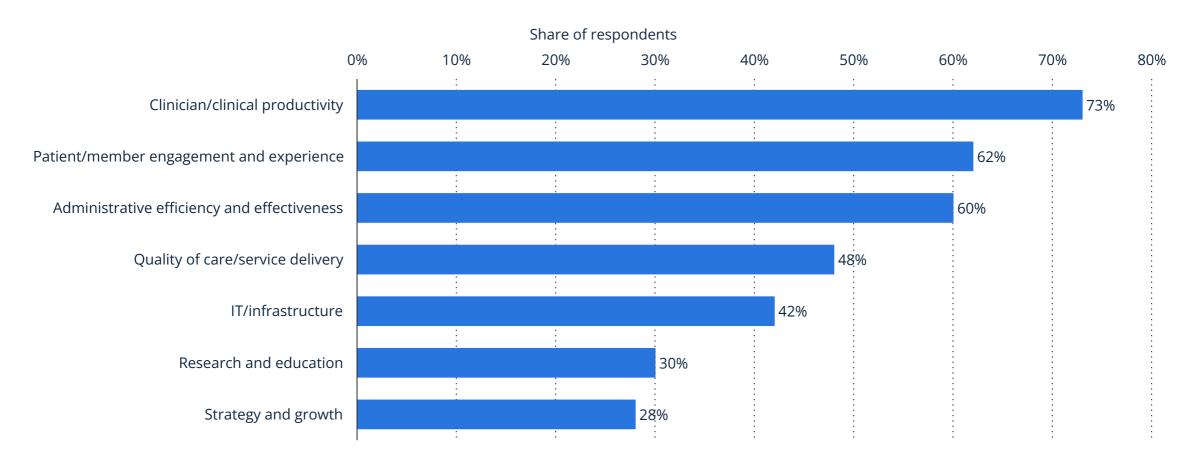
Most common reasons for clinicians not using Al worldwide in 2024





### Healthcare areas believed to benefit the most from the use of generative AI in the United States in 2024

Healthcare areas believed to benefit the most from generative AI in the U.S. 2024

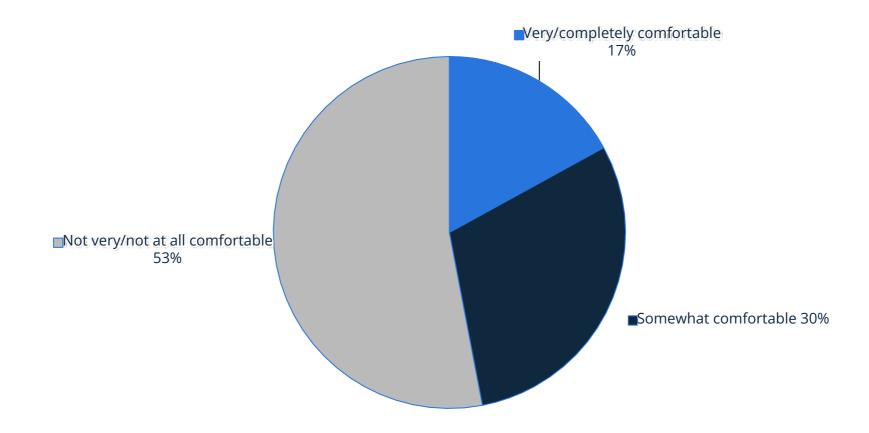




Source(s): McKinsey & Company

#### Distribution of comfort levels of nurses using artificial intelligence (AI) in the United States in 2024

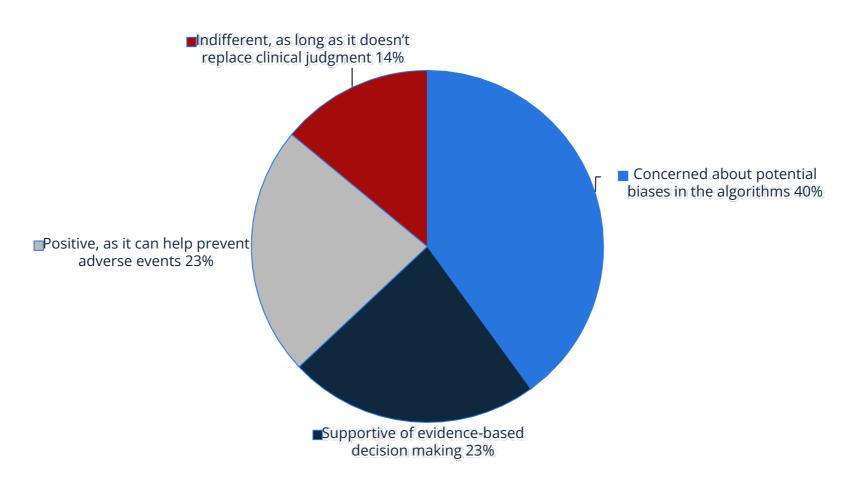
Comfort of nurses using Al in the U.S. 2024





### Distribution of nurses' views on Al-based predictive analytics for patient outcomes in the United States in 2024

Nurses' views on Al-based predictive analytics for patient outcomes in the U.S. 2024

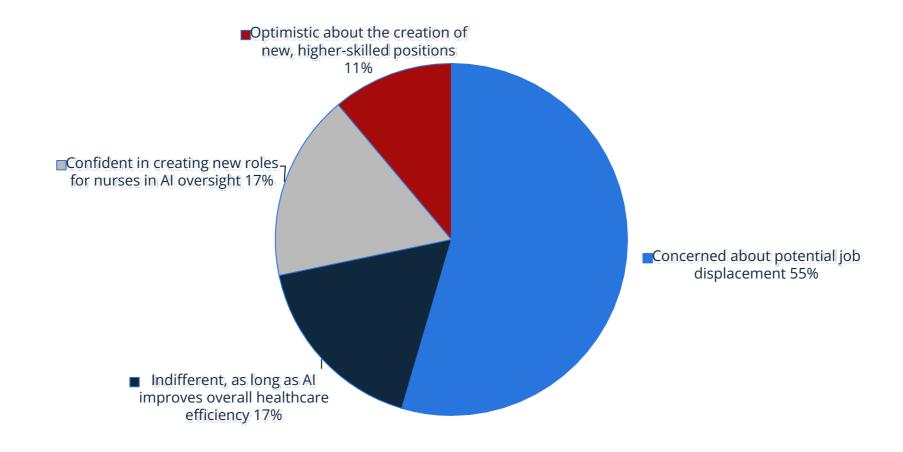




Source(s): Cross Country Healthcare

## Share of nurses who expressed the following perceptions of AI on long-term job security in the United States in 2024

Nurses' perception of AI on long-term job security in the U.S. 2024

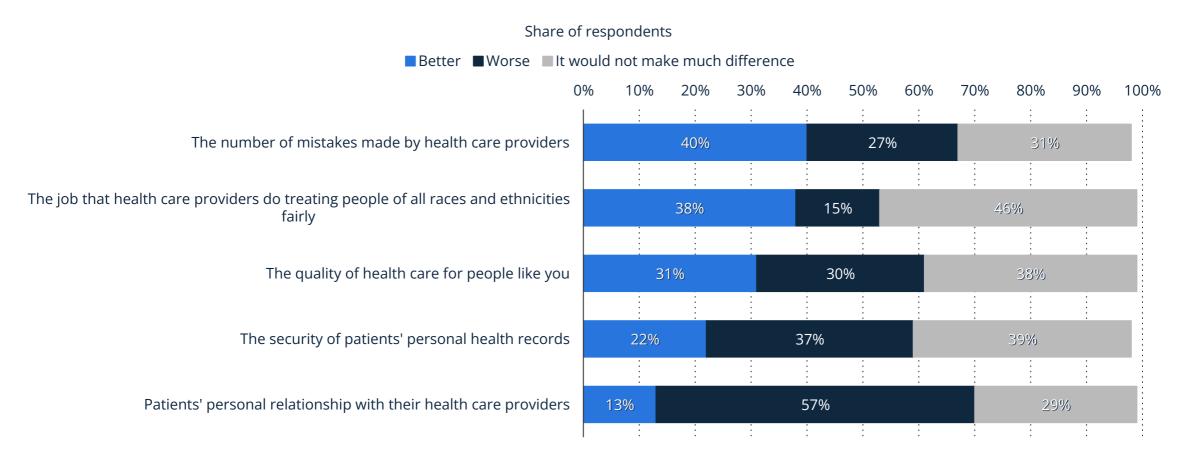




Source(s): Cross Country Healthcare

#### Distribution of views regarding the effect of AI on the select aspects of healthcare in the United States in 2022

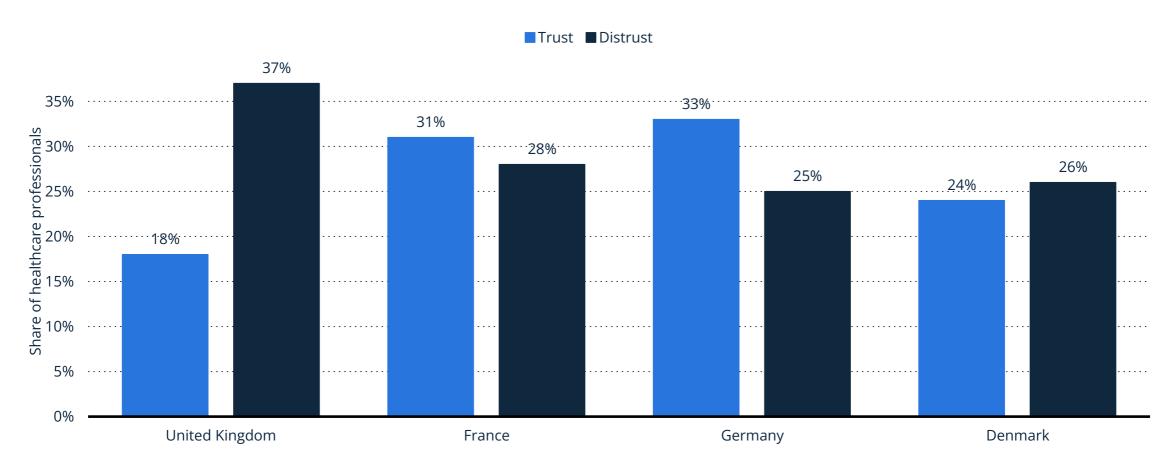
Views regarding the effect of AI on select aspects of healthcare in the U.S. 2022





## Share of health professionals who trust and distrust AI in healthcare in Denmark, France, Germany, and the United Kingdom as of 2024

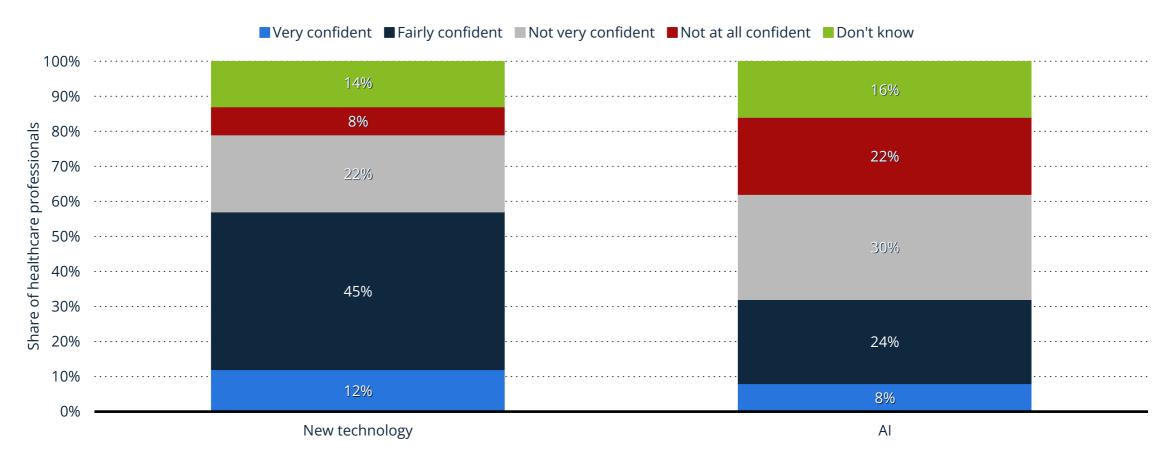
Trust in Al among healthcare professionals in Europe 2024, by country





## Distribution of confidence in using a new technology and AI in healthcare among health professionals in Denmark, France, Germany, and the United Kingdom as of 2024

Confidence of HCPs to use AI and other new tech in healthcare in Europe 2024



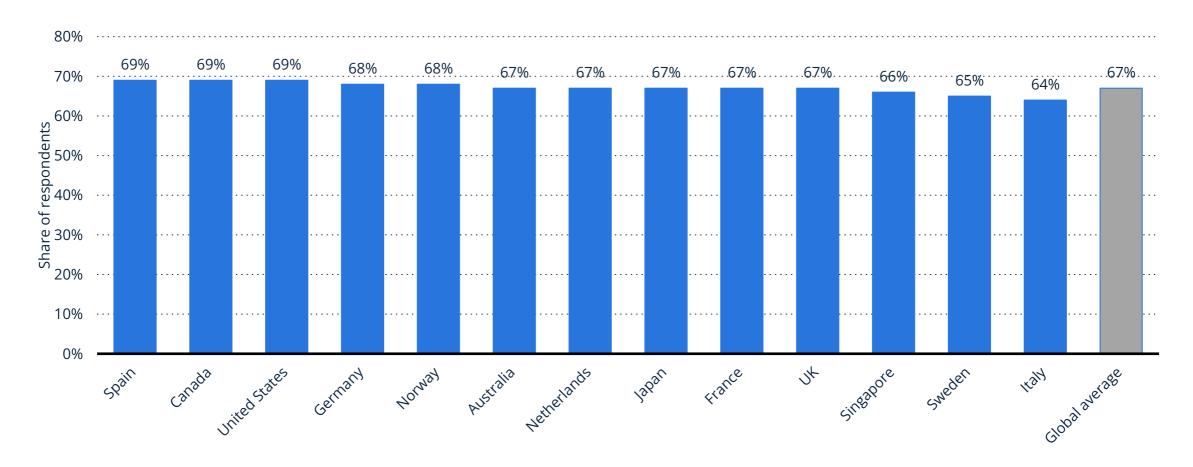


**CHAPTER 05** 

#### Patients' views on Al

## Share of consumers worldwide who believed that medical opinions or suggestions from generative AI would be helpful as of 2023, by selected countries

Consumers who trust medical advice from generative AI worldwide in 2023, by country

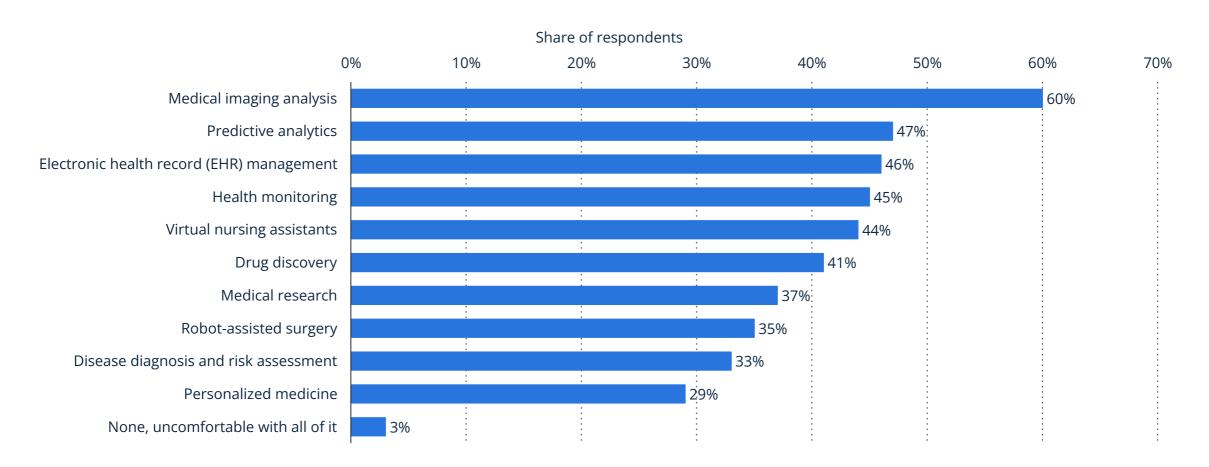




Source(s): Capgemini

### Share of adults comfortable with AI in selected medical activities in the United States as of 2024

Share of adults comfortable with AI in medical activities in the U.S. 2024

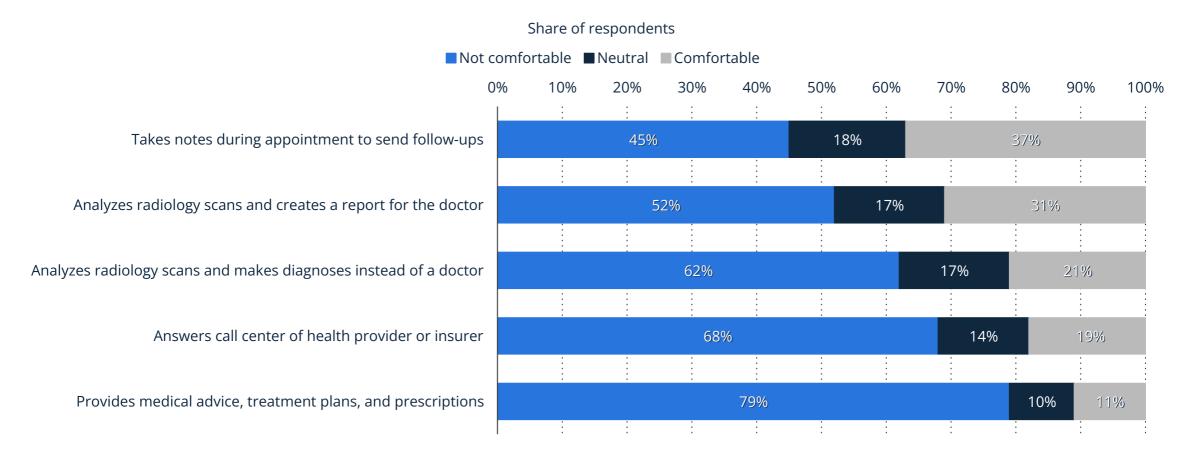




Source(s): Innerbody Research

## Share of patients indicating following levels of comfort with generative Al healthcare applications in the United States in 2024

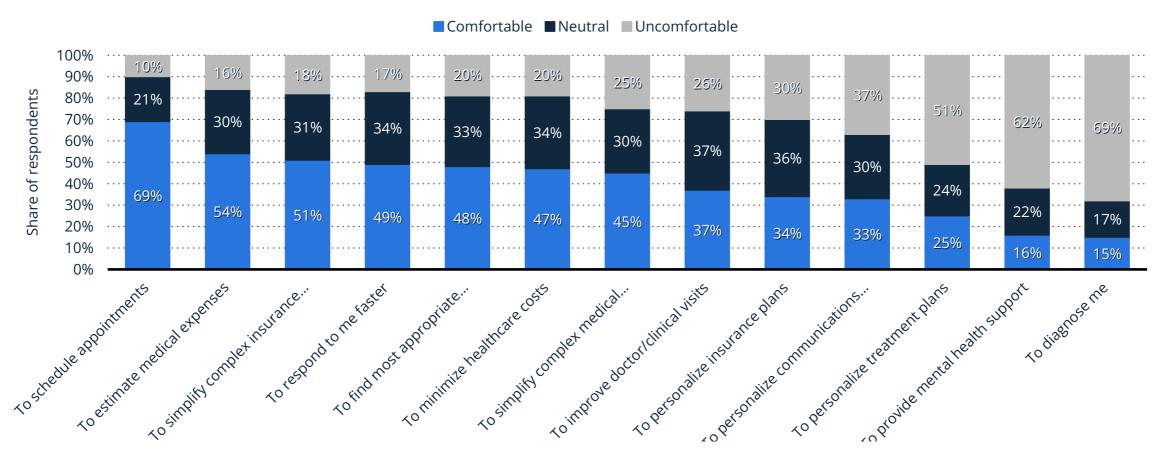
Share of patients comfortable with gen AI application in the United States in 2024





### Distribution of comfort level of adults with the use of artificial intelligence in healthcare in the United States in 2024

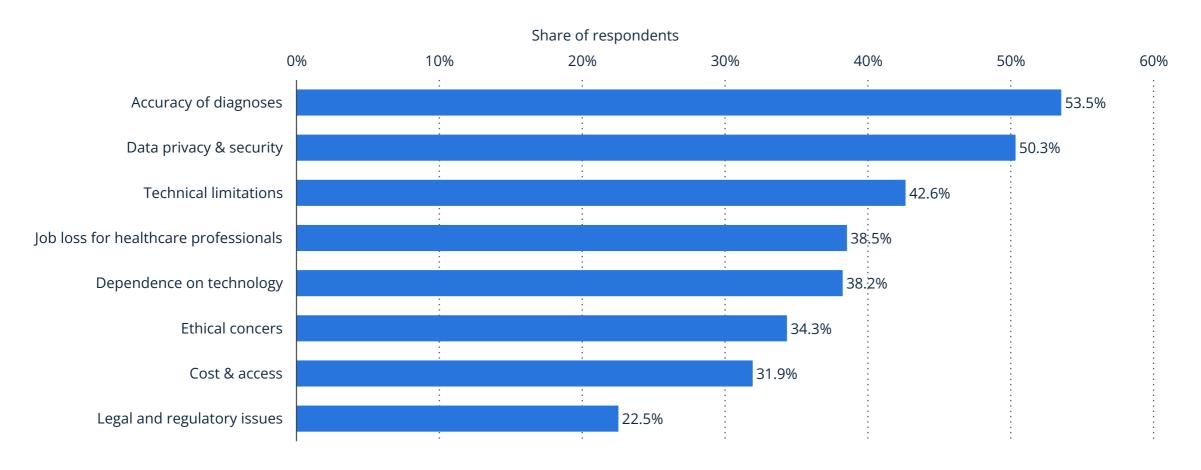
Comfort level of U.S. adults with using artificial intelligence in healthcare 2024





## Share of adults with following concerns about the use of AI in healthcare in the United States in 2024

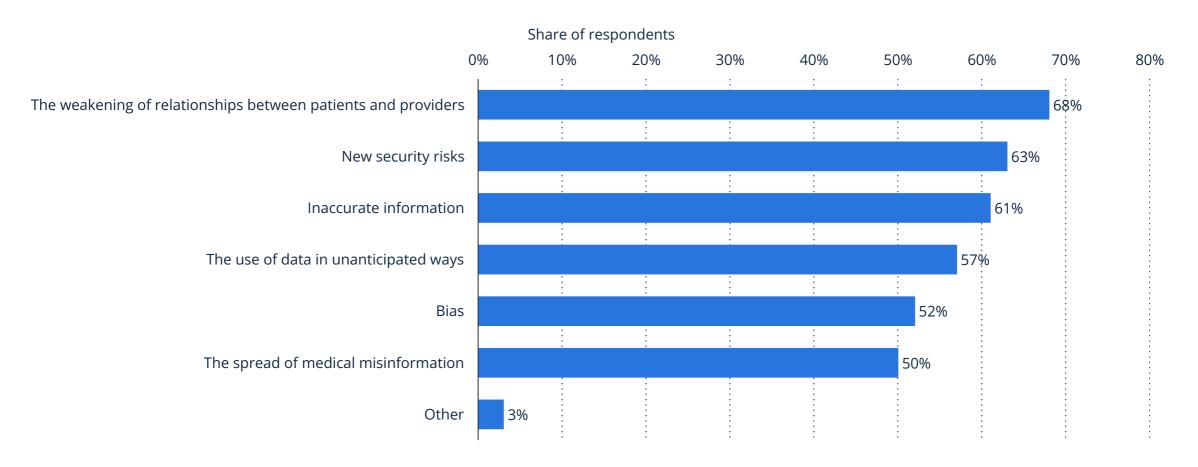
Top concerns about the use of AI in healthcare in the United States in 2024





#### Concerns of adults with the use of artificial intelligence in healthcare in the United States in 2024

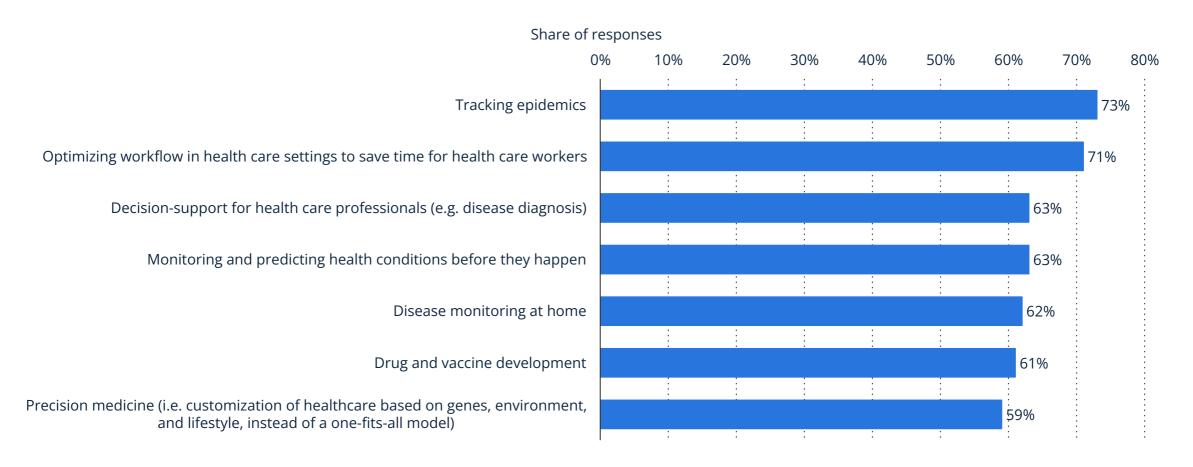
Concerns of U.S. adults with the use of artificial intelligence in healthcare in 2024





## Share of people who were comfortable with various uses of AI within the health care system in Canada in 2023

Comfort levels with various uses of AI in health care system in Canada in 2023



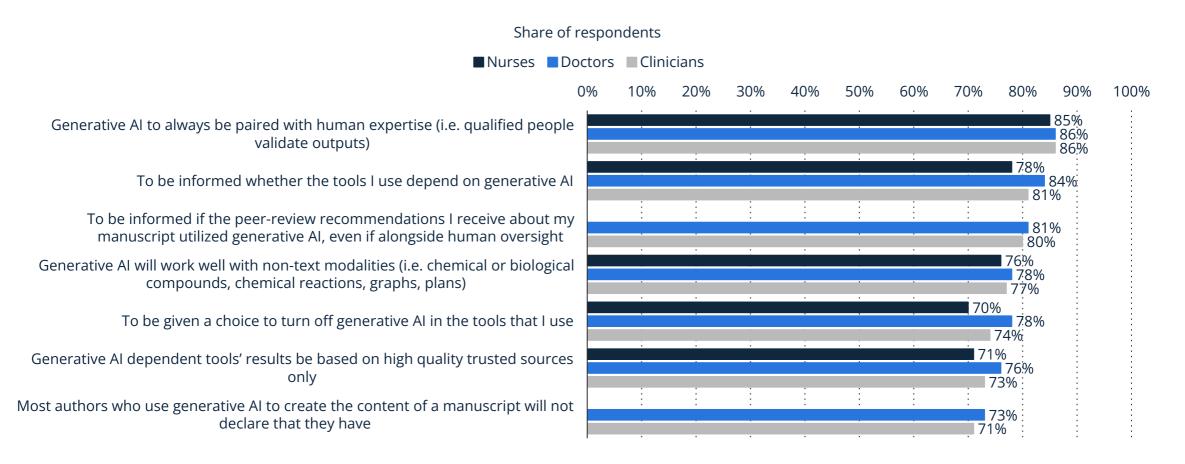


**CHAPTER 06** 

#### Future of AI in healthcare

## Share of clinicians who expect AI to be used in the following ways in healthcare worldwide in 2024

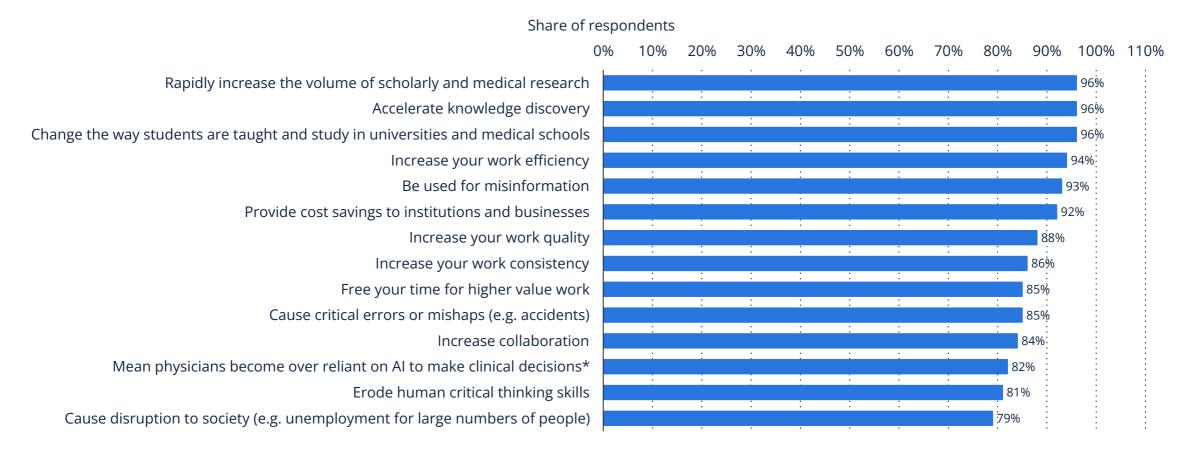
Expectations of clinicians regarding AI use in healthcare worldwide in 2024





# Share of clinicians who expect AI use in healthcare to have the following positive or negative impacts worldwide in 2024

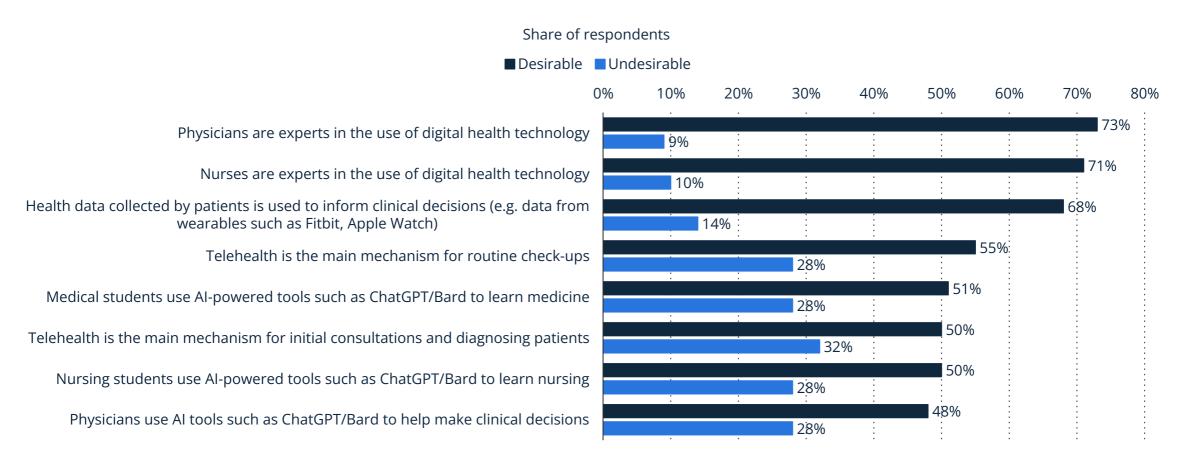
Expectations of clinicians regarding AI impact in healthcare worldwide in 2024





## Share of clinicians globally who believe the following expectations regarding healthcare in the coming years are desirable or not as of 2023

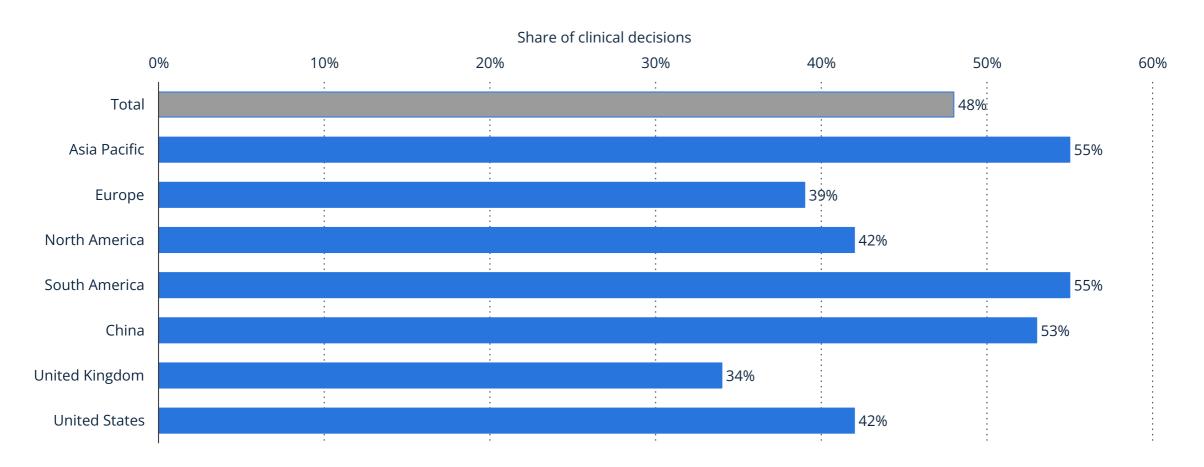
Clinicians' opinions on desirable features of healthcare in future worldwide 2023





## Share of clinicians who believed the future use of AI tools such as ChatGPT/Bard to make clinical decisions would be desirable as of 2023, by region/country

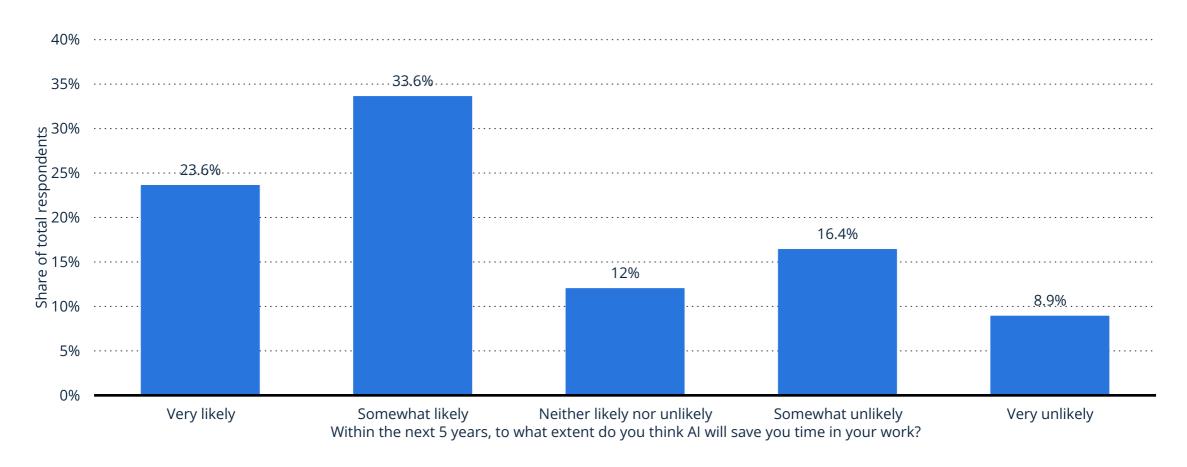
Clinicians' opinions on the desirability of ChatGPT/Bard use in future 2023





# Distribution of thoughts of NHS staff on the time-saving potential of Al in the United Kingdom as of 2024

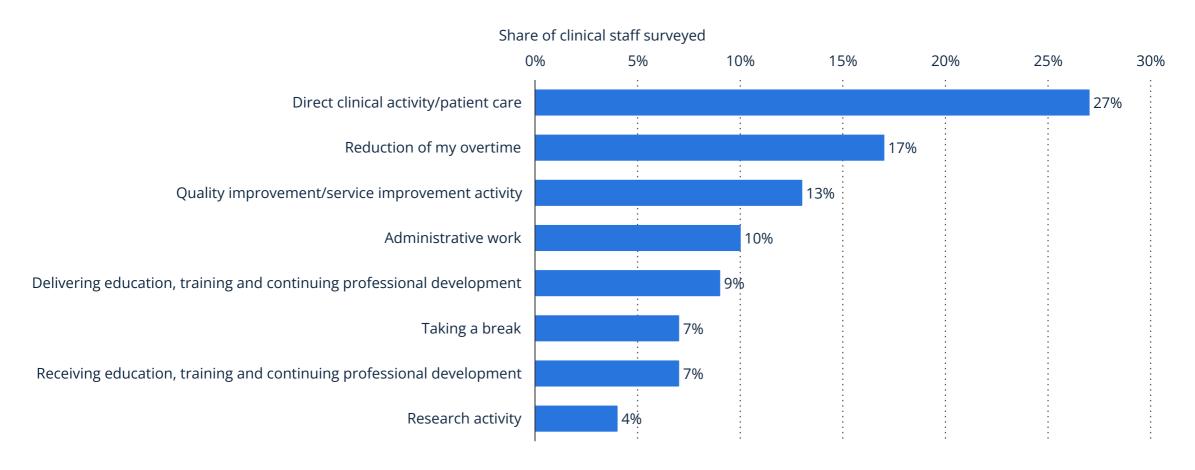
Perception of NHS staff on the time-saving potential of AI in the UK 2024





#### How clinical staff would use one hour of time freed up by technology in the United Kingdom (UK) as of 2024

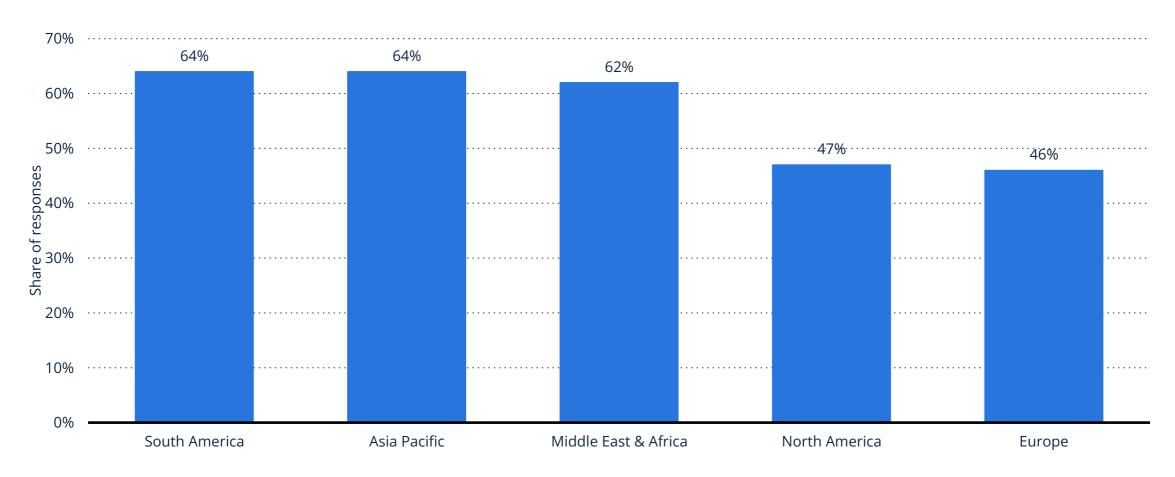
How clinical staff would use time freed up by technology in the UK 2024





### Share of clinicians who believed in ten years' time the majority of their decisions will be based on support tools that utilize artificial intelligence (AI) as of December 2021, by region

Clinicians' who believed clinical decisions will be based on AI by 2031, by region





#### Sources

Bain & Company

BIS Research

Canada Health Infoway

Capgemini

**CB** Insights

Corti

Cross Country Healthcare

Elsevier

**Gradient Flow** 

Health Foundation

Innerbody Research

John Snow Labs

McKinsey & Company

Pew Research Center

Roland Berger

Salesforce.com

Software Advice

WHO

YouGov

