

5g In Healthcare Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Hardware, Services), By Application (Remote Patient Monitoring, Connected Medical Devices, AR/VR, Connected Ambulance, Asset Tracking), By End Use (Healthcare Providers, Healthcare Payers, Other), By Region & Competition, 2021-2031F

<https://marketpublishers.com/r/581E99CE4504EN.html>

Date: January 2026

Pages: 182

Price: US\$ 4,500.00 (Single User License)

ID: 581E99CE4504EN

Abstracts

The Global 5G in Healthcare Market is projected to expand from USD 310.21 Million in 2025 to USD 494.73 Million by 2031, registering a CAGR of 8.09%. This market encompasses the utilization of fifth-generation cellular technology to enable sophisticated medical applications, such as telesurgery and remote patient monitoring, by leveraging high-speed data transmission and ultra-low latency. Key drivers propelling this sector include the urgent need for scalable remote care solutions, the handling of immense volumes of medical data, and the drive for operational efficiency within healthcare systems. Supporting these economic benefits, CTIA reported in 2024 that 5G-driven innovation within the United States healthcare sector generated annual cost savings of \$305 billion, indicating a fundamental structural shift toward connected health ecosystems rather than fleeting trends.

Conversely, market growth faces substantial hurdles, primarily due to the significant capital expenditures needed for network infrastructure and the rigorous data security protocols required to safeguard patient privacy. Furthermore, regulatory inconsistencies across various jurisdictions hinder the smooth integration of these technologies. These obstacles demand considerable upfront investment and strict compliance measures,

potentially delaying the broad implementation of 5G solutions, notwithstanding their ability to transform the healthcare industry.

Market Driver

A major force driving the Global 5G in Healthcare Market is the rapid growth of telehealth and remote consultation services, which necessitate ultra-low latency networks to facilitate high-definition video consultations and real-time monitoring, especially in isolated areas. As providers work to close the health equity gap, 5G supplies the essential bandwidth to extend specialist care beyond traditional facilities. Ericsson projected that global 5G subscriptions would hit 2.3 billion in 2024, establishing the digital infrastructure needed for these systems. Reinforcing this trend, the 'Future Health Index 2024' report by Philips in June 2024 noted that 32% of global healthcare leaders view virtual care as a means to extend specialist services to underserved communities, allowing health systems to sustain patient engagement regardless of geography.

The increasing demand for the real-time transmission of massive medical data files also accelerates adoption, particularly as diagnostics produce large datasets that overwhelm legacy networks. Pathology departments rely heavily on 5G to instantly transmit high-resolution scans for analysis, a capability essential for AI-driven diagnostics where processing speed directly influences clinical results. For instance, Huawei's February 2024 'Medical Technology Digitalization Solution' announcement highlighted that 5G infrastructure at Ruijin Hospital enabled simultaneous access to 1,000 pathological sections within a second, increasing retrieval speeds by 80 times. Such progress illustrates how 5G removes data bottlenecks, fostering collaboration and enabling the practical use of precision medicine tools.

Market Challenge

The strict data security protocols required to ensure patient confidentiality pose a significant barrier to the growth of the Global 5G in Healthcare Market. Because 5G technology drastically increases the number of connected endpoints via the Internet of Medical Things (IoMT), it inadvertently broadens the attack surface for cyber threats. Consequently, healthcare providers must constantly assess and strengthen their defenses rather than prioritizing aggressive network expansion. This defensive stance retards the integration of advanced connectivity solutions, as the liability risks associated with compromising sensitive medical records are too severe to overlook.

The severity of this threat is directly linked to the cautious pace of market adoption, as health systems facing persistent cyber risks divert resources toward compliance and protection instead of innovation. In 2024, the American Hospital Association reported that the healthcare sector filed 592 regulatory reports regarding data breaches, impacting roughly 259 million Americans. This high frequency of security incidents underscores the industry's hesitation to fully adopt open, connected ecosystems without first implementing exhaustive, and frequently costly, protective measures.

Market Trends

The adoption of private 5G networks for secure and dedicated smart hospital infrastructure is rising as a crucial trend to overcome the security and reliability limitations of public networks. Private 5G grants healthcare institutions full control over bandwidth allocation, ensuring uninterrupted connectivity for mission-critical equipment such as robotic surgical tools and life-support systems. This approach enables hospitals to isolate sensitive patient data from general network traffic, directly reducing cybersecurity risks linked to the growing number of connected devices. Supporting this shift, Nokia's January 2025 'Financial Report for Q4 and Full Year 2024' confirmed the company had secured 850 private wireless customers globally, indicating strong growth in enterprise connectivity solutions for high-demand sectors like healthcare.

Concurrently, the convergence of high-bandwidth 5G networks with artificial intelligence for predictive diagnostics is revolutionizing clinical decision-making. High-speed 5G connectivity permits the real-time transmission of complex physiological data to AI engines, facilitating immediate analysis and predictive alerts without latency issues. This integration powers advanced applications, including generative AI models that help clinicians instantly synthesize patient histories, evolving beyond mere data transmission to intelligent, real-time interpretation. Highlighting this strategic focus, the 'Future Health Index 2024' report by Philips in June 2024 revealed that 85% of healthcare leaders globally are currently investing in or planning to invest in generative AI technologies to bridge the gap between massive data generation and actionable clinical insights.

Key Market Players

AT&T Intellectual Property

Verizon

China Mobile International Limited

Quectel

Telit Cinterion

TELUS International

Huawei Technologies Co., Ltd.

Cisco Systems, Inc.

Orange

NEC Corporation

Report Scope

In this report, the Global 5G in Healthcare Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

5G in Healthcare Market, By Component

Hardware

Services

5G in Healthcare Market, By Application

Remote Patient Monitoring

Connected Medical Devices

AR/VR

Connected Ambulance

Asset Tracking

5G in Healthcare Market, By End Use

Healthcare Providers

Healthcare Payers

Other

5G in Healthcare Market, By Region

North America

United States

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia Pacific

China

India

Japan

Australia

South Korea

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global 5G in Healthcare Market.

Available Customizations:

Global 5G in Healthcare Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

Contents

1. PRODUCT OVERVIEW

- 1.1. Market Definition
- 1.2. Scope of the Market
 - 1.2.1. Markets Covered
 - 1.2.2. Years Considered for Study
 - 1.2.3. Key Market Segmentations

2. RESEARCH METHODOLOGY

- 2.1. Objective of the Study
- 2.2. Baseline Methodology
- 2.3. Key Industry Partners
- 2.4. Major Association and Secondary Sources
- 2.5. Forecasting Methodology
- 2.6. Data Triangulation & Validation
- 2.7. Assumptions and Limitations

3. EXECUTIVE SUMMARY

- 3.1. Overview of the Market
- 3.2. Overview of Key Market Segmentations
- 3.3. Overview of Key Market Players
- 3.4. Overview of Key Regions/Countries
- 3.5. Overview of Market Drivers, Challenges, Trends

4. VOICE OF CUSTOMER

5. GLOBAL 5G IN HEALTHCARE MARKET OUTLOOK

- 5.1. Market Size & Forecast
 - 5.1.1. By Value
- 5.2. Market Share & Forecast
 - 5.2.1. By Component (Hardware, Services)
 - 5.2.2. By Application (Remote Patient Monitoring, Connected Medical Devices, AR/VR, Connected Ambulance, Asset Tracking)
 - 5.2.3. By End Use (Healthcare Providers, Healthcare Payers, Other)

- 5.2.4. By Region
- 5.2.5. By Company (2025)
- 5.3. Market Map

6. NORTH AMERICA 5G IN HEALTHCARE MARKET OUTLOOK

- 6.1. Market Size & Forecast
 - 6.1.1. By Value
- 6.2. Market Share & Forecast
 - 6.2.1. By Component
 - 6.2.2. By Application
 - 6.2.3. By End Use
 - 6.2.4. By Country
- 6.3. North America: Country Analysis
 - 6.3.1. United States 5G in Healthcare Market Outlook
 - 6.3.1.1. Market Size & Forecast
 - 6.3.1.1.1. By Value
 - 6.3.1.2. Market Share & Forecast
 - 6.3.1.2.1. By Component
 - 6.3.1.2.2. By Application
 - 6.3.1.2.3. By End Use
 - 6.3.2. Canada 5G in Healthcare Market Outlook
 - 6.3.2.1. Market Size & Forecast
 - 6.3.2.1.1. By Value
 - 6.3.2.2. Market Share & Forecast
 - 6.3.2.2.1. By Component
 - 6.3.2.2.2. By Application
 - 6.3.2.2.3. By End Use
 - 6.3.3. Mexico 5G in Healthcare Market Outlook
 - 6.3.3.1. Market Size & Forecast
 - 6.3.3.1.1. By Value
 - 6.3.3.2. Market Share & Forecast
 - 6.3.3.2.1. By Component
 - 6.3.3.2.2. By Application
 - 6.3.3.2.3. By End Use

7. EUROPE 5G IN HEALTHCARE MARKET OUTLOOK

- 7.1. Market Size & Forecast

- 7.1.1. By Value
- 7.2. Market Share & Forecast
 - 7.2.1. By Component
 - 7.2.2. By Application
 - 7.2.3. By End Use
 - 7.2.4. By Country
- 7.3. Europe: Country Analysis
 - 7.3.1. Germany 5G in Healthcare Market Outlook
 - 7.3.1.1. Market Size & Forecast
 - 7.3.1.1.1. By Value
 - 7.3.1.2. Market Share & Forecast
 - 7.3.1.2.1. By Component
 - 7.3.1.2.2. By Application
 - 7.3.1.2.3. By End Use
 - 7.3.2. France 5G in Healthcare Market Outlook
 - 7.3.2.1. Market Size & Forecast
 - 7.3.2.1.1. By Value
 - 7.3.2.2. Market Share & Forecast
 - 7.3.2.2.1. By Component
 - 7.3.2.2.2. By Application
 - 7.3.2.2.3. By End Use
 - 7.3.3. United Kingdom 5G in Healthcare Market Outlook
 - 7.3.3.1. Market Size & Forecast
 - 7.3.3.1.1. By Value
 - 7.3.3.2. Market Share & Forecast
 - 7.3.3.2.1. By Component
 - 7.3.3.2.2. By Application
 - 7.3.3.2.3. By End Use
 - 7.3.4. Italy 5G in Healthcare Market Outlook
 - 7.3.4.1. Market Size & Forecast
 - 7.3.4.1.1. By Value
 - 7.3.4.2. Market Share & Forecast
 - 7.3.4.2.1. By Component
 - 7.3.4.2.2. By Application
 - 7.3.4.2.3. By End Use
 - 7.3.5. Spain 5G in Healthcare Market Outlook
 - 7.3.5.1. Market Size & Forecast
 - 7.3.5.1.1. By Value
 - 7.3.5.2. Market Share & Forecast

- 7.3.5.2.1. By Component
- 7.3.5.2.2. By Application
- 7.3.5.2.3. By End Use

8. ASIA PACIFIC 5G IN HEALTHCARE MARKET OUTLOOK

8.1. Market Size & Forecast

8.1.1. By Value

8.2. Market Share & Forecast

8.2.1. By Component

8.2.2. By Application

8.2.3. By End Use

8.2.4. By Country

8.3. Asia Pacific: Country Analysis

8.3.1. China 5G in Healthcare Market Outlook

8.3.1.1. Market Size & Forecast

8.3.1.1.1. By Value

8.3.1.2. Market Share & Forecast

8.3.1.2.1. By Component

8.3.1.2.2. By Application

8.3.1.2.3. By End Use

8.3.2. India 5G in Healthcare Market Outlook

8.3.2.1. Market Size & Forecast

8.3.2.1.1. By Value

8.3.2.2. Market Share & Forecast

8.3.2.2.1. By Component

8.3.2.2.2. By Application

8.3.2.2.3. By End Use

8.3.3. Japan 5G in Healthcare Market Outlook

8.3.3.1. Market Size & Forecast

8.3.3.1.1. By Value

8.3.3.2. Market Share & Forecast

8.3.3.2.1. By Component

8.3.3.2.2. By Application

8.3.3.2.3. By End Use

8.3.4. South Korea 5G in Healthcare Market Outlook

8.3.4.1. Market Size & Forecast

8.3.4.1.1. By Value

8.3.4.2. Market Share & Forecast

- 8.3.4.2.1. By Component
- 8.3.4.2.2. By Application
- 8.3.4.2.3. By End Use
- 8.3.5. Australia 5G in Healthcare Market Outlook
 - 8.3.5.1. Market Size & Forecast
 - 8.3.5.1.1. By Value
 - 8.3.5.2. Market Share & Forecast
 - 8.3.5.2.1. By Component
 - 8.3.5.2.2. By Application
 - 8.3.5.2.3. By End Use

9. MIDDLE EAST & AFRICA 5G IN HEALTHCARE MARKET OUTLOOK

- 9.1. Market Size & Forecast
 - 9.1.1. By Value
- 9.2. Market Share & Forecast
 - 9.2.1. By Component
 - 9.2.2. By Application
 - 9.2.3. By End Use
 - 9.2.4. By Country
- 9.3. Middle East & Africa: Country Analysis
 - 9.3.1. Saudi Arabia 5G in Healthcare Market Outlook
 - 9.3.1.1. Market Size & Forecast
 - 9.3.1.1.1. By Value
 - 9.3.1.2. Market Share & Forecast
 - 9.3.1.2.1. By Component
 - 9.3.1.2.2. By Application
 - 9.3.1.2.3. By End Use
 - 9.3.2. UAE 5G in Healthcare Market Outlook
 - 9.3.2.1. Market Size & Forecast
 - 9.3.2.1.1. By Value
 - 9.3.2.2. Market Share & Forecast
 - 9.3.2.2.1. By Component
 - 9.3.2.2.2. By Application
 - 9.3.2.2.3. By End Use
 - 9.3.3. South Africa 5G in Healthcare Market Outlook
 - 9.3.3.1. Market Size & Forecast
 - 9.3.3.1.1. By Value
 - 9.3.3.2. Market Share & Forecast

- 9.3.3.2.1. By Component
- 9.3.3.2.2. By Application
- 9.3.3.2.3. By End Use

10. SOUTH AMERICA 5G IN HEALTHCARE MARKET OUTLOOK

- 10.1. Market Size & Forecast
 - 10.1.1. By Value
- 10.2. Market Share & Forecast
 - 10.2.1. By Component
 - 10.2.2. By Application
 - 10.2.3. By End Use
 - 10.2.4. By Country
- 10.3. South America: Country Analysis
 - 10.3.1. Brazil 5G in Healthcare Market Outlook
 - 10.3.1.1. Market Size & Forecast
 - 10.3.1.1.1. By Value
 - 10.3.1.2. Market Share & Forecast
 - 10.3.1.2.1. By Component
 - 10.3.1.2.2. By Application
 - 10.3.1.2.3. By End Use
 - 10.3.2. Colombia 5G in Healthcare Market Outlook
 - 10.3.2.1. Market Size & Forecast
 - 10.3.2.1.1. By Value
 - 10.3.2.2. Market Share & Forecast
 - 10.3.2.2.1. By Component
 - 10.3.2.2.2. By Application
 - 10.3.2.2.3. By End Use
 - 10.3.3. Argentina 5G in Healthcare Market Outlook
 - 10.3.3.1. Market Size & Forecast
 - 10.3.3.1.1. By Value
 - 10.3.3.2. Market Share & Forecast
 - 10.3.3.2.1. By Component
 - 10.3.3.2.2. By Application
 - 10.3.3.2.3. By End Use

11. MARKET DYNAMICS

- 11.1. Drivers

11.2. Challenges

12. MARKET TRENDS & DEVELOPMENTS

12.1. Merger & Acquisition (If Any)

12.2. Product Launches (If Any)

12.3. Recent Developments

13. GLOBAL 5G IN HEALTHCARE MARKET: SWOT ANALYSIS

14. PORTER'S FIVE FORCES ANALYSIS

14.1. Competition in the Industry

14.2. Potential of New Entrants

14.3. Power of Suppliers

14.4. Power of Customers

14.5. Threat of Substitute Products

15. COMPETITIVE LANDSCAPE

15.1. AT&T Intellectual Property

15.1.1. Business Overview

15.1.2. Products & Services

15.1.3. Recent Developments

15.1.4. Key Personnel

15.1.5. SWOT Analysis

15.2. Verizon

15.3. China Mobile International Limited

15.4. Quectel

15.5. Telit Cinterion

15.6. TELUS International

15.7. Huawei Technologies Co., Ltd.

15.8. Cisco Systems, Inc.

15.9. Orange

15.10. NEC Corporation

16. STRATEGIC RECOMMENDATIONS

17. ABOUT US & DISCLAIMER

I would like to order

Product name: 5g In Healthcare Market - Global Industry Size, Share, Trends, Opportunity, and Forecast, Segmented By Component (Hardware, Services), By Application (Remote Patient Monitoring, Connected Medical Devices, AR/VR, Connected Ambulance, Asset Tracking), By End Use (Healthcare Providers, Healthcare Payers, Other), By Region & Competition, 2021-2031F

Product link: <https://marketpublishers.com/r/581E99CE4504EN.html>

Price: US\$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/581E99CE4504EN.html>