



Healthcare Challenges in 2026



>10m

Healthcare worker shortfall

The World Health Organization estimates a projected shortfall of 10 million health workers by 2030

World Health Organization; OECD

>70%

of healthcare leaders cite burnout and retention as their top challenges. Nursing, primary care, and specialized clinical roles are in shortest supply.

Healthcare Workforce Outlook: 2026

"In 2026, the biggest shift in healthcare tech will be the move from AI insights to AI-driven care management."

Divendra Goya, Think AI

Rise of the Smart Hospital

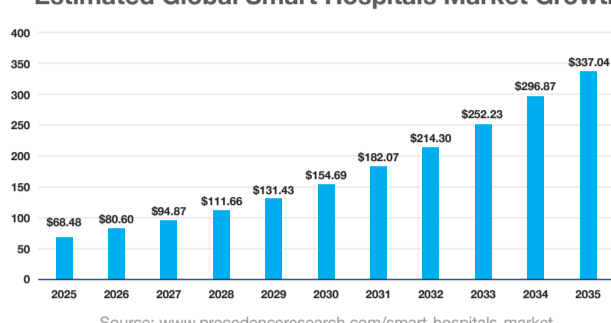
Smart Hospital: Healthcare facilities that use advanced digital technologies, AI, and the Internet of Medical Things (IoMT) to improve patient care, enhance operational efficiency, and optimize clinical workflows.

The US has an estimated 40% share of the global smart hospital market. Its market value is expected to grow at over 24% annually to reach \$119 billion by 2033.

Studies suggest that digital systems and automation can minimize errors by 30 – 50%, improving compliance and patient outcomes.

Source: Data Intelligence

Estimated Global Smart Hospitals Market Growth



AI's Growing Impact on Healthcare



AR/VR surgery, tele-robotics



Autonomous mobile robots



Continuous patient monitoring



Dynamic staffing



Point-of-care ultrasound



Virtual patient sitting

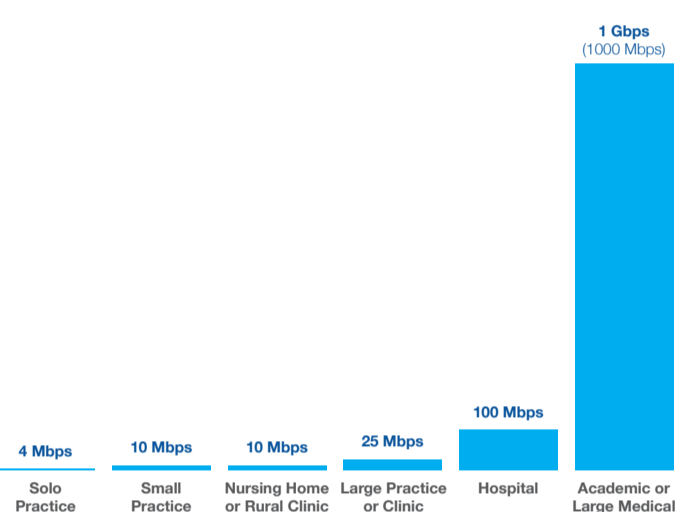
88% of healthcare organizations using AI have seen a positive ROI growth over the past 12 months.

Source: 2026 Medical Software Trends Survey

Growing Demands on Wireless Communication Networks

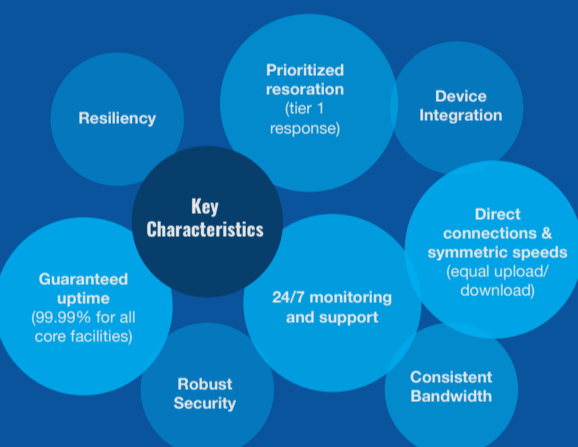
- Demands high-speed, ultra-low latency, and high-reliability performance
- Poor in-building coverage can cripple patient care
- Potential risks from weak Wi-Fi credentials
- Real-time data and monitoring create massive data flows requiring more bandwidth and consistent uptime.
- Seamless handovers needed for devices to maintain continuous connection.
- Construction materials like reinforced concrete, low-emissivity glass and energy-efficient building materials often block radio signals, creating dead zones.

Minimum Wireless Bandwidth Recommendations for Medical Facilities (Mbps)



The Shift to Medical-Grade Connectivity

To overcome the wireless challenges of today's clinical AI / smart hospital environments, more healthcare facilities are trending away from standard Wi-Fi and toward medical-grade connectivity.



Source: NCTNA

What is medical-grade connectivity?

A highly reliable, secure, and high-performance network infrastructure and communication solution designed specifically for healthcare environments. It ensures seamless, real-time, and safe data transfer between medical devices, electronic health records (EHR), and staff, meeting strict regulatory compliance (like HIPAA).

Often combines private 5G technology with CBRS services supported via an advanced distributed antenna systems (DAS) platform.

5 Reasons to Choose DAS for Medical-Grade Connectivity



1. Superior Signal Penetration

- Low-power antenna network distributes signals evenly, eliminating "dead zones" in critical areas like stairwells, elevators, and basements.
- Antennas are placed closer to users, bypassing physical obstacles that often block cell signals.



2. Multi-Carrier, Neutral Host Support

- Supports all major cellular carriers (e.g., AT&T, Verizon, T-Mobile) on a single infrastructure.
- Enables patients to connect with loved ones and online content, and care providers to better monitor and respond to improve outcomes and the patient experience.
- Clinicians deliver **more accurate care**, and patient **outcomes improve** with mobile connectivity.



3. Critical Safety & Regulatory Compliance

- Supports Emergency Responder Radio Communication Systems to ensure two-way radios work throughout the building during a crisis.
- Use of licensed frequency is less prone to the congestion and interference of unlicensed Wi-Fi bands.



4. Mission-Critical Reliability

- Direct cellular link ensures dedicated bandwidth for medical apps and public access.
- Encrypted cellular data at the carrier level secures sensitive patient data better than typical Wi-Fi.



5. Future Ready

- DAS supports new technologies, including private 5G networks, network slicing, and next-gen services.

SOLID Solutions for Any Healthcare Environment



ALLIANCE 5G DAS

Unified platform supports all major cellular carriers, private networks, public safety, two-way radio, and paging frequencies



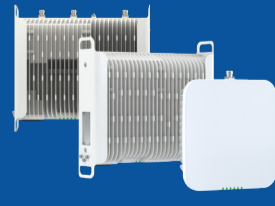
nBIU

4th Generation headend conserves valuable space, while delivering high-capacity coverage for medical campuses



edgeROU/edgeHUB

Fiber-to-the-edge, high speed, low latency to enable edge-based devices and applications



SOLID BARS

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