Cleveland Clinic deploys 5G in its newest hospital

Article



The news: Cleveland Clinic tapped Verizon Business to build a private 5G network into its newest hospital, Cleveland Clinic Mentor Hospital, which is scheduled to open in July 2023. It's the first US hospital to be built with this technology.

- The hospital will have four operating rooms, 19 emergency beds, 34 inpatient rooms, and imaging facilities.
- Cleveland Clinic's main hospital in Cleveland is ranked fourth on Newsweek's list of World's
 Best Smart Hospitals 2023, behind Mayo Clinic, Massachusetts General Hospital, and Johns





Hopkins Hospital.

Use cases that Cleveland Clinic and Verizon are exploring for Mentor Hospital include:

- Patient check-in kiosks
- Enhanced digital displays
- In-room infotainment for patients
- Asset tracking
- AR/VR adoption for clinician education, patient education, assisted surgery, and imaging

What makes a hospital smart? It takes many technologies to form the foundation of a smart hospital. The most important ones are:

- The internet of things (IoT), the ecosystem of internet-connected sensors and devices that generate, collect, analyze, and transmit data from wearables and remote patient monitoring devices.
- Artificial intelligence (AI) and automation. Smart hospital solutions use AI to capture and process information, then build automation around the data.
- Data analytics that provide insights into clinician performance, improving the patient experience, clinical volumes, financial health, and other operational factors.
- Cloud technologies to secure and support the many data-intensive applications.
- Next-generation networks like 5G (and eventually 6G) to facilitate this digital transformation.

5G networks enable better use of technologies already in place in most hospitals, like:

- Electronic health record (EHR) systems and patient portals.
- Telehealth and telemedicine platforms, as well as virtual nursing.
- Robotics for tasks like disinfection, surgery, medication delivery, and care support.

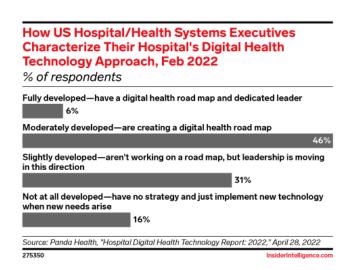
Why it matters: The role of the hospital is changing rapidly, thanks to technological advances, financial pressures, and shifting patient behaviors. Smart hospital executives will deploy 5G networks to adapt to these new realities.



- Precision medicine, same-day surgeries, and remote patient monitoring devices have virtually eliminated the need for oncology wards and other inpatient services, thus reducing the need for many hospital beds.
- Payers are pushing for value-based care, which can be costly for hospitals that lack insight into clinicians' performance, patient outcomes, and costs.
- Patients are choosing lower-cost care venues like urgent care and retail health clinics for the convenience—and because some insurers require it.

Our take: The hospital of the future will be small by today's standards (under 100 inpatient beds) but its digital infrastructure will enable better care coordination, patient engagement, and outcomes. But there's still a long way to go to get to the future.

Go deeper with The State of 5G report.



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