

amdocs private wireless network solution for healthcare organizations

Network connectivity is a critical aspect of the healthcare IT infrastructure. As organizations introduce new connected medical and IoT devices into their digital environments, they need secure and reliable networks to interact with information more quickly and allow their practitioners to spend more time interacting with patients.

Since such devices must constantly communicate with the network, they cannot function properly without consistent and reliable network connectivity. The network must support devices that provide critical services, and enable them to do so in a rapid manner. Yet failed or slow connections remain all too common in healthcare environments, placing the ability to provide real-time continuous care across long-term care facilities, ambulatory clinics and hospitals, as well as remote care, at risk.

To enable connected devices to support the required level of healthcare, the following network challenges must be addressed:

- **Network security:** Healthcare organizations must ensure their systems are protected from vulnerabilities that leave them open to data theft. The Health Insurance Portability and Accountability Act (HIPAA) provides strict rules for handling healthcare data. Advancing network technology and the role of IT in HIPAA are crucial in keeping electronic personal healthcare information secure on the network layer
- **Reliable connectivity:** Healthcare providers are constantly increasing the number of connected devices on their network. Every new device increases the probability of congestion and latency if not scaled properly. Organizations are responsible for working with their IT departments to ensure apps and devices are always available and that they have the right network to support the increasing number of devices
- **Wi-Fi coverage:** Even the most advanced medical facilities can be plagued by blockage of critical signals and areas with weak or no cellular or Wi-Fi connectivity. Older facilities constructed of concrete, as well as those not originally built with wireless access in mind, present especially difficult challenges

Private LTE/5G networks – more viable than Wi-Fi

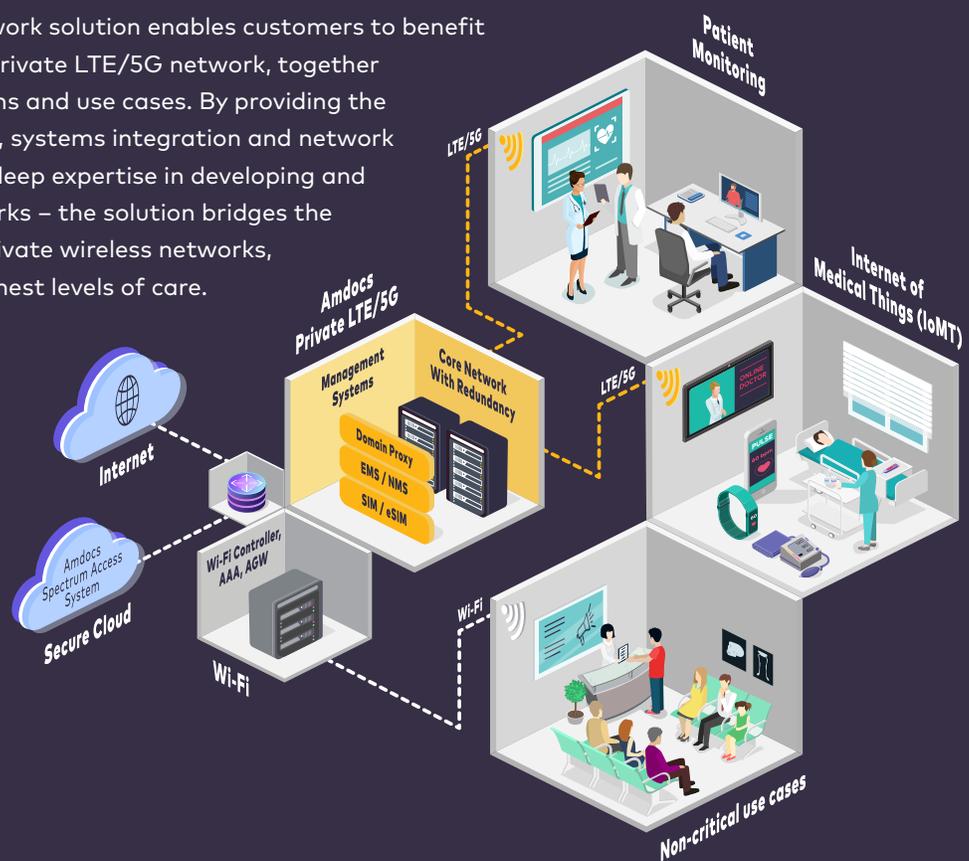
While healthcare IT leaders often defer to Wi-Fi for a secure network, a private LTE/5G network can also provide high security with its 3GPP security standards, which are used in modern cellular infrastructure to ensure compliancy with HIPAA requirements. Numerous use cases can be achieved cost-effectively through a secure private LTE/5G network, with the advantage of ensuring lower latency and high reliability. The ability to deploy such networks has significantly improved due to the convergence of several factors:

- **Shared wireless spectrum** via CBRS in the United States (with numerous countries adopting similar models)
- **Proven providers** of network engineering services and solutions with end-to-end “blueprints” and practices for network design, rollout (including integration), testing and operations
- **Reliable, secure yet cost-effective enterprise-focused private LTE/5G network components**
- **Expanded open ecosystem** for RAN and core network components, such as Telecom Infra Project (TIP), Open RAN (O-RAN)
- **5G standards/technology** such as network slicing and edge computing

Even so, private LTE/5G networks raise many challenges and complexities that need to be dealt with across the full lifecycle of tailoring, rolling out and operating a private LTE/5G network.

Partner with Amdocs for this journey

Amdocs Private Wireless Network solution enables customers to benefit from all the advantages of a private LTE/5G network, together with its health care applications and use cases. By providing the necessary hardware, software, systems integration and network services – combined with our deep expertise in developing and building secure, reliable networks – the solution bridges the worlds of healthcare IT and private wireless networks, enabling you to deliver the highest levels of care.



Amdocs Private Wireless Network solution covers:

- **Technology consulting and planning/design services:** Investigation and analysis of use cases; specification of requirements and evaluation/selection of wireless network technologies and solutions; end-to-end engineering services covering planning and design
- **Spectrum Allocation:** FCC-approved SAS administration service for CBRS, which provides several capabilities such as radio frequency channel allocation and interference protection; interoperability with all FCC-certified CBRS device and domain proxy manufacturers, with seamless analytics and reporting; multiple payment options (pay-as-you-go model, CAPEX model with Amdocs combined solutions and customized commercial arrangements)
- **End-to-end systems integration:** Includes support for network components (RAN, core, SAS) plus software and integration support for workflow, orchestration, inventory, automation (including 5G slice management), policy management (PCRF) and converged charging; software-powered automation for faster and more efficient rollout
- **End-user device management:** Comprehensive eSIM management platform for end-user and M2M devices; supports activation, error handling/remediation, profile inventory and system health management
- **Network operations:** Full portfolio of network management solutions, including network assurance, NOC operations, triage and SLA management, and optimization – all based on advanced network monitoring and analytics tools

Experience the benefits of private LTE/5G with Amdocs

Amdocs' private wireless network deployments enable healthcare organizations to realize the following benefits:

- **More reliability:** CBRS-based private LTE/5G networks enable more reliable wireless service as the number of users, devices and services increase
- **Better coverage than Wi-Fi:** LTE/5G can handle more dynamic environment changes compared to Wi-Fi. Private LTE with CBRS is ideal for coverage in large enterprises, with higher power specifications and handoff capabilities that enable nodes to deliver service over a longer range
- **Support for current and new applications:** Network requirements for use cases and applications must be considered before designing the network. Amdocs can help design the right network to support use cases such as reliable voice/data, asset tracking, healthcare IoT devices, applications for patient monitoring, and outdoor connectivity, as well as futureproofing networks for new use cases
- **Affordable cost of ownership:** Amdocs' end-to-end private network solution spans from design to hardware procurement to deployment and operations with automation. With one vendor managing multiple components within the network, cost savings are passed to the customer, resulting in a more affordable total cost of ownership

Learn more

To learn more about how Amdocs' private network solutions can help healthcare organizations, visit

[Open Wireless Networks](#)