Broadband connectivity for field hospitals and temporary care centers

Rapidly deployable LTE connectivity will help provide the much needed broadband connectivity for field hospitals and temporary care centers set up in an emergency to face the COVID-19 pandemic.

The COVID-19 pandemic is spreading across the globe and governments must quickly deploy field hospitals and temporary care centers to face the dramatic increase in patients that need treatment. To be fully operational and coordinated with other medical centers, these emergency locations need robust connectivity that can be provided very quickly by the Nokia Digital Automation cloud solution.
Customer challenges

To face the rapidly rising numbers of people who are affected by COVID-19 and need urgent care, governments need to very quickly erect hospitals to increase the capacity of beds that can host patients in hard-hit geographical areas.

As in any hospitals, these temporary medical care centers need dedicated connectivity to support critical services and to be fully operational. Field hospitals will need to support services such as:

- Connection of medical equipment deployed throughout the new facility
- Telemedicine/consultation between the primary hospital and the remote facility
- Remote access to hospital care information systems
- Inter-personnel and care professional communications
- Patient-nurse communications and alert systems
- Eventually family and friend communications with patients.

Technology to support field hospitals will need:

- Broadband to support high-density, multimedia communications
- Robust and mission-critical services to guarantee communications between medical systems
- Mobility, for personnel moving within the hospital
- Easy and quick deployment and maintenance, as installation must happen in a few hours or days
- Easy integration with existing care information system of the primary hospital
- Ease of dismantling once the epidemic is over.

How can Nokia help?

Nokia is providing rapidly deployable LTE systems, which allow quick deployment of a mobile broadband network for a campus-sized site. This solution answers the requirements of a temporary field hospital with:

- 4.9G/LTE technology providing mobile broadband communications with differentiated quality of service management to guarantee that critical communications from medical equipment always have the highest priority
- Fast deployment (less than 1 hour), requiring no expert skills on-site to get the network up and running
Use Case

Broadband connectivity for field hospitals and temporary care centers

- Ease of management on-site through a simple web interface, with sophisticated network management tasks performed remotely
- Connection to existing healthcare applications (for remote monitoring of patients) used by the hospital quickly activated through an edge cloud server.

The solution can also come with devices to interconnect medical equipment and staff, applications such as group communications to offer medical personnel immediate access to essential voice and video group communication services, or drones for logistic and site monitoring or indoor positioning to track the position of all the medical equipment.

Nokia in China

- In Wuhan, China, where the COVID-19 pandemic started, the Chinese government decided to build a temporary hospital in a few days to handle the huge number of patients infected by the virus.
- In just 2 days, Nokia deployed, in collaboration with China Telecom, a new 5G mobile network to provide ultra-broadband connectivity to the newly built hospital.
- Beyond medical care center connectivity, the network was used to remotely follow up its construction with HD cameras, as subject matter experts were not allowed to come on site.
How governments will benefit

• In less than an hour a field hospital can get the connectivity needed for equipment, personnel and patients, regardless of location and access to internet connectivity.

• Mission-critical communications resiliency through a broadband 4.9G network that provides the reliability and security expected for life critical services.

Contact us

Contact your sales representative to learn how our private wireless solutions for field hospitals can help you address an emergency.

For more information on our solutions for public safety, visit: nokia.com/networks/industries/public-safety