

5G TELEMEDICINE

5G ENABLED XR FOR TELEMENTORING

5G technology offers massive capacity connections and fast speeds that are poised to transform healthcare delivery.

Our Booz Allen 5G team has implemented specific use cases for telemedicine that leverage the 5G capabilities of Ultra-Reliable Low-Latency Communications (URLLC) and Enhanced Mobile Broadband (eMBB). These emerging technologies enable the extension of operational medical expertise forward beyond existing boundaries and can integrate other advanced technologies—such as augmented reality (AR), virtual reality (VR), and mixed reality (MR), together with automated data analytics—to enhance support for mobile forces in operational and austere environments or anywhere medical expertise is required.

Our 5G AR capability leverages the ability of 5G to provide access to high-quality virtual telementoring using AR technology to overlay 3D digital content on physical space in real time.

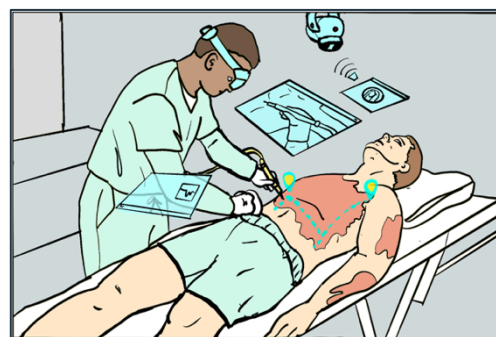
Combined with physiological data collected from sensors, high-definition video, digital medical images, and electronic health records, the AR telementoring capability provides the remote medical provider with the enhanced clinical situational awareness necessary to further augment the care delivered on-site by the in-person provider.

Network-Aware Mobile Medic Solution

Medics and first responders using a telemedicine application need to know they can rely on the technology without concerns over fluctuating connectivity. Understanding that a myriad of conditions can impact network performance, Booz Allen has partnered with Shabodi, a network-aware enablement platform, to develop the Mobile Medic application to provide a secure and reliable communication channel between first responders and remote experts for real-time medical guidance.

Mobile Medic runs on a first responder's phone or smart device, reducing system complexity and expediting access to resources and support. The solution can dynamically modify and request quality of service (QoS) in real time, ensuring reliable and high-speed connectivity for critical communication. This capability can be extended to a wide range of use cases and medical situations, where life-saving applications require minimum network bandwidth and latency for optimal functionality.

Shortening the time from injury to diagnosis and treatment enabled by these technologies helps to optimize the “golden hour” of casualty care in environments where conditions and circumstances interfere with existing paradigms of transport and evacuation. This in turn measurably decreases casualty morbidity/mortality and improves outcomes.



About Booz Allen

Trusted to transform missions with the power of tomorrow's technologies, Booz Allen Hamilton advances the nation's most critical civil, defense, and national security priorities. We lead, invest, and invent where it's needed most—at the forefront of complex missions, using innovation to define the future. We combine our in-depth expertise in AI and cybersecurity with leading-edge technology and engineering practices to deliver impactful solutions. Combining more than 100 years of strategic consulting expertise with the perspectives of diverse talent, we ensure results by integrating technology with an enduring focus on our clients. We're first to the future—moving missions forward to realize our purpose: Empower People to Change the WorldSM.

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