

## SOLUTION BRIEF

# Augmented Reality for Healthcare

Overcoming the challenges of medical device support is of high importance for healthcare providers. The impact of unnecessary downtime, scheduling difficulties involved with service, lack of sufficient medical devices expertise and skills, and need for improved regulatory compliance are factors driving requirements for more effective support and maintenance for medical devices of all types.

## Key Challenges

### Device Availability

Struggle to stay current with maintenance schedules, recovering from product failure and overcoming improper device handling.

### In House Support

The in-house Health Technology Management (HTM) team does not always have the appropriate experience, documentation or must wait for a technician to arrive.

### Certification Efficiency

Equipment users are being asked to perform complex and important calibrations and maintenance with little technical aptitude. Annual device certification requirements for vendors and healthcare providers require availability of experienced resources.

### Device Complexity

Technician attrition coupled with long learning curves due to ever increasing complexity of the equipment, as well as the propagation of more med tech devices.

## Meet CareAR

CareAR is an augmented reality (AR) visual support platform that enables Healthcare IT staff or medical equipment technicians to receive remote, real-time assistance and guidance from offsite experts and local self-solve and self-learning via their mobile device, tablet, or smart glasses.

## Benefits for Health Providers:



### Expert Access

Augmented reality remote assistance makes more frequent efficient contact with experienced support to reduce mishandling and improve maintenance



### Training Effectiveness

Remote assist and augmented reality self-solve guidance immersively engages HTM professionals with increased comprehension



### Regulatory Compliance

Captures maintenance processes and procedures and digitally records compliance in servicing medical devices and equipment



### Cost Savings

Access to more effective remote assistance and self-learning speeds results, lowering operational costs and increasing paid uptime use rates, along with increased visibility, tracking, and forecasting

## CareAR® Assist

CareAR's Assist is a visual AR solution for remote troubleshooting—think of it as an extra pair of eyes that enables see-what-I-see support combined with real-time graphical guidance overlaid within each user's device field of view. CareAR applies computer vision to map the target medical system, enabling annotated guidance to be anchored in place. As a result, direction is contextually tuned to each remote assist session with graphical guidance accurate placement ideal for complex medical device interactions.

## CareAR® Instruct

Instruct boosts self-solve and self-learning for HTM staff with step-by-step augmented reality graphical guidance. Hotspot focus engages users with contextual graphical guidance overlaid on actual medical device objects within each user's smartphone or wearable device field of view.

Additional video and 2D content with Instruct natural language search effectiveness enables users to self-tailor step-by-step direction for their optimal learning style with supplemental content from the medical facility or device manufacturer.

## Technical Requirements

mobile	iOS 11 or later (requires ARKit) Android 10.0 or later (requires ARCore)
desktop	Windows and MacOS (intel)
smart glasses	Android 8 or later (includes Google Glass, Lenovo, Realwear)
network	Automatic video adaptation to optimize experience over WiFi or Mobile Data
data encryption	AES 256-bit

## Features



### 3D Spatial Mapping

Locks guidance in place supporting complex medical devices



### Personalized

Immersively engages users with contextual graphical direction



### Enterprise cloud platform

Built for scale on a global infrastructure for easy integration



### ServiceNow Integration

Integrate and extend AR for ServiceNow digital workflows within ITSM, FSM, and CSM

## Results Include:

### Increased Uptime

HTM on-site technicians gain immediate access to medical device vendor experts who provide graphical guidance contextually tailored for each issue

### Efficient Support

Medical device vendors can reduce the need to dispatch technicians by up to 50% with real-time graphical direction from remote experts

### Complexity Resolved

Remote expert augmented reality assistance enables healthcare field technicians to resolve challenging issues 10% - 25% faster

# Resolve Issues Remotely With Enterprise Augmented Reality

Schedule a demo at [CareAR.com/demo](https://carear.com/demo)