



**Exploring how Augmented Reality Can Optimize TeleCollaboration
And Expand Access To Care And Support For The Armed Forces**

Collaboration

Augmented reality (AR), something that was just a concept, an idea in the mind of humans is now a powerful tool with the potential to completely transform healthcare. The world is not new to innovations, because innovation has always been at the core of human progress. The purpose of innovation is to ameliorate, make lives healthier, and worth living.



In this era of technological breakthroughs, OpticSurg is on a mission to innovate and optimizing healthcare delivery, and empowering healthcare workers on the frontline. OpticSurg is transforming healthcare by integrating AR and artificial intelligence (AI) to revolutionize remote medical collaboration.

By constructing a solution with the input of those who understand the nuances of patient care, ensures that the technology addresses real-world needs and provides tangible improvements to healthcare delivery, Vision Beyond™ is a software platform created by providers, for providers as a way to collaborate remotely. Vision Beyond™ is OpticSurg's proprietary smart glasses-enabled, augmented reality-enhanced Telecollaboration Software platform.

Through Vision Beyond™ the person at bedside can communicate with a remote expert in real time to more efficiently initiate point of care and minimizing delays. Essentially, allowing the remote expert to be virtually present and supporting the healthcare giver at bedside in a meaningful fashion. And it allows for real-time collaboration using voice, video, and annotation.



“The success of this study underscores Vision Beyond™’s potential to transform battlefield medicine and other high-stakes operational environments by granting frontline medics instant access to specialized expertise”.

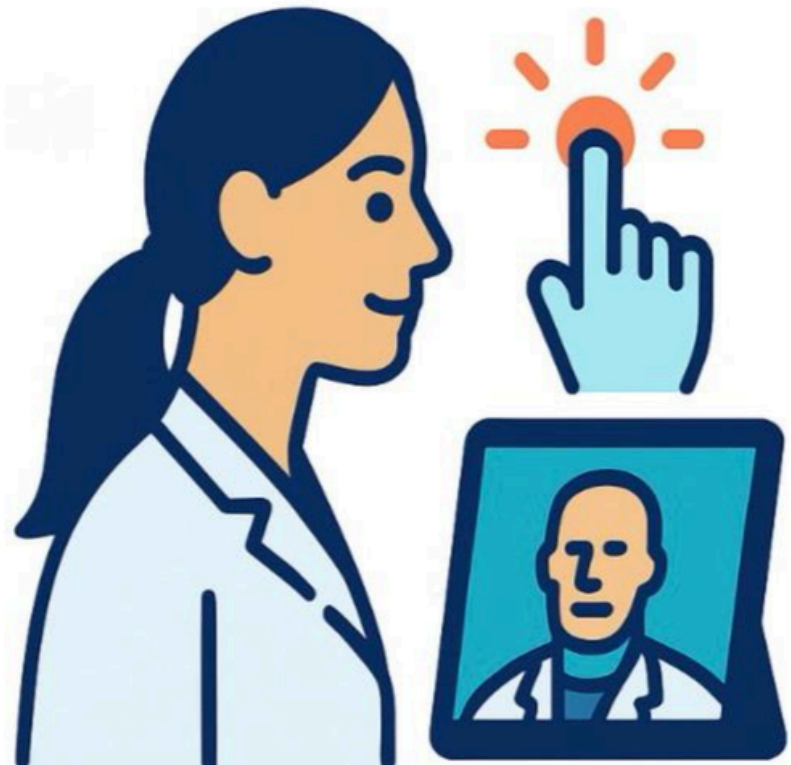
This white paper explores the transformative impact of Vision Beyond™, including its pioneering military collaboration and its potential to improve healthcare outcomes and workflows in various industries. By bridging the gap between expertise and location, OpticSurg is setting new standards in healthcare delivery.



This white paper also highlights OpticSurg's transformative impact, including a significant collaboration with Dr. Flavia C. Soto, MD, FACS, Battalion Surgeon, and Navy Commander, exploring ways to enhance healthcare for military personnel. Vision Beyond™ keeps setting new standards for innovation and efficiency by demonstrating its potential to optimize care delivery across borders in healthcare by enabling hands-free, real-time support.

Limited access to specialized expertise, delayed responses time, and inefficient workflows are just a few of the significant challenges in healthcare systems, which contribute to widespread struggles within the industry. These hurdles hinder the delivery of timely, quality care. OpticSurg's Vision Beyond™ platform directly tackles these issues by enabling remote collaboration through augmented reality, providing real-time support from experts to frontline healthcare workers, and improving patient care efficiency.

This solution bridges the gap between knowledge and location, allowing healthcare professionals to optimize care delivery in critical settings.



Military Collaboration Case Study

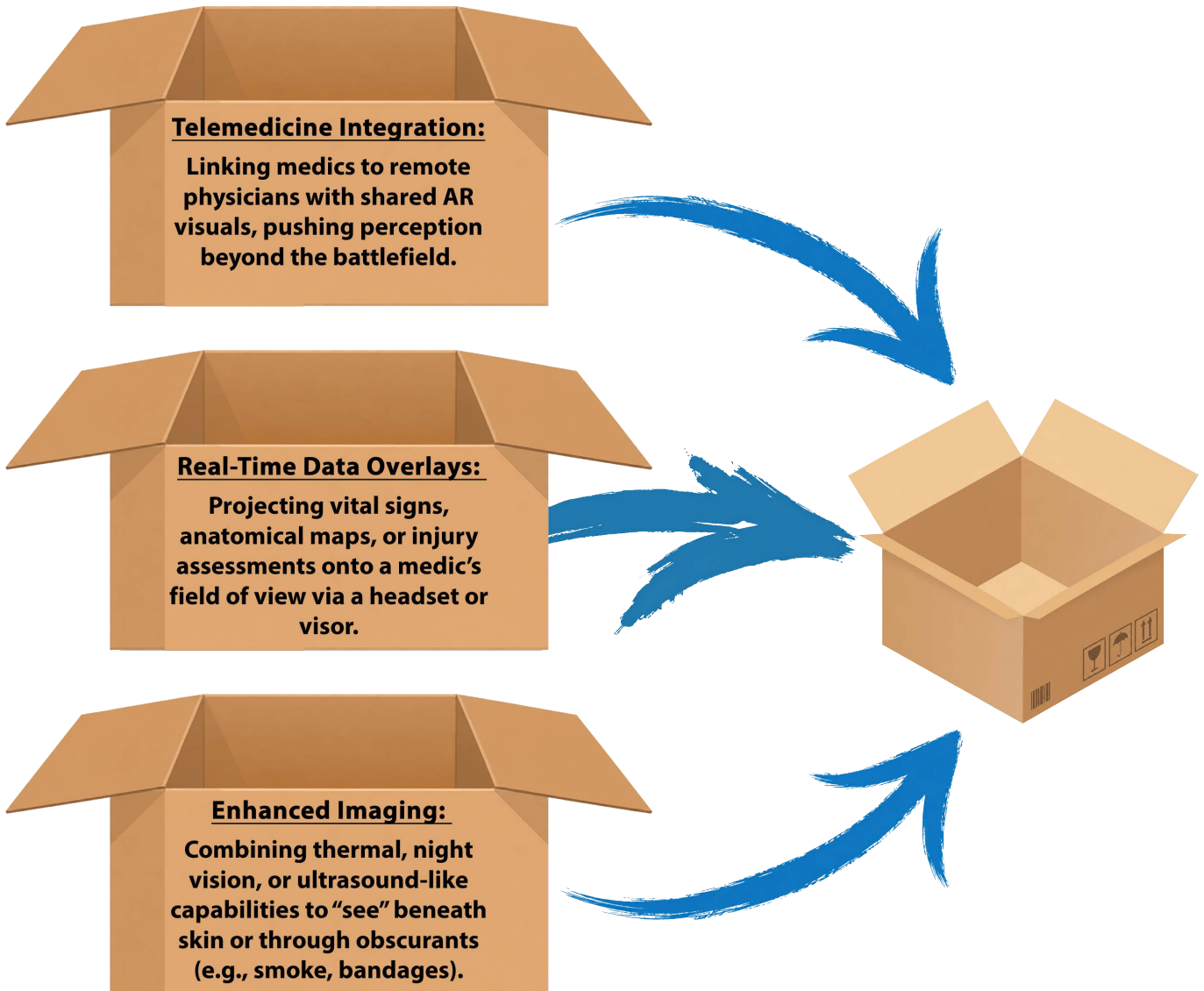
OpticSurg's Vision Beyond platform feasibility has been actively tested in military settings, demonstrating its ability to enhance remote medical collaboration in various environments. Recently, a confidential feasibility study was conducted with Dr. Flavia C. Soto, MD, FACS, Battalion Surgeon, and Navy Commander, alongside Corpsman, to evaluate the platform's effectiveness during deployment training abroad. The study was structured into three critical phases, each assessing different aspects of Vision Beyond™'s capabilities.

- **PHASE 1:** OpticSurg team, Corpsman, and Dr. Soto tested the onboarding process and connectivity technology. The findings confirmed that Vision Beyond™ was easy to onboard and use, while connectivity played a crucial role in enabling real-time interactions.
- **PHASE 2:** focused on simulation and pre-deployment preparation, where OpticSurg team, Corpsman, and Dr. Soto tested Vision Beyond™ in simulated remote medical support scenarios. The results demonstrated the platform's versatility and effectiveness across a range of remote support situations.
- **PHASE 3:** Corpsman utilized Vision Beyond™ smart glasses during real-time deployment training abroad, while Dr. Soto provided remote support from the U.S. This phase validated the platform's ability to enable seamless communication across borders, enhancing real-time medical support, optimizing collaboration, and providing critical remote assistance in austere environments. The success of this study underscores Vision Beyond™'s potential to transform battlefield medicine and



other high-stakes operational environments by granting frontline medics instant access to specialized expertise.

Envision "Vision Beyond™" as a futuristic Augmented Reality enhanced system tailored for military medics, integrating advanced sensors, imaging, and data overlays to extend perception and decision-making in high-stakes environments. It might feature:



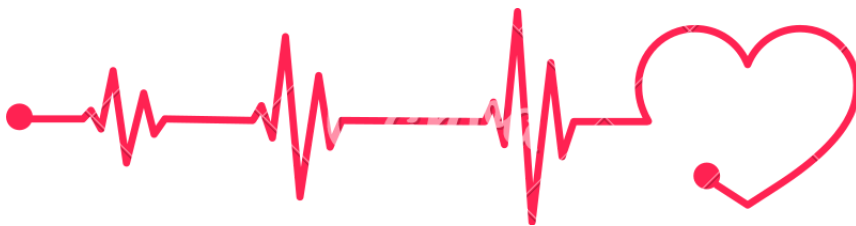
Providing critical remote assistance in austere environments.

Tactical Combat Casualty Care (TCCC)

- **Internal Visualization:** Medics could use AR to overlay a soldier's pre-deployment anatomical scan (e.g., from CT or MRI) onto their body, revealing internal injuries, like a ruptured spleen or shrapnel path, without invasive tools. Imagine a medic spotting a hidden bleed in a dusty firefight, beyond what eyes alone can see.
- **Step-by-Step Guidance:** AR could display animated overlays for procedures (e.g., tourniquet application, cricothyrotomy), guiding medics through chaos when memory falters.

Field Diagnostics

- **Vital Sign Monitoring:** The system might project pulse, oxygen levels, or blood pressure directly onto the patient, pulled from wearable sensors, letting medics assess status without fumbling for devices, extending awareness beyond manual checks.
- **Wound Assessment:** Using AI-driven imaging, it could highlight infection risks or tissue damage depth, giving medics a "beyond-surface" view to prioritize care.



Remote Surgery and Telementoring

- **Shared Vision:** A medic in a forward position could wear "Vision Beyond™" goggles, streaming their AR-enhanced view to a surgeon stateside. The surgeon could annotate the display—marking where to cut or clamp—extending expert insight beyond physical presence.
- **Austere Environments:** In remote ops with no evac, medics could perform complex interventions (e.g., chest tube insertion) under AR guidance, seeing "beyond" their training limits.

Training Simulation

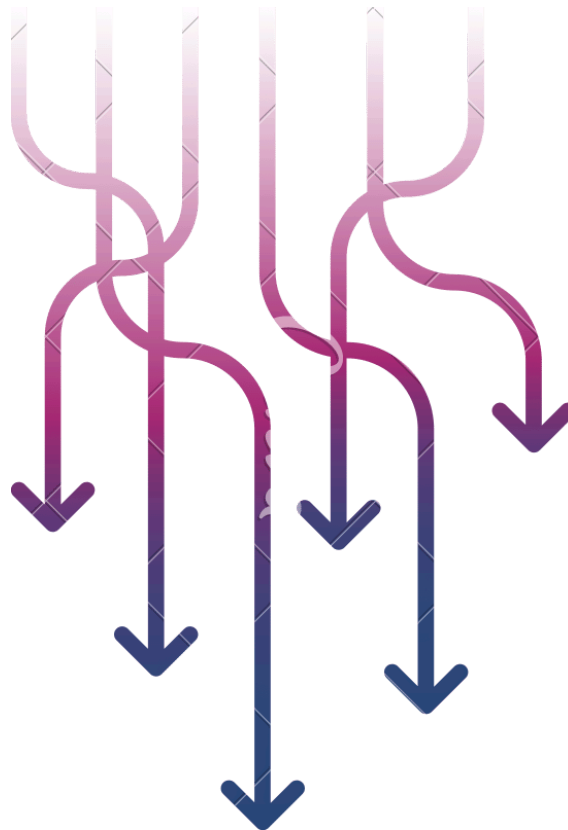
- **Realistic Scenarios:** Trainees could practice on AR overlays of virtual wounds projected onto mannequins or live actors, simulating internal anatomy changes (e.g., collapsing lungs) beyond static models.
- **Pre-Deployment Prep:** Medics could study a squad's unique anatomical avatars, preparing for real injuries with a "beyond-standard" understanding of their team.

Evacuation and Triage

- **Priority Marking:** AR could tag casualties with color-coded overlays (e.g., red for critical), visible to all medics, speeding decisions beyond verbal chaos.
- **Navigation Aid:** Medics could see evac routes or landing zones projected in their view, ensuring care continues beyond line-of-sight obstacles.

Applications Beyond the Military

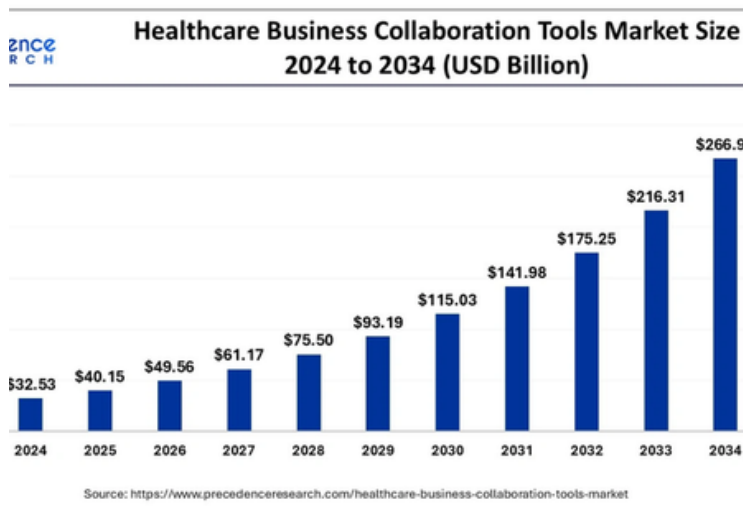
While the military collaboration demonstrates Vision Beyond™'s potential in critical care, the platform's capabilities extend far beyond defense applications. In healthcare settings, it streamlines communication in emergency rooms, intensive care units, and remote clinics, allowing real-time expert assistance. Vision Beyond™ can also revolutionize medical training, offering immersive, hands-on experiences for students and professionals. Additionally, the platform's remote collaboration tools have applications in industries like manufacturing and education, where they enhance operational efficiency and reduce costly errors. Research highlights the growing importance of remote collaborative care, particularly in managing chronic diseases and improving healthcare efficiency. A study published in the *Journal of Clinical Pharmacology and Therapeutics* found that telehealth solutions significantly enhance access to medical expertise, especially in underserved areas, by reducing patient transfers and improving healthcare outcomes.



Market Opportunity for Vision Beyond™ in Healthcare Collaboration Tools

According to Precedence Research, the global healthcare business collaboration tools market is experiencing rapid growth. The market is projected to grow at a Compound Annual Growth Rate (CAGR) of 23.43% between 2025 and 2034, which highlights a substantial opportunity for innovative solutions like OpticSurg's Vision Beyond™. As healthcare systems increasingly shift toward integrated, real-time collaboration, technologies that optimize remote communication and workflow management are primed to lead the charge.

This advancement coordinates with the increasing demand for telecollaboration tools that facilitate seamless communication between healthcare professionals, particularly in settings with limited access to specialized expertise. Vision Beyond™'s innovative AR platform directly addresses these needs by enabling hands-free, real-time collaboration between healthcare providers. By tapping into this rapidly expanding market, OpticSurg is positioning Vision Beyond™ to become a transformative solution for healthcare providers worldwide, capitalizing on a growing demand for efficient and accessible care delivery.



Surgeon, Biomedical Engineer, Innovator, Inventor, and Entrepreneur with extensive leadership experience in transformative Healthcare Technology, biotechnology Augmented Reality, Artificial Intelligence, Digital Health, NanoTechnology, RadioFrequency Ablation, DNA Technology, Medical Device, and Tissue Engineering.
 — Dr. Tran Tu Huynh, President & Founder, OpticSurg



Dr. Soto collaborates with OpticSurg Inc., a health tech company, to explore and advance Vision Beyond, a proprietary, patented Augmented Reality (AR), enhanced Telecollaboration Platform designed to improve clinical decision-making and real-time surgical consultation. Her leadership and service continue to inspire innovation in delivering high-quality care, especially for military service members.



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