

Operational Highlight

EXMED

*Transforming Medical Operations
Through Connected Technology*

The Core Challenge

Military and expeditionary medical teams often operate in remote and high-pressure environments where reliable access to patient information is critical. Existing medical systems were not always designed to work effectively in disconnected or resource-constrained conditions, making it difficult for care teams to securely access, share, and maintain medical records across operational settings. As a result, providers sometimes had to rely on manual processes and disconnected systems, increasing the risk of delayed information, duplicated efforts, and gaps in continuity of care for deployed service members, hindering the Military Health System's ability to maintain a complete, accessible, and integrated health record for deployed service members.

Concept Plus' Specific Role


Through the EXMED C4IT contract, Concept Plus serves as the prime contractor supporting the Defense Health Agency (DHA) and Navy PMS 408 in modernizing expeditionary medical operations. Concept Plus designed, engineered, integrated, and delivered two fully configured EXMED C4IT prototypes supporting distributed Naval and Joint medical operations afloat and ashore.

The solution integrates critical operational and clinical platforms including JOMIS OpMed CDP, MHS GENESIS Theater, BATDOK J, and Theater Blood Mobile within a secure, hardened architecture engineered for interoperability across expeditionary medical environments. Designed for deployment afloat EPF FLT II class ships or to be brought ashore and in forward operational settings, the platform enables secure connectivity across CANES, MEDCOI, NIPRNET, and SIPRNET while supporting resilient performance in DDIL conditions.

What Made Our Approach Unique

Concept Plus implemented a segmented Zero Trust network architecture supported by cloud synchronized, virtualization, ruggedized mobile hardware, standardized software baselines, and automated configuration management to streamline deployment, sustainment, and in theater system updates with minimal operational disruption. The effort also included full lifecycle engineering, RMF accreditation support, testing, training, and sustainment documentation to support long term operational readiness and future EXMED modernization phases. CP also delivered the capability to enable near "Zero Touch" deployment through the development of a Cloud to Edge to distribution process and automated configuration setup reducing the training burden and time to maintain capabilities in austere environments.

Mission Impact

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- **Modernized expeditionary medical documentation and continuity of care** from point of injury through all Roles of care
 - **Repeatable deployment profile for C4IT requirements** that can be procured, built, and delivered to Navy and other Services requiring **large scale data center capability** at the edge via a MIL standard small form factor and delivery package
 - **Reduced mission disruption** through resilient architecture and streamlined in theater system sustainment
 - **Improved interoperability** across medical, logistics, and command systems in distributed operational environments
 - **Enhanced operational readiness** with secure, reliable access to critical medical systems in DDIL conditions
 - **Reduced technical and integration risk for future expeditionary medical modernization efforts** as capability was designed to scale and support future software capability needs including **AI/ML at the edge**