

IMPACTS PROJECT

'Optimizing the use of soft-sided medical shelter systems as a Hospital Expansion Solution (HXS) to increase patient care capacity during surge events'



Contact

Would you like more information regarding our project?



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IMPACTS PROJECT

MEDICAL
Shelter System
Utilization

Interdisciplinary Collaboration

The Improving Modular Patient Admission Capacity Through Scalable Solutions (IMPACTS) Project, implemented by the University of California, Davis, is funded under the National Disaster Medical System (NDMS) Modular/Convertible Capability Pilot, under the direction of the Defense Health Agency (DHA) as the technical and administrative sponsor. The project has sourced and tested various modular, scalable, joint military-civilian patient care facilities, which may be utilized to quickly expand hospital inpatient capacity during patient surge events.



Diversified Partnerships

Given the possibility of supply chain constraints for soft-sided structures and component parts, especially during a national emergency – we are working alongside five medical shelter vendors to determine the interoperability of each shelter system, along with their relevant functional components.

This will allow for the creation of a fully functional patient care space utilizing products from different vendors, thus mitigating the effect of disruptions during inventory shortages.



Comprehensive Solutions



Determining Functional Capacity

Compiling experiential and real-world data ranging from pharmaceutical and equipment lists, to electrical and fuel consumption measurements, in order to create tools for future use and reference.



Testing and Demonstrating Interoperability

Planning and executing hands-on testing and demonstration events to determine the functionality and interoperability of various medical shelter systems.



Documenting Vital Resources

- Developing a **Shelter System Interoperability Guide**, which will serve as the go-to resource for managing hospitals seeking to utilize a soft-sided hospital expansion solution from different vendors in the case of an emergency surge event.
- Building **Simulation Models** to predict the effect of patient surge on hospital capacity and determine how the utilization of a HXS may impact relevant operational metrics.

