

NDMS Pilot Program: Enhancing Capacity, Capability, and Interoperability across the NDMS Definitive Care Network

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Today's Objectives

1. Provide an overview of the NDMS Pilot Program
2. Share insights from current efforts to build military-civilian partnerships that enhance medical surge response
3. Define future opportunities for stakeholder engagement with the NDMS Pilot Program



Figure 1. Seal of the NDMS

Agenda

1. The NDMS Pilot Program Overview
2. Insights on Military-Civilian Partnerships
3. Future Opportunities

What is the NDMS

The NDMS is a federally coordinated system that augments the nation's ability to respond to medical surges from domestic disasters or military contingencies.

The NDMS coordinates a seamless continuum of care, including patient evacuation, medical response, and definitive medical care via a 1600 civilian health care facilities network.

Since its establishment in 1984, the U.S. has activated the NDMS definitive care network to assist in over 300 disasters and emergencies, but there has **never been an activation at full-scale**. The subject of the NDMS Pilot Program is this full-scale activation scenario.



Figure 2. The NDMS is a partnership between the U.S. Departments of Health and Human Services (HHS), Defense (DoD), Homeland Security (DHS), and Veterans Affairs (VA).

Afghanistan Evacuation (Aug 2021)

Number of people evacuated:

- 124,334

Number of flights:

- 778 flights — 387 U.S. military and 391 non-U.S. military

Average per flight:

- 160 people

Number of U.S. citizens evacuated:

- “More than 5,500” (President Biden, Aug. 31)



Figure 3. U.S. Afghanistan evacuees depart a U.S. Air Force C-17 Globemaster III

<https://www.washingtonpost.com/politics/2021/09/02/afghan-evacuation-war-by-numbers/>
<https://www.flickr.com/photos/cne-cna-c6f/51403332261> (Public Domain)

Hurricane Maria 2017

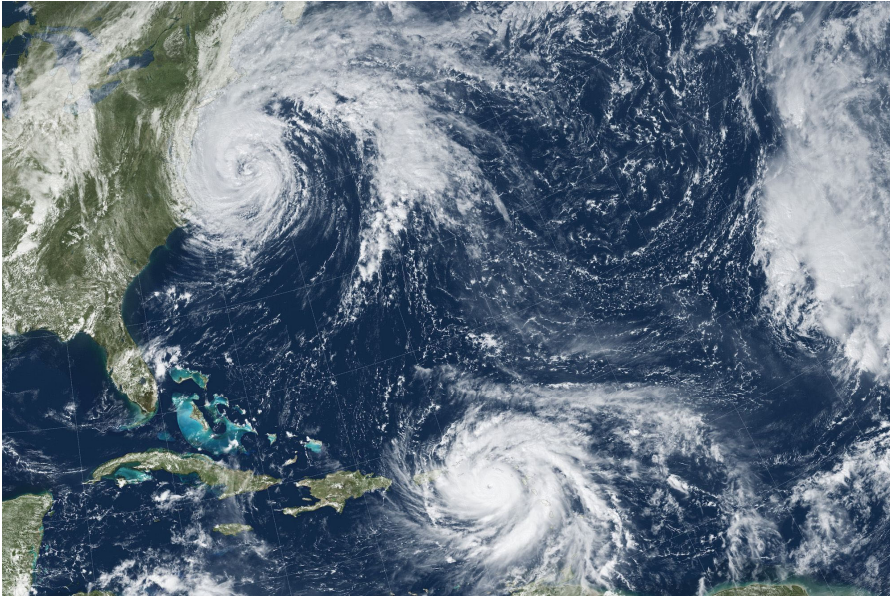


Figure 4. Hurricane Maria

- NDMS was activated to respond to this domestic disaster, particularly to provide care for patients evacuated from the Virgin Islands and Puerto Rico.
- Multiple Federal Coordinating Centers were activated, including the FCC in Columbia, which is an Army base.
- The Army issued orders to the military medical facility responsible for the FCC at that time, to activate the FCC.

<https://www.nationalgeographic.org/activity/assessing-hurricane-maria-damage/>

The NDMS Pilot Program

The NDMS Pilot Program Mission:

Strengthen interoperable partnerships across the NDMS to care for our nation's combat casualties by increasing medical surge capacity and capability.

Pilot Goals:

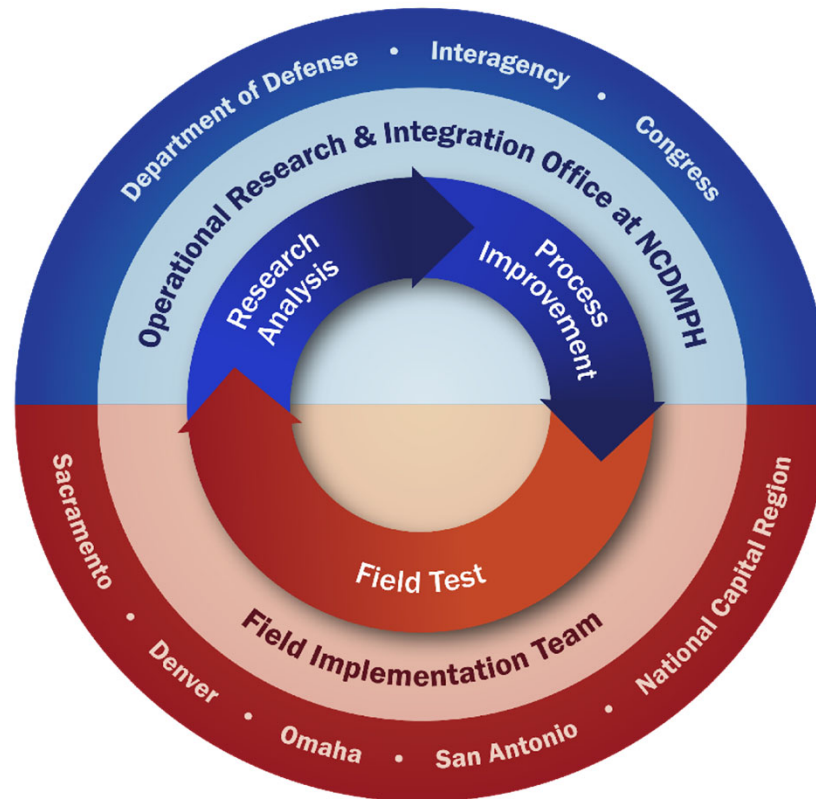
- Assess NDMS capabilities and capacity to transport and care for casualties during a medical surge event resulting from an overseas military contingency
- Increase and enhance capacity, capability, and interoperability across NDMS definitive care network
- Address the potential national security threat of limited capacity to care for casualties returning from an overseas wartime contingency

Hypothetical Pilot Scenario:

Overseas military contingency resulting in 1,000 combat casualties returning daily to the United States for 100 days or longer.

Pilot Strategy

The NDMS Pilot Program has two lines of effort (LOE) to accomplish its **partner-based, outcome-focused, and research-validated mission**. The lead for both LOEs is the Uniformed Services University's **National Center for Disaster Medicine and Public Health (NCDMPH)**.



LOE1

Improve the NDMS capabilities and capacities at local & regional levels

LOE2

Support and create collaborative Federal interagency NDMS efforts

Figure 5. NDMS LOEs

Pilot Sites

- Five Pilot Sites: **Sacramento, CA**; Denver, CO; Omaha, NE; San Antonio, TX; National Capital Region
- Each site consists of a **regional NDMS definitive care network** including multiple health care entities, such as:
 - Federal Coordinating Centers (FCCs)
 - NDMS partner hospitals
 - Public health departments
- The Pilot aims to **increase the capacity and capability** to respond to a medical surge from an overseas wartime contingency through a collaborative Federal and civilian network

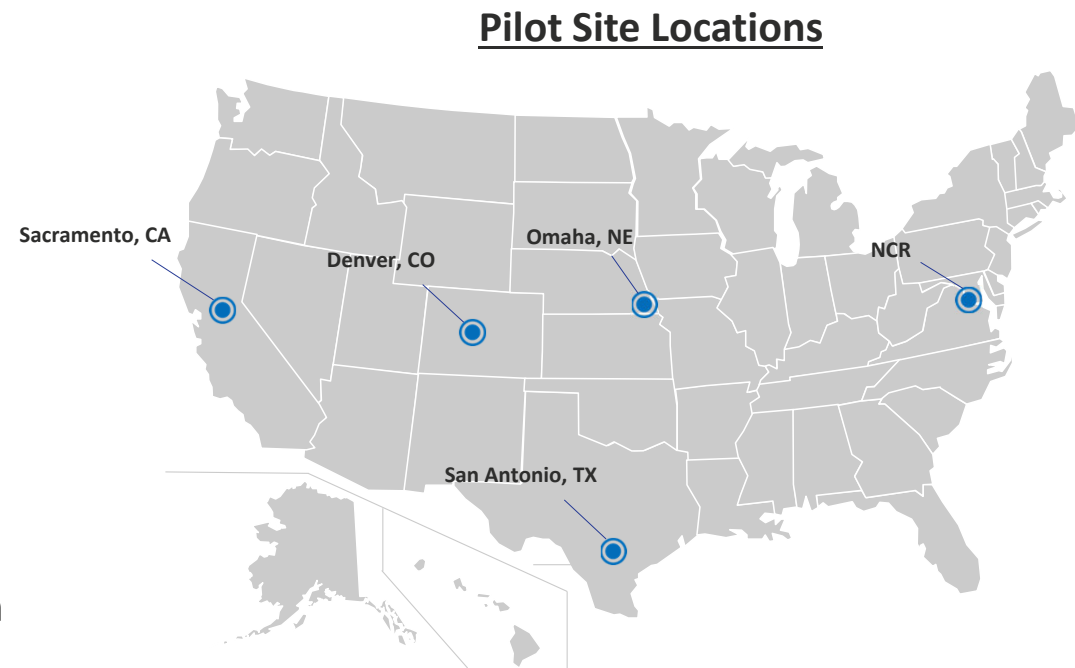


Figure 6. Map of NDMS Pilot Site Locations

Pilot Timeline

Phase I (complete): The Military-Civilian NDMS Interoperability Study (MCNIS)

- Assessment of the current state of the NDMS definitive care network to identify weaknesses and opportunities

Phase II (current): Pilot Implementation

- 5-year collaboration of interagency military and civilian NDMS partners at all 5 Pilot sites

Phase III (future): Results Analysis & Pilot Expansion

- Identification of scalable site-specific solutions, development of site-agnostic metrics and benchmarks, and recommendations to Congress

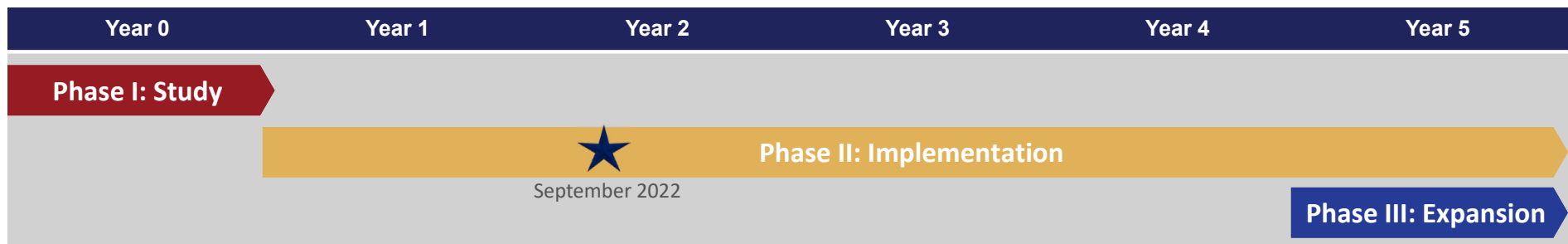


Figure 7. The NDMS Pilot Timeline

Phase I: Study



The MCNIS identified **three focus areas**, with three capabilities within each, for Pilot Implementation. Each capability has tailored benchmarks & metrics to measure enhancement of the NDMS Program.

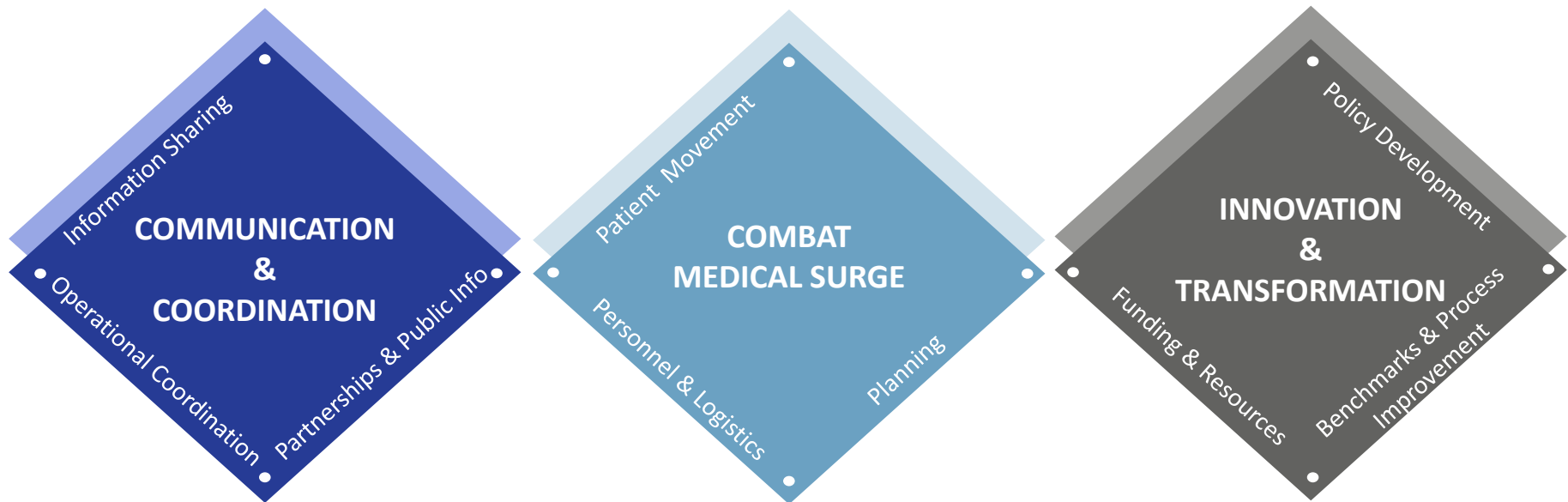
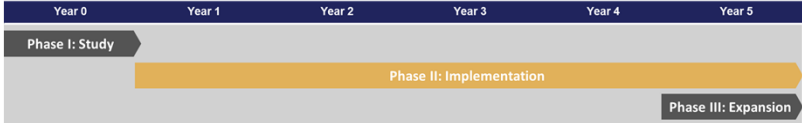


Figure 8. NDMS Pilot Concepts and Capabilities

Phase II: Implementation



During Phase II of the Pilot, site-specific operational teams are **identifying strengths and opportunities for consideration in future implementation** of enhancements to the NDMS Program.

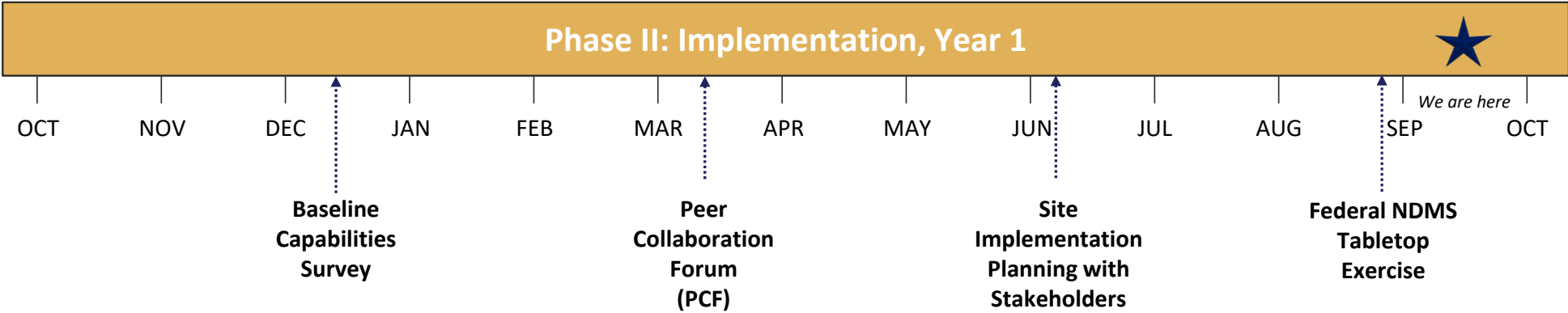


Figure 9. NDMS Pilot Year 1 Milestones

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Sacramento Area Stakeholder Engagement

Feedback from local, regional, state, and Federal partners offers valuable insights, including leading practices and innovations, that inform the Pilot's efforts to enhance the NDMS Program in Sacramento.



Figure 10. The NDMS Pilot Stakeholder Groups

Perspectives on Regional NDMS Response Readiness

During the Sacramento Site PCF, stakeholders responded to polls to share their perspectives on regional communication, collaboration, and medical surge efforts.



67% were aware that their organization may receive combat casualties during an NDMS activation



82% shared resources with external organizations during COVID-19 response



48% confirmed their organization had never participated in a military medical surge exercise



83% were unfamiliar with differences between NDMS reimbursement for military and civilian patients



53% rated current efforts to develop unified public messaging as “Moderately Weak” or “Very Weak”

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Strengths Identified in the Sacramento Region

The following leading practices, many implemented during COVID-19 response, were identified as strengths in the Sacramento region and across the state:

- Cross-stakeholder coordination via the **state's Mutual Aid System** greatly enhanced information sharing and patient movement coordination during the COVID-19 response
- **Multi-Agency Coordination groups** helped facilitate resource-sharing between strained systems and facilities when convened
- Existence of IT infrastructure, in the form of **emergency management (EM) systems**, utilized across counties helped facilitate information sharing and coordination on bed availability

Strengths Identified in the Sacramento Region (cont.)

- Use of a statewide **COVID-19 dashboard** supported information sharing during medical surge response
- Dedicated statewide **patient transfer centers** set up to coordinate patient movement across health systems and county lines helped to orchestrate patient transfers when regional resources are overwhelmed efficiently

Opportunities for the Sacramento Region

During the PCF, Stakeholders shared several opportunities and potential innovations for future implementation to enhance the NDMS Program in the Sacramento region and across California:

- Integrate with **California's Mutual Aid System** to enhance operational coordination and information sharing during a NDMS activation
- Update the **FCC NDMS Operational Plan** to reflect current processes for a NDMS activation that align with Mutual Aid System processes
- Create a **NDMS Steering Committee** to convene stakeholders across military and civilian communities for planning and coordination of medical surge response

Opportunities for the Sacramento Region (cont.)

- Obtain and maintain accurate **NDMS partner facility contact information** to support continuity of operations
- Expand **participation in and understanding of the NDMS definitive care network** through education and recruitment of NDMS partner facilities
- Utilize **existing civilian capabilities**, including EM systems and patient transfer centers, to optimize NDMS patient movement processes
- Conduct **joint military-civilian exercises** that include local and state partners

Frequently Asked Questions

1. What is the role of partner facilities in the NDMS, and what are the benefits to participating in the program?
2. What are the steps to join and who can hospitals contact?
3. What is the cost of joining, and how are facilities reimbursed?
4. Is it mandatory to receive patients under an activation if you have signed an MOU with the program?

Questions?



Photo Credit: Shutterstock, 2022.

Additional Resources

Learn more about the NDMS, including the Definitive Care Network, on the [ASPR NDMS Website](#). The page titled “[Become a Partner Healthcare Facility](#)” includes more information about partnering with the NDMS.

Learn more about the NDMS Pilot Program by visiting the [NCDMPH website](#), or reach out to the Pilot team at ndmspilot@usuhs.edu.

Additional Links:

- Definitive Care Reimbursement Online Training: <https://mrc.adobeconnect.com/ndmsdcrpot1216/>
- Provider Registration Forms: <https://www.phe.gov/Preparedness/responders/ndms/definitive-care/reimbursement-program/Pages/Claims-Submission.aspx>
- Information on the NDMS Reimbursement website: www.phe.gov/ndms/reimbursement
- FAQs: <https://www.phe.gov/Preparedness/responders/ndms/definitive-care/Pages/Frequently-Asked-Questions.aspx>

Thank You

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