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

Claire Pelura Federal Health Manager, Deloitte Consulting

Patrick Femia Federal Health Analyst, Deloitte Consulting Gabriela Paszt
Project Manager, Operations,
Henry M. Jackson Foundation
for the Advancement of
Military Medicine



THE VIEWS EXPRESSED ARE SOLELY THOSE OF THE AUTHORS AND DO NOT REFLECT THE OFFICIAL POLICY OR POSITION OF THE HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE, INC., PUBLIC HEALTH FOUNDATION, DEPARTMENT OF MILITARY & EMERGENCY MEDICINE, UNIFORMED SERVICES UNIVERSITY OF THE HEALTH SCIENCES, THE DEPARTMENT OF DEFENSE, OR THE US GOVERNMENT.





### 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.

 $\underline{\text{https://www.nationalgeographic.org/activity/assessing-hurricane-maria-damage/}}$ 





### 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 causalities 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 causalities returning from an overseas wartime contingency

#### **Hypothetical Pilot Scenario:**

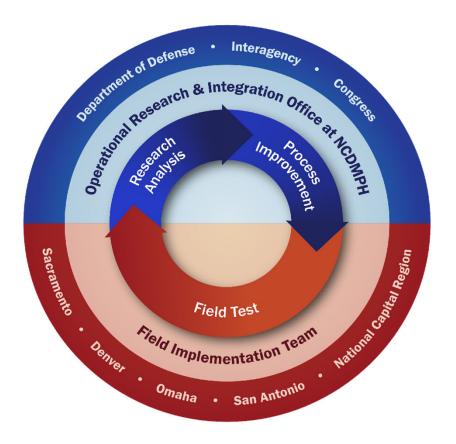
Overseas military contingency resulting in 1,000 combat casualties returning daily to the United States for 100 days or longer.

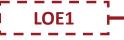




### Pilot Strategy

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).





Improve the NDMS capabilities and capacities at local & regional levels



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

#### **Pilot Site Locations**



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.

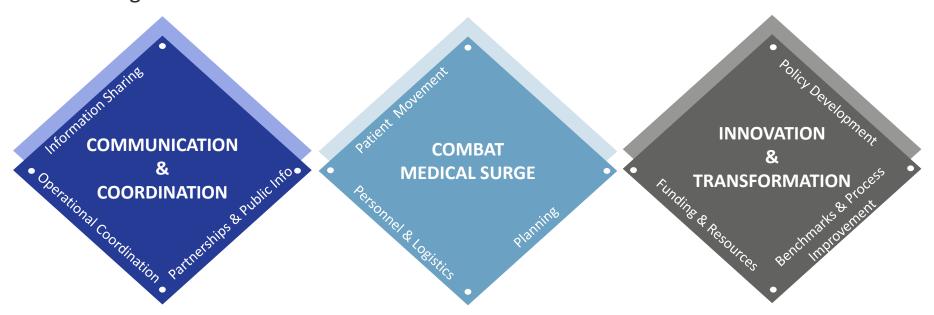


Figure 8. NDMS Pilot Concepts and Capabilities





### 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.

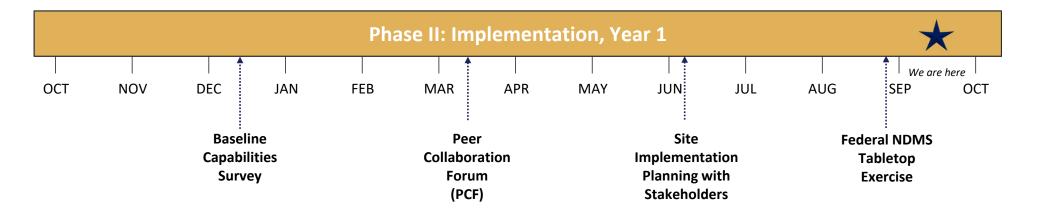


Figure 9. NDMS Pilot Year 1 Milestones





# Agenda

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





### 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.

#### **Federal**

- FCC
- Administration for Strategic Preparedness and Response (ASPR) Region IX

#### **State**

- Emergency Medical Services Authority (EMSA)
- California Department of Public Health (CDPH)
- California Governor's Office of Emergency Services (Cal OES)
- CHA



Figure 10. The NDMS Pilot Stakeholder Groups

#### **Regional & County**

- Regional Disaster Medical Health Coordinators & Specialists (RDMHC/Ss)
- Medical Health Operational Area Coordinators (MHOACs)
- Local Emergency Medical Services (EMS)
   Agencies (LEMSAs)
- Health Care Coalitions

#### Local

Local Health Care Facilities





### 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



and civilian patients

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





# Agenda

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





### 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 <u>ASPR NDMS Website</u>. The page titled "<u>Become a Partner Healthcare Facility</u>" includes more information about partnering with the NDMS.

Learn more about the NDMS Pilot Program by visiting the <u>NCDMPH website</u>, or reach out to the Pilot team at <u>ndmspilot@usuhs.edu</u>.

#### Additional Links:

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





### Thank You

#### **Gabriela Paszt**

Outreach Coordinator NDMS Pilot Program gabriela.houselee.ctr@usuhs.edu

#### **Claire Pelura**

Site Operations Lead NDMS Pilot Program cpelura@deloitte.com

#### **Patrick Femia**

Sacramento Site Technical Writer NDMS Pilot Program pfemia@deloitte.com

Website: <a href="mailto:ncdmph.usuhs.edu/ndms-pilot">ncdmph.usuhs.edu/ndms-pilot</a>

Contact: <a href="mailto:ndmspilot@usuhs.edu">ndmspilot@usuhs.edu</a>



