

The banner features a blue background with white line art depicting a person sitting at a desk with a computer monitor. The text 'Himss19' is in white with a yellow '19', followed by 'CHAMPIONS OF HEALTH UNITE' in large white capital letters.

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PULSE: A Health IT Disaster Response Platform

Session #6, February 12, 2019

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DISCLAIMER: The views and opinions expressed in this presentation are those of the author and do not necessarily represent official policy or position of HIMSS.

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Conflict of Interest

Leslie Witten-Rood has no real or apparent conflicts of interest to report.

Mariann Yeager, MBA has no real or apparent conflicts of interest to report.



Agenda

- Health IT in disaster response
- Overview of Patient Unified Lookup Services for Emergencies (PULSE)
- Local disaster response planning approach, funding and process
- How to deploy PULSE within your jurisdiction
- Lessons learned from PULSE in California



Learning Objectives

- Identify the need to include health IT in disaster response planning
- Assess existing interoperability efforts that can be leveraged in planning
- Interpret case studies of PULSE and other disaster response efforts to date
- Decide if your community is ready to leverage health IT in a disaster response



Lessons in Health IT From Katrina



DEPARTMENT OF HEALTH & HUMAN SERVICES

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Director
 Office for Civil Rights
 200 Independence Ave., SW Rm 506F
 Washington, DC 20201

September 9, 2005

U.S. Department of Health and Human Services Office for Civil Rights HURRICANE KATRINA BULLETIN #2:

HIPAA Privacy Rule Compliance Guidance and Enforcement Statement For Activities in Response to Hurricane Katrina

Background

Hundreds of thousands of evacuees from areas affected by Hurricane Katrina have been relocated to shelters across the country. For many, an important need is to identify and provide prescription medications. However, medical and prescription records of many evacuees either are lost or inaccessible.

Health plans and health care providers are working together with other industry segments to gather and provide this information to the appropriate points of care for the evacuees. The information below provides guidance on how the HIPAA Privacy Rule applies to these activities, as well as describes the HHS Office for Civil Rights' enforcement approach in light of these emergency circumstances.

Compliance Guidance

The *Hurricane Katrina Bulletin: HIPAA Privacy and Disclosures in Emergency Situations* (attached), issued by OCR, emphasizes the broad range of permissible disclosures that covered entities may make to respond to the needs of evacuees in these situations. For example, health plans and health care providers may disclose prescription and other health information to health care providers at shelters to facilitate treatment of the evacuees.

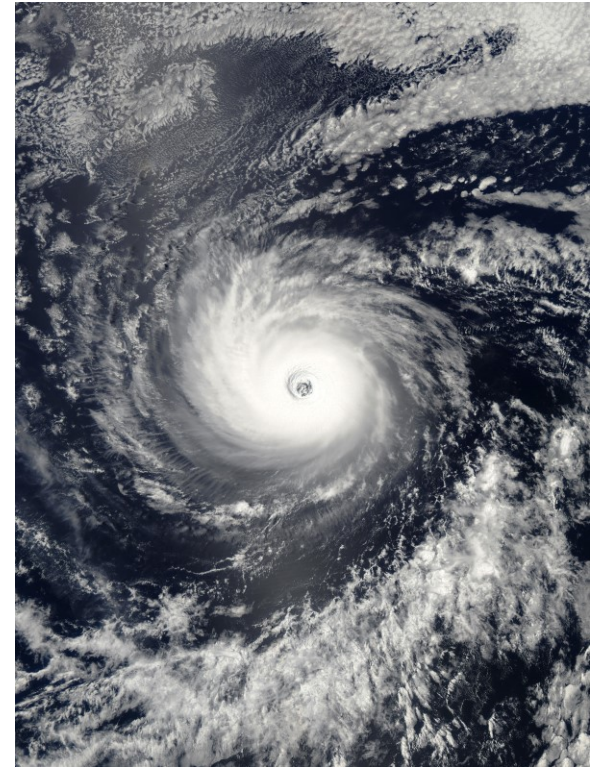


Photo Credit: Creative Commons Hurricane



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Bridging the Gap for Disaster Response

Need

- Volunteers need access to patient information when treating in shelters
- Volunteers must be authenticated against the state's volunteer database to access information
- Leverage existing health IT infrastructure

Gap

- Disaster healthcare volunteers do not have access to EHRs, health IT systems or health information networks
- EHRs, health IT systems and health information networks do not authenticate users against state volunteer databases
- Disaster response is not tied into health IT infrastructure



History of PULSE

April 2014: ONC evaluates use of HIE infrastructure for disaster preparedness and response

July 2015: ONC awards EMSA a grant to advance HIE statewide during a disaster and regionally in daily EMS

July 2017: PULSE Go-live in CA

January 2018: PULSE migrates to private sector; Advisory Council formed

March 2015: PULSE use case and technical architecture published

March 2016: EMSA begins PULSE development

November 2017: PULSE activated for CA fires



PULSE Purpose

Assure health information is accessible by volunteer healthcare professionals who work in:

- Mobile field hospital or Alternate Care Facility
- Medical Shelter



Photo Credit: CalEMSA



PULSE DESIGN

Patient Target Populations

- Disaster victims who need medical treatment or medication refills
- All victims experiencing a medical or trauma emergency
- Displaced victims of disasters outside of their normal health system or geographic area of service



Photo Credit: CalEMSA



Patient Unified Lookup Service for Emergencies



What Does PULSE Do?

PULSE enables authorized disaster healthcare volunteers to access health records to treat people injured or displaced due to disasters

How Does PULSE Work?

- Disaster Healthcare Volunteers log into the PULSE portal and are authenticated against the state's credentialed volunteer database
- Authorized volunteers in alternative care facilities, search for patient records from all connected providers and networks
- Volunteers retrieve and view patient records while treating patients at alternative care facilities

How It Works

Steps For Using PULSE Web Portal in Declared Disaster

1. Qualified volunteer logs in with State Credentials
2. Search for patient
3. Retrieve records
4. Review records and incorporate in care consultation with patient

PULSE's Health Information May Be Used For:

- Informing treatment decisions
- Prescription refills
- Immunizations
- Allergies
- Supporting traditional care sites in the aftermath of a disaster (a backup EHR)



PULSE Queries for Records

PULSE connects to health information networks so that providers and emergency responders have a way to access health information across systems

eHealth Exchange™

Leveraging Existing Interoperability



Leveraging Health IT in Your Disaster Planning



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Overview of California

California

- 58 Counties
- 6 Mutual Aid Regions
- Home Rule State – ***Power of local city or county to establish own system of self-government***
- Gaps:
 - Every County is different
 - Disparate systems (communications, patient tracking, resource requesting etc.)
 - Limited Cooperative Agreements between counties and across regions

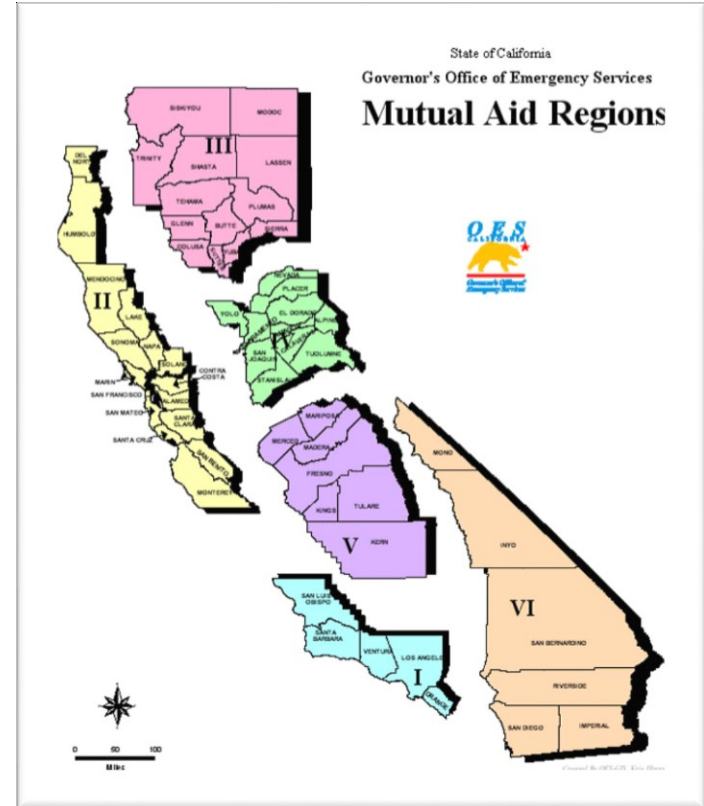


Photo Credit: CalEMSA



Medical Response

- Multi-Agency Coordination
- Healthcare Facility Evacuations
- Patient Transportation Planning
- Shelter Clinic Planning



Principles of Disaster Medical/Health Operations

- Local Operational Control and Response
- Standardized Emergency Management System (SEMS) Compliant
- Structured to Facilitate Mutual Aid
- State Responsible for Resource Assistance
- Coordinate and Integrate Private and Public ESF 8 Partners



Photo Credit: CalEMSA

Standardized Emergency Management System (SEMS)

- During an emergency, multiple jurisdictions and agencies will likely be involved
- The purpose of SEMS is to:
 - Manage multiple agencies and jurisdictions in CA
 - Facilitate the flow of information within and between system levels
 - Coordinate amongst all responding agencies
 - Ensure structured and common response to emergencies
 - Incorporate the Incident Command System (ICS)



Medical Health Operational Area Coordination (MHOAC) Program

- Single Point of Contact for coordination with the RDMHC/S, EMSA and CDPH
 - Situation Status Reporting
 - Resource Requests
- 17 Functions – may be delegated
- *Health and Safety Code: 1797.153*

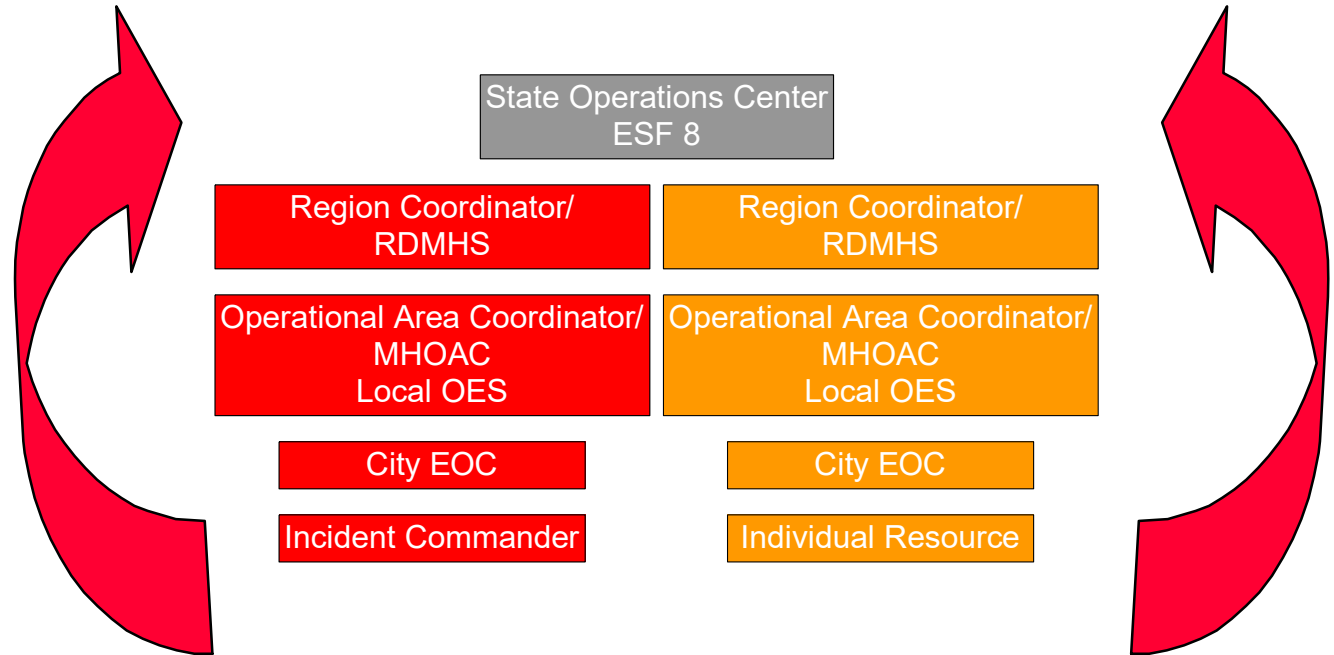


Regional Disaster Medical Health Coordination (RDMHC/S) Program

- Coordinates disaster medical and health resources within the Region
- Manages and improves the Region's medical/health mutual aid and mutual cooperation system
- Supports development of the OA medical/health disaster response system
- *Health and Safety Code: 1797.153*



How the Medical Health Mutual Aid System Works



Lessons Learned from PULSE California



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PULSE Pilot Use Case

- Emergency or disaster occurs
- Request is made to EMSA to activate PULSE
- EMSA activates PULSE through the PULSE operator
- Disaster Healthcare Volunteer (DHV) can log into PULSE from DHV System (single sign-on through DHV website)
- Access to patient information available through connected health information networks

In CA, six types of Licensed Volunteers can log into PULSE when its activated by EMSA :

- Physician
- Nurse Practitioner
- Pharmacist
- Registered Nurse
- Physician's Assistant
- EMT / Paramedic

Planned expansion of roles

First Activation of PULSE: Wildfires Statewide October through December 2017

- EMSA partnered with the eHealth Exchange network to increase PULSE's geographic coverage for accessible patient records
- PULSE established a connection to eHealth Exchange in Fall 2017



Photo Credit: CalEMSA



Second Activation of PULSE: July 2018 in Shasta and Lake County

EMSA partnered with eHealth Exchange to broaden access to additional providers for patients impacted by fires in the affected areas



Photo Credit: CalEMSA



July and August 2018 Wildfires

- Northern California Medical Reserve Corps (MRC) supported local medical and health operations at the shelter.
- Contra Costa County MRC provided care in Lake County



Photo Credit: CalEMSA

Norovirus outbreak at evacuation center



Photo Credit: CalEMSA

Third Activation of PULSE: November 2018 in Butte County

Photo Credit: CalEMSA



EMSA realized that use by medical personnel needed active deployment procedures

Photo Credit: CalEMSA



EMSA deployed a 3 member team to initiate PULSE and train personnel



Deploy PULSE

- Used in Camp Fire
- Nine locations
- Medical component of shelter
- EMSA sent team to initiate use

- CAL-MAT Team Members used PULSE for:
 - Patient History
 - Medical Refills



Photo Credit: CalEMSA

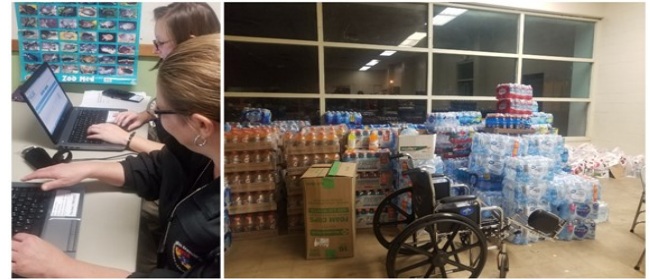


Photo Credit: CalEMSA



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Just in Time Training

- 132 Medical Staff provided just in time training on PULSE and deployed to Butte County
 - 20 Member of the Disaster Medical Services Division — CAL-MAT
 - 10 Disaster Health Care Volunteers and Medical Reserve Core
 - 12 Scripps Medical Response Team
 - 36 California Air National Guard 143rd and 144th Fighter Wing, 144th Medical Group
 - 50 California Army National Guard's 297th Area Support Medical company from San Mateo



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Expanding Access to PULSE Nationwide



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PULSE Advisory Council

- Nora Belcher, Texas e-Health Alliance (TEHA)
- Rim Cothren - California Association of Health Information Exchange (CAHIE)
- Tara Cramer Georgia Regional Academic Community Health Information Exchange (GRACHIE)
- Kristen Finne, HHS Assistant Secretary of Preparedness and Response (ASPR)
- George Gooch, Executive Director, Texas Health Services Authority (THSA)
- Dan Smiley, California Emergency Medical Services Authority (CalEMSA)
- Lee Stevens, HHS Intergovernmental and External Affairs
- Sean Turner, Dignity Health
- Leslie Witten-Rood, California Emergency Medical Services Authority (CalEMSA)
- Jeremy Wong, Audacious Inquiry (Ai)
- Mariann Yeager, The Sequoia Project (facilitator)



PULSE Scalability Strategy

- Already connected to eHealth Exchange network, with California connections, and ability to connect nationwide
- Connectivity will be expanded to entire eHealth Exchange network
- Carequality will enable PULSE to connect to additional networks

eHealth Exchange™

	All 50 States	70,000 Medical Groups	
	Four Federal Agencies (DoD, VA, CMS, SSA)	3,400+ Dialysis Centers	
	75% of U.S. Hospitals	8,300 Pharmacies	
Supporting more than 120 million patients			
59 Regional and State HIEs			

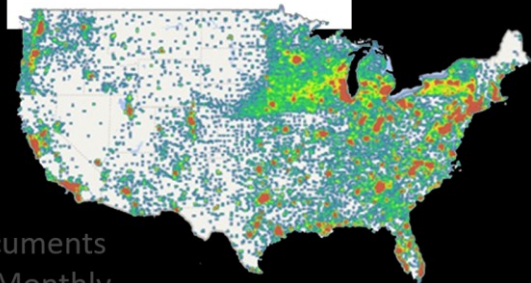


40,000+ Clinics

1,700 Hospitals

600K+ Physicians

14M+ Clinical Documents
Exchanged Monthly



Advice On Pursuing PULSE

Self-Assessment Checklist for Communities

- Perceived Value of Patient Health Record Access in Disaster Response
- Characteristics of Disasters Which Create Demand for Patient Record Lookup
- Leadership Champions Support Use Case and Clearly Agreed Upon “Owner”
- Potential Overlap or Conflict with Existing Programs
- Resources Available
- Jurisdiction Risk Tolerance
- Jurisdiction Connectivity

Download the Checklist:
<https://sequoiaproject.org/pulse/>



HIPAA Concerns Alleviated

PULSE is the treatment
use case

- Federal Law 42 CFR 2.1(b)(2)(A), 2.2(b)(2)(A), 2.51
- California State Health and Safety Code §11845.5(c)(2)

Additional support:

- Privacy Guidance Template available for download at www.SequoiaProject.org/PULSE
- State of California issues HIPAA reminder for each DECLARED

Privacy is the most common question
as communities pursue PULSE



Questions

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