

Hospitals Rising to the Challenge:

The First Five Years of the U.S. Hospital Preparedness Program and Priorities Going Forward

(Evaluation Report, HHS Contract #HHSO100200700038)

National Healthcare Preparedness
Evaluation and Improvement
Conference
July 20-24, 2009

Project Team

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HPP Assessment Project

Phases

1. Create a Descriptive Framework of healthcare preparedness for mass casualty events (delivered 12/07)
2. Use that framework to evaluate the current state of healthcare preparedness and to assess the impact of ASPR's Healthcare Preparedness Program (HPP) (delivered 1/09)
3. Build on the framework, informed by the evaluation, to propose a definition and strategy for healthcare preparedness for the future
4. Propose future assessment criteria for healthcare preparedness consistent with the definition of preparedness
5. Evaluate the Healthcare Facility and Emergency Care Partnership Programs

Major Project Deliverables

- **Descriptive Framework:** provides a basis for the evaluation and a starting point for the definition of preparedness for the future
- **Evaluation Report:** assessing the progress in healthcare preparedness for mass casualty disasters achieved as a result of the first five years (2002-07) of the HPP
- **Preparedness Report:** proposing a functional definition of healthcare preparedness for mass casualty disasters for the future.

Definitions

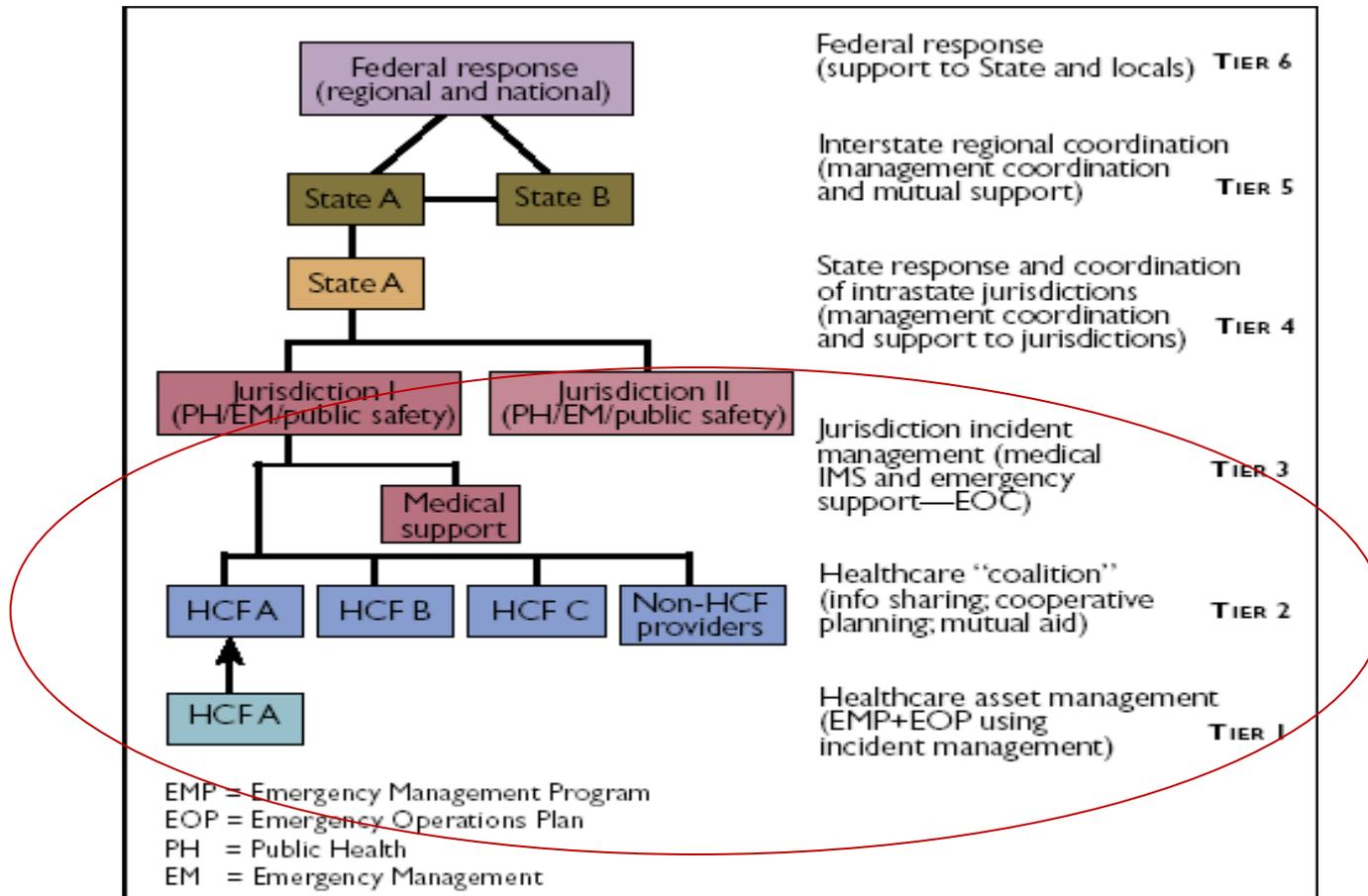
Mass Casualty Event. Any event that requires coordinated response of at least several hospitals within a community to provide adequate medical care for those affected. (Descriptive Framework)

Catastrophic Health Event (CHE). “Any natural or man made incident, including terrorism, that results in a number of ill or injured persons sufficient to overwhelm the capabilities of immediate local and regional emergency response and healthcare systems.” (HSPD-21)

- Such as those described in the National Planning Scenarios:
 - Large scale anthrax attack
 - Detonation of an improvised nuclear device (IND)
 - Major earthquake

Healthcare Coalition. A formal collaboration among hospitals that includes public health. May include other healthcare entities. Close relationship with EMS and EMA. Should have role in both preparedness and response.

Focus of Descriptive Framework and Evaluation Report: Hospitals and Community Response (Tiers 1-3)



Methodology

- Literature review of state of healthcare preparedness prior to HPP (2002)
- Convened virtual working group of 133 individuals from 91 sites (all 50 states and major cities) – hour long semi-structured discussion with each. Questions for discussion derived from descriptive framework

Virtual Working Group



Virtual Working Group

Sector	Number of Participants
Department of Health–Municipality	6
Department of Health–State/Territory	33
EMS	3
Hospital	28
Hospital Association	4
Hospital Region	4
Hospital System	6
National Preparedness Leaders	7

Evaluation Report: Assessment Criteria

- Organization and Authority:
 - Is there a dedicated disaster coordinator at the institution?
 - Level of engagement of senior leadership?
 - Sources and distribution of funding for emergency management planning at institution(HPP? Other Sources?)
 - Does institution actively participate in emergency planning and response with other hospitals in community?
- Hazard Vulnerability Analysis:
 - Are institutional and community hazard analyses shared and incorporated into emergency planning?
- Exercise and Dynamic Improvement:
 - When was last drill or exercise and what was scenario?
 - What were the findings in the after action report and were changes made in emergency operations plan or surge capacity planning?

Evaluation Report: Assessment Criteria

- Situational Awareness and Communication
 - Bed tracking capability and coordination with federal HAVbed system?
 - Method and capability to track assets and resources: staff, stuff, space
 - How is information categorized, collected and communicated?
- Patient Care: Surge Capacity and Allocation of Scarce Resources:
 - How is surge capacity calculated at your institution?
 - Has estimate been tested by event or exercise?
 - Institutional, community role in surge capacity for catastrophic health event?
 - Planning for the delivery of care in setting of scare resources

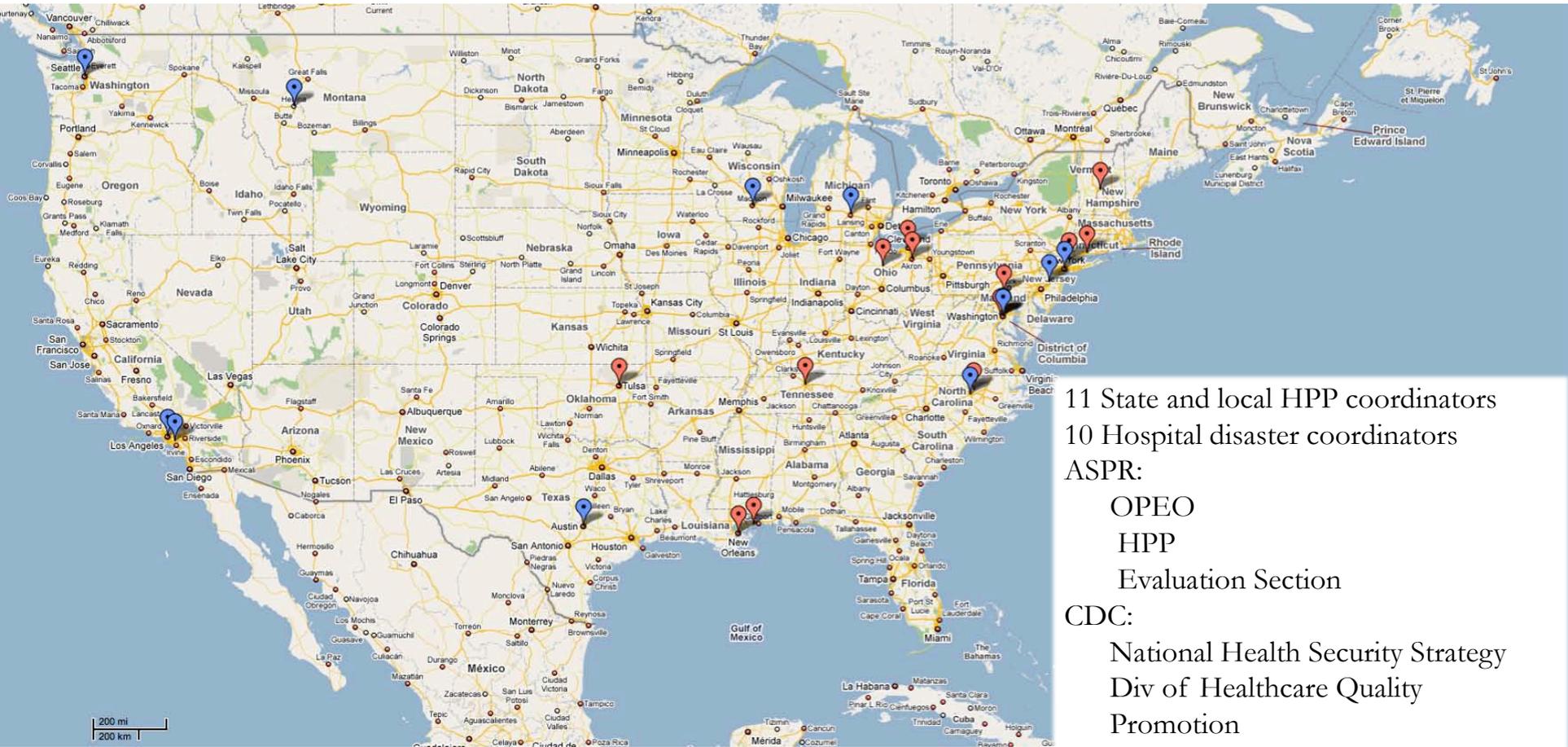
Evaluation Report: Assessment Criteria

- Role and status of healthcare coalition in development of preparedness capabilities
 - Definition of region or community for coalition
 - How was coalition established- role of local, state, federal support
 - How is coalition staffed?
 - What is the governance mechanism?
 - Coalition activities: preparedness, response, both?
 - How is coalition integrated into ICS, multiagency coordination, State EOC and the Tiered response structure?
 - Funding: local, state, federal, private

Methodology

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- **Face-to-face issue analysis meeting with subset of 30 to discuss key themes from the working groups discussions**

Meeting Attendees



11 State and local HPP coordinators

10 Hospital disaster coordinators

ASPR:

OPEO

HPP

Evaluation Section

CDC:

National Health Security Strategy

Div of Healthcare Quality

Promotion

AHRQ: Performance Measure Validation Study

VA: Survey of VA Medical Centers' Emergency Preparedness

Methodology

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- Face-to-face issue analysis meeting with subset of 30 to discuss key themes from the working groups discussions
- Report peer reviewed by 6 non-USG participants and HHS personnel

Evaluation Report Data Summary: Key Indicators of Progress towards Preparedness

- Leadership and Organization
 - Engagement of Senior Leadership
 - Funding sources and flow
- Methods for continuous Improvement and Accountability
 - Drills and exercises and application of lessons learned
 - Healthcare coalition participation
- Community Engagement and Collaboration
 - MOUs and other agreements
 - Community hazards assessment and planning
 - Participation in healthcare coalition
- Situational Awareness and Communication
 - Bed/staff/resource tracking
- Patient Care: Surge Capacity and Allocation of Scarce Resources
- Catastrophic Health Emergency Planning

Findings

- The state of preparedness of individual hospitals has significantly improved over the last 6 years
- Nascent coalitions consisting of healthcare institutions and local and state agencies are emerging across the country
- Situational Awareness and Communication Tools are Improving
- More Emphasis and Rigor in Drills and Exercises
- Planning for catastrophic health events, including disaster standards of care, is in its early stages

Individual Hospitals Are Better Prepared

- Funding for “stuff”: Decon, PPE, isolation rooms, pharmaceutical caches, communications equipment, ventilators, etc.
- Appointment of disaster coordinators
- More extensive training for hospital personnel
- More comprehensive and realistic exercises and drills
- Increased coordination between hospitals, public health, and emergency management
- Reasons for progress: HPP, TJC, increased risk perception

Disaster Healthcare Coalitions Are Emerging across the country

- Local collaborative planning and/or response networks have emerged in every location we talked to
- Range from only joint planning to joint training, drills, & purchasing with medical EOC
- Different names, memberships, structures, & functions
 - Many started because of need to coordinate HPP grant and became a forum for joint preparedness activities
 - Some make use of pre-existing structures (e.g., MMRS)
 - Some are distinct entities, while others are more informal
 - May have multiple overlapping committees
 - Response role varies from network to network

Important Characteristics of Coalitions

- Include at least all hospitals, PH, EMA, and EMS formally linked (e.g., by mutual aid agreements)
- Conduct joint threat assessment, planning, purchasing, training and drills
- Serve as information clearinghouse with systems for tracking patient load and assets
- Have a formal role in local/state incident command system
- Coordinate volunteers in healthcare settings
- Provide forum for decisions regarding allocation of resources
- Coordinate alternate care facilities

Coalitions Are the Keystones of Preparedness

- Healthcare coalitions are essential to effective regional response to commonly occurring mass casualty events that overwhelm an individual hospital
- Healthcare coalitions are creating a foundation for local and national healthcare preparedness
- It is unlikely that current healthcare coalitions (plus existing state and federal resources—including NDMS) are sufficient to enable an effective response to a catastrophic health event

Situational Awareness and Communication Tools are Improving

- Most hospitals participate in statewide electronic bed reporting and emergency notification systems
- Some locations are able to track personnel, supplies, pharmaceuticals in near-real time
- Many locations have developed and tested reliable and redundant communications (among hospitals and between hospitals, public health, and emergency management)
- Gaps:
 - Patient tracking
 - Resource tracking
 - Interoperable communications between states
 - Automated reporting
 - Information sharing between competitive hospitals

More Emphasis and Rigor in Drills and Exercises

- Informed by local hazard vulnerability analyses
- Performed jointly with community partners
- Homeland Security Exercise and Evaluation Program (HSEEP) being adopted in many locations
- Use of external evaluators
- Incorporating lessons learned
- Greater efficiencies through regional drills that satisfy multiple requirements (e.g., Joint Commission, HPP, MMRS)
- **Barrier:** lack of funding of staff time for drills and exercises

Planning for Catastrophic Health Events Is in Early Stages

- Allocation of scarce resources is critical to CHE planning
- States and hospitals are at various stages of planning- most still in early stages
 - Focus is on pandemic flu, critical care, and ventilator allocation
 - Efforts range from informal discussions to multidisciplinary workgroups & draft orders
- Concern about legal and regulatory protections when hospitals shift to use of triage/allocation plans
- Regional coordination and consistency in application of standards/protocols during an emergency are needed
- Need for national coordination and consensus on standards/guidelines and process

Grant Program Challenges

- Grant funding cycle
- Coordination with CDC, DHS guidance and reporting requirements
- Frequent changes in goals, benchmarks, performance measures
- NIMS compliance

Conclusion

- Hospitals are significantly better prepared than in 2001 for “common disasters”
- Would not have happened without HPP
- Creation of coalitions is the most significant accomplishment of HPP
- US healthcare system not yet well prepared for catastrophic health event

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