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Emergency Preparedness and Response
Exercise Program



Essential Functions and Considerations for Hospital Recovery

Harvard School of Public Health
Emergency Preparedness and Response Exercise Program
Version 2 - June 2014



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Dear Hospital Representative,

The following document, *Essential Functions and Considerations for Hospital Recovery*, was developed by the Harvard School of Public Health Emergency Preparedness and Response Exercise Program (HSPH-EPREP) in collaboration with the Massachusetts Department of Public Health (MDPH) Office of Preparedness and Emergency Management and is meant to serve as a resource for hospitals to use as they prepare to manage their recovery from emergencies of all types. This document draws from an extensive literature review, review of many hospital plans, multiple interviews with hospitals that have had to recover from major incidents, and from lessons learned during the execution and evaluation of the 2013 MDPH statewide hospital recovery workshop series. We gratefully acknowledge their contributions and the hard work that many hospital leaders have undertaken to develop and expand healthcare recovery capabilities across the Commonwealth. The second version has been updated to include lessons learned from a statewide exercise series focused on Healthcare System Recovery as well as lessons learned from workshop participants from across the nation.

This resource was written for hospitals and is intended to complement the ongoing efforts of federal, state, and local agencies that are similarly committed to enhancing healthcare recovery capabilities. Many agencies, including the Federal Emergency Management Agency (FEMA), Office of the Assistant Secretary for Preparedness and Response (ASPR), Massachusetts Emergency Management Agency, MDPH, and their local partners are currently focused on updating recovery capabilities to address modern recovery challenges that may affect hospitals in the future. *Essential Functions and Considerations for Hospital Recovery* and all related documents have been developed through a contract with the Office of Preparedness and Emergency Management at the Massachusetts Department of Public Health, with funding from the Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program. The views and opinions expressed as part of this document and all related documents do not necessarily represent the views and opinions of the Office of Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program.

Sincerely,

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1. Introduction and Acknowledgements

Essential Functions and Considerations for Hospital Recovery was developed by the Harvard School of Public Health Emergency Preparedness and Response Exercise Program (HSPH-EPREP) through a contract with the Massachusetts Department of Public Health Office of Preparedness and Emergency Management with funding from the Office of Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program. This document is intended to assist hospitals with organizing, developing, and/or refining their recovery capabilities in accordance with federal guidance. This document is not intended to supersede any federal guidance; rather, *Essential Functions and Considerations for Hospital Recovery* is structured to help hospitals incorporate recovery capabilities into comprehensive hospital emergency operations plans. The views and opinions expressed in this document do not necessarily represent the views and opinions of the Office of Assistant Secretary for Preparedness and Response Hospital Preparedness Program or the Massachusetts Department of Public Health.

In preparing this document, the Harvard School of Public Health reached out to dozens of hospital representatives, many of whom had to recover from major disasters, to discuss recovery planning. The essential functions for hospital recovery that are included in this document are informed by correspondence and discussions among our researchers and healthcare responders who went through difficult emergencies and were willing to frankly discuss their successes and challenges with our team. We are immensely grateful for the candid manner in which many hospital representatives discussed their experiences. Additionally, our researchers reviewed existing hospital recovery literature. A list of references used to support the development of this document can be found in Appendix A.

In the spring of 2013, the Massachusetts Department of Public Health Office of Preparedness and Emergency Management sponsored a series of interactive recovery workshops for the hospitals of the Commonwealth of Massachusetts that were facilitated by the Harvard School of Public Health Emergency Preparedness and Response Exercise Program. Six regional



workshops were held statewide to engage hospital emergency preparedness coordinators and members of hospital emergency preparedness committees in an open discussion of recovery challenges and best practices. Each region shared its own perspective on the challenges that recovery presents hospitals. Many of the sections in this document were improved upon following the discussions in the workshops. We are thankful for the insightful contributions made by each region and by the many hospitals that participated in the workshop series.

During these workshops, representatives from the Region 1 office of the Federal Emergency Management Agency provided support by presenting the National Disaster Recovery Framework (NDRF). We sincerely appreciate the active involvement that our federal partners have taken in promoting recovery planning in accordance with the NDRF.

This document references and interprets information presented by several healthcare emergency preparedness and emergency management sources. Readers can identify the source of information presented throughout this document as well as interpretations of guidance by using the guide below:

Healthcare Emergency Preparedness Guidance (ASPR, TJC)

Emergency Management Guidance (DHS, FEMA)

Harvard School of Public Health Interpretation

Please address any comments or questions to:

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2. Recovery Defined

The Assistant Secretary for Preparedness and Response (ASPR) has outlined functions related to recovery that will assist healthcare organizations as they develop their emergency response plans. ASPR provided detailed descriptions of the associated functions required by healthcare systems in the Healthcare Preparedness Capabilities guidance document released in January of 2012.

ASPR Hospital Preparedness Program - Capability 2: Healthcare System Recovery

Healthcare system recovery involves the collaboration with Emergency Management and other community partners, (e.g., public health, business, and education) to develop efficient processes and advocate for the rebuilding of public health, medical, and mental/behavioral health systems to at least a level of functioning comparable to pre-incident levels and improved levels where possible. The focus is an effective and efficient return to normalcy or a new standard of normalcy for the provision of healthcare delivery to the community (ASPR 12).

The Federal Emergency Management Agency (FEMA) has outlined concepts and principles that federal, state, and local governments as well as other recovery stakeholders including hospitals can follow. FEMA provided detailed descriptions of recovery concepts and principles that are intended to ensure unified and collaborative recovery efforts in the National Disaster Recovery Framework which was released in September of 2011.

FEMA Emergency Management Institute Disaster Recovery Definition

The process of restoring normal public or utility services following a disaster, perhaps starting during but extending beyond the emergency period to that point when the vast majority of such services, including electricity, water, communications, and public transportation, have resumed normal operations. Short-term recovery does not include the reconstruction of the built environment, although reconstruction may commence during this period. Long-term recovery (see reconstruction) is the process of returning the community, to the extent possible, to the conditions that existed prior to the event, preferably while taking the opportunity to mitigate against future disasters (Eadie 329).



For the purposes of this document a short, but comprehensive working definition of hospital recovery will be used.

Hospital Recovery – Definition

The process by which a hospital minimizes the impact an emergency has made on its operations in an effort to resume normal operations or establish new norms for operations.

3. The Joint Commission Standards Related to Recovery

Many emergency management elements of performance (EPs) that The Joint Commission (TJC) uses to accredit and certify hospitals can be related to hospital recovery. Four emergency management EPs that specifically relate to hospital recovery are listed below. Additional emergency management EPs relate to functions and plans that hospitals should develop in order to respond to and recover from emergencies.

The Joint Commission Recovery Elements of Performance

EM 02.01.01 EP4 - The hospital develops and maintains a written Emergency Operations Plan that describes the recovery strategies and actions designed to help restore the systems that are critical to providing care, treatment, and services after an emergency.

EM 02.01.01 EP5 - The Emergency Operations Plan describes the processes for initiating and terminating the hospital's response and recovery phases of the emergency, including under what circumstances these phases are activated.

EM 02.02.03 EP2 – [EOP describes the following] How the hospital will obtain and replenish medical supplies that will be required throughout the response and recovery phases of an emergency, including personal protective equipment where required.

EM 02.02.03 EP3 - [EOP describes the following] How the hospital will obtain and replenish non-medical supplies that will be required throughout the response and recovery phases of an emergency. (TJC Comprehensive Accreditation Manual for Hospitals: January 2013)



4. Principles for Recovery Planning

The Assistant Secretary for Preparedness and Response (ASPR) has divided Capability 2: Healthcare System Recovery into functions, tasks, and resource elements which consist of plans, equipment, and skills. Additionally, ASPR outlines principles that healthcare organizations should use when developing any emergency response plans.

ASPR Hospital Preparedness Program Planning Principles

- 1. Planning must be community-based, representing the whole population and its needs**
- 2. Planning must include participation from all stakeholders in the community**
- 3. Planning uses a logical and analytical problem-solving process to help address the complexity and uncertainty inherent in potential hazards and threats**
- 4. Planning considers all hazards and threats**
- 5. Planning should be flexible enough to address both traditional and catastrophic incidents**
- 6. Plans must clearly identify the mission and supporting goals (with desired results)**
- 7. Planning depicts the anticipated environment for action**
- 8. Planning does not need to start from scratch**
- 9. Planning identifies tasks, allocates resources to accomplish those tasks, and establishes accountability**
- 10. Planning includes senior officials throughout the process to ensure both understanding and approval**
- 11. Time, uncertainty, risk, and experience influence planning**
- 12. Effective plans tell those with operational responsibilities what to do and why to do it, and they instruct those outside the jurisdiction in how to provide support and what to expect**
- 13. Planning is fundamentally a process to manage risk**
- 14. Planning is one of the key components of the preparedness cycle (ASPR viii)**

The National Disaster Recovery Framework (NDRF), published in September 2011 by the Federal Emergency Management Agency (FEMA), outlines nine core principles that guide disaster recovery. While the audience that the NDRF is targeted at is broad and community-focused, hospitals should still review these core principles before writing the recovery elements of their hospital emergency operations plans. The Harvard School of Public Health recommends that hospitals consider both ASPR and FEMA principles before establishing their own individual recovery planning principles. The list on the next page was created in an effort to merge the planning principles that ASPR has given hospitals with the NDRF recovery core principles.



FEMA National Disaster Recovery Framework Recovery Core Principles

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. Individual and Family Empowerment 2. Leadership and Local Primacy 3. Pre-Disaster Recovery Planning 4. Partnerships and Inclusiveness 5. Public Information | <ol style="list-style-type: none"> 6. Unity of Effort 7. Timeliness and Flexibility 8. Resilience and Sustainability 9. Psychological and Emotional Recovery (FEMA NDRF 9) |
|--|--|

The hospital recovery planning principles as outlined in this document may be used as a starting point for discussion among hospital recovery planners. Every hospital should determine if the planning principles listed below are sufficient for their healthcare organization.

Hospital Recovery - Planning Principles for Hospital Recovery

1. **Do not plan in isolation:** Involve your whole hospital and partner agencies when developing your hospital’s plans for recovery
2. Consider your hospital’s hazard vulnerability analysis (HVA) when developing your hospital’s plans for recovery
3. Integrate recovery plans into your hospital’s emergency operations plan (EOP)
4. Use the Hospital Incident Command System (HICS) to manage recovery
5. Plan for system failures and/or shortages to occur during response and recovery
6. Leverage existing local and regional resources in your recovery plans
7. Plan to communicate recovery information to partner agencies so they can assist with your recovery (e.g. public, media, local agencies, vendors, regional partners, MDPH/ESF#8, DHHS/Recovery Support Function: Health and Social Services)

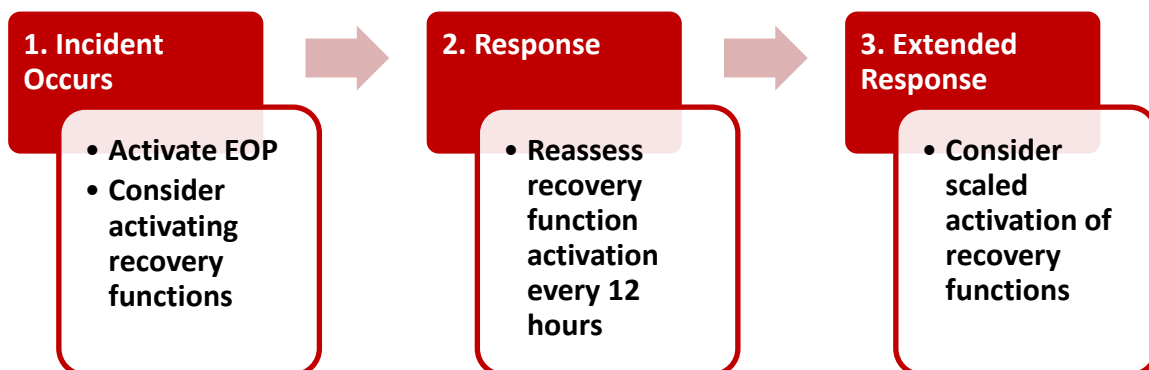
Developing hospital recovery capabilities will strengthen a hospital’s ability to quickly respond to and recover from any emergency. Hospitals should not approach developing recovery capabilities by trying to build a stand-alone recovery plan. Rather than consider recovery functions in a separate plan, hospitals should integrate essential recovery functions into established incident management structures or write recovery functions into hospital emergency operations plans from their inception. Effective hospital recovery planning and the development of recovery functions will complement, coordinate with, and build upon existing hospital emergency response functions, capabilities, resources, and the hospital emergency operations plan.

5. Triggers for the Activation of Recovery Functions During Response

Both ASPR and FEMA are in full agreement regarding the importance of considering recovery during every phase of emergency preparedness and response. Capability 2: Healthcare System Recovery mentions alert and notification as they relate to continuity of operations (COOP) activities, but not specifically a healthcare organization's recovery functions. It is important for hospitals to consider how and when they will activate their recovery functions relative to other areas of hospital emergency management such as response plans and continuity of operations plans as there is overlap among all these plans. However, it is imperative that hospitals develop clear and specific triggers to activate elements of their recovery functions as early as possible during an incident. Many hospitals that have had to recover from significant events stated that they waited too long to initiate recovery functions after they started responding to an emergency. This avoidable delay was one of the most difficult challenges for these hospitals to overcome when initiating recovery operations.

Hospital Recovery - Triggers for the Activation of Recovery Functions

1. Hospitals should consider activating their recovery functions as soon as their emergency operations plan (EOP) is activated
2. Hospitals should regularly reassess the value of activating their recovery functions when involved in extended response operations (e.g. at least at every shift change)
3. Hospitals should consider a tiered or scaled activation of recovery functions, giving consideration to potentially conflicting response and recovery objectives





6. Setting Recovery Objectives

ASPR outlines that hospitals should develop both short-term and long-term recovery priorities following a disaster in Capability 2: Healthcare System Recovery. However, Capability 2 does not specifically elaborate on how hospitals should set those recovery objectives. Federal agencies involved in Recovery Support Function: Health and Social Services describe several outcomes they believe health and social service organizations should generally strive for that help to establish objectives, but those aspirational outcomes often do not readily translate into concrete, incident-specific objectives.

NDRF Recovery Support Function (RSF): Health and Social Services Outcomes

- 1. Restore the capacity and resilience of essential health and social services to meet ongoing and emerging post-disaster community needs**
- 2. Encourage behavioral health systems to meet the behavioral health needs of affected individuals, response and recovery workers, and the community**
- 3. Promote self-sufficiency and continuity of the health and well-being of affected individuals; particularly the needs of children, seniors, people living with disabilities whose members may have additional functional needs, people from diverse origins, people with limited English proficiency, and underserved populations**
- 4. Assist in the continuity of essential health and social services, including schools**
- 5. Reconnect displaced populations with essential health and social services (FEMA NDRF 54)**

Hospitals should set simple, measurable, achievable, realistic, and task-oriented (S.M.A.R.T.) objectives during recovery just as they do during response. Hospitals can consider their operations and organizational priorities in order to set S.M.A.R.T. objectives during recovery. Hospitals should consider response actions and decisions that will automatically generate recovery objectives. Anytime a service or normal business operation is altered, reduced, or shut off during response, there may be actions hospitals need to take during recovery to return to normal operations or to prepare for the next emergency. An example is turning on a generator in response to a power outage. Once power is restored and the generator is no longer needed, it will need to be serviced and refueled. Hospital recovery leadership will need to review and update objectives throughout recovery as new damage assessment information is collected from internal and external sources.



Hospital Recovery – Setting Recovery Objectives

1. **Develop Standing Recovery Objective(s)**
 - A. Ensure the safety of staff and patients throughout all recovery efforts
 - B. Prioritize hospital functions as they relate to the mission of the hospital
 - Clinical functions
 - Teaching functions
 - Research functions
 - Administrative/Support functions
2. **Prepare Pre-written Recovery Objectives that are Triggered by Response Actions**
 - C. Examine response actions that require attention during the recovery phase to help the hospital resume normal operations
 - Ex. 1 (power outage): Service and refuel emergency generators within 24 hours of power restoration
 - Ex. 2 (power outage): Reschedule cancelled elective procedures within 72 hours following the restoration of power/surgical services
 - Ex. 3 (MCI/surge): Offer staff critical incident stress debriefings before they are sent home following any mass casualty incident
3. **Prepare to Establish Incident Specific Objective(s)**
 - D. Prioritize short-term and long-term department, unit, service, and/or utility recovery objectives based upon hospital-wide damage assessment, hospital needs, and community needs

7. Assessment and Documentation of Recovery Needs

Rapidly conducting an accurate damage assessment following a major disaster is one of the most complex challenges that a hospital may ever face. ASPR focuses a planning resource element on “*Assessment of healthcare delivery recovery needs post disaster*” in Capability 2: Healthcare System Recovery. In this element, ASPR underlines the importance of hospitals preparing to coordinate the assessment of their recovery needs following a disaster with their external partners. Following a disaster, hospitals will need to both collect and share information with partners from federal, state, and local agencies as well as private and non-governmental organizations. Identifying what information these recovery partners collect, share, and need is an important step in preparing to assess a hospital’s recovery needs.



The recovery procedures described in the NDRF stress the importance of local and state damage assessments following a disaster. While legislation such as the Post-Katrina Emergency Management Reform Act passed in 2006 allows federal agencies to be more forward leaning when it comes to response, federal recovery assets are still largely dependent upon local and state damage assessments (Bea 8). Federal agencies rely upon local and state responders to communicate needs quickly and clearly so recovery assets can be deployed and directed to where they can be of greatest assistance in a timely manner. Federal assets will only be necessary for response and recovery when local and state capabilities are overwhelmed. Consequently, substantial resources will be requested from federal partners when they are needed. This significant need at the local and state level translates directly into financial considerations for federal partners who will be reluctant to dedicate funding to any organization that is not transparent about how their damage assessment was completed.

NDRF Assessment Protocol for Recovery Support Function Activation

The NDRF employs an assessment protocol to ensure a scalable, flexible, adaptable, and cost-effective approach to recovery activities and to determine which coordination structures are necessary and appropriate under the circumstances. From this assessment, the [Federal Coordination Officer] (FCO), in coordination with the State, activates the appropriate Recovery Support Functions (RSFs), if necessary (FEMA NDRF 31).

Hospitals should meet with their local emergency management agency and discuss when it may be appropriate to coordinate their hospital damage assessment with local authorities. Some circumstances when this may be beneficial include a declared state of emergency and major disasters as declared by the President. Public and private nonprofit facilities that provide medical care or the essential service of emergency medical care as defined by the President and outlined in the Robert T. Stafford Disaster Relief and Emergency Assistance Act may be eligible for reimbursement under the Stafford Act.¹

¹ For more information on the Stafford Act visit:

<http://www.fema.gov/robert-t-stafford-disaster-relief-and-emergency-assistance-act-public-law-93-288-amended>



ASPR Hospital Preparedness Program Capability 2: Healthcare System Recovery - P2. Assessment of Healthcare Delivery Recovery Needs Post-disaster

The State and Healthcare Coalitions, in coordination with healthcare organizations, emergency management, local, state, and Federal recovery coordinators, relevant response partners, and stakeholders, perform an assessment of healthcare organizations recovery needs post-disaster. This process should include but is not limited to the following elements:

- 1. Coordination with healthcare organizations to identify immediate operating needs for the delivery of essential healthcare services**
- 2. Coordination with partner healthcare organizations to identify possible long-term healthcare recovery priorities**
- 3. Processes to communicate healthcare recovery priorities to the local and state agencies responsible for recovery
(ASPR 14)**

Every hospital is a complex organization that is dedicated to providing medical care that meets the unique needs of their community. The high amount of variability among both communities and hospitals makes it difficult to find a one-size-fits-all solution to hospital damage assessment. However, the variability among hospitals also affords each hospital the opportunity to tailor their damage assessment procedure to its organization. Each hospital should create a method for collecting the most accurate information regarding their needs following a disaster and ensure they develop their assessment so that it is simple and transparent.

Performing a hospital-wide damage assessment following a disaster will be a resource-intensive activity involving data collection, complication, and analysis. It is important to develop methods for hospital staff to report urgent matters that require immediate attention so these significant issues are not lost among the large volume of less urgent, minor concerns that will also be reported during the damage assessment. Hospitals should prepare to manage their damage assessment using the Hospital Incident Command System. Hospitals should also consider their hazard vulnerability analysis and prepare methods to speed their damage assessment following both highly likely and catastrophic incidents. Hospitals that approach

their hazard vulnerability analysis in a compressive manner will be able to identify how to mitigate threats, how to respond to incidents effectively, and how to speed recovery from an incident. For example, a hospital that is in a flood plain could consider developing an assessment tool that provides an initial assessment of damage depending upon the level of floodwater inundation at the hospital campus. Hazard specific assessment tools should complement, rather than replace general all-hazards assessment methods that hospitals have prepared for response and recovery.² Reported damage assessments can dictate the amount of recovery funds that are available to hospitals and attempts to change assessments can result in years of litigation.



A cyber-disruption will present unique challenges for hospitals as they work to recover from a disaster. A variety of hazards can render information technology (IT) systems inoperable, which may prevent hospitals from effectively gathering information and coordinating recovery activities. Hospitals can reduce the effect that an IT disruption will have on their recovery efforts by planning to use redundant and resilient forms of communication during recovery. Hospitals should consider building assessment into standard operating procedures for their services, departments, and units so assessments begin as soon as possible once a cyber-disruption occurs. In the event of a cyber-attack, hospitals may need to spend time identifying

² Additional information on how to conduct a hospital-wide assessment following a disaster can be found in the *Hospital Assessment and Recovery Guide* written by Richard Zane M.D. and Paul Biddinger M.D. available from: <http://archive.ahrq.gov/prep/hosprecovery/>



the vulnerabilities that were exploited in their IT systems and to what extent their systems and data were corrupted before implementing strategies to restore their networks.

Hospital Recovery – Damage Assessment Considerations

- A. Hospitals should prepare a simple and transparent method for conducting a comprehensive damage assessment that covers all areas of the hospital**
- B. Hospitals should consider threat/hazard-specific assessment tools that can be used to standardize assessment across the entire hospital and simplify initial assessments**
 - A. Ex. 1: Hospital surge inundation model that estimates damage based upon flood or surge level (e.g. 4” floodwater = subbasement, basement, and first floor flooding)**
 - B. Ex. 2: IT system specific assessment tool(s) that helps track status/functionality of multiple and various IT systems used throughout the hospital**
- C. Damage assessment begins during response and will need to be repeated throughout recovery to monitor progress as a hospital works to achieve recovery objectives**
- D. Pathways and the processes used to share damage assessment information within the hospital and with external recovery partners should be clearly defined**
- E. Each department, unit, service should be asked to identify at least the following:**
 - A. Operational status (e.g. fully operational, partially operating, non-operational)**
 - B. Status of staff**
 - C. Damage to physical space and equipment**
 - D. Disruptions to communication/information technology systems**
 - E. Immediate needs and long-term needs**
 - F. Estimated time to resume department-level, unit-level, service-level functions**

8. Recovery Team

Who should be involved in recovery efforts is difficult for hospitals to determine. Everyone at the hospital including administrative, clinical, and support staff can potentially be involved in emergency response and recovery and there will be many competing priorities for hospitals to balance as they transition from response to recovery. Some constraints that hospitals will need to consider when assigning staff to recovery functions include response needs and staff fatigue. Hospitals will need to proactively staff their recovery team in a practical manner. Considering potential recovery needs and setting clear recovery objectives will help hospitals determine appropriate recovery team staffing levels.



Both ASPR and FEMA identify the need for organizations involved in recovery to identify a local-level disaster recovery coordinator who can coordinate recovery efforts with state and federal recovery coordinators. Hospitals should maintain a clear Hospital Incident Command System (HICS) and include a hospital disaster recovery coordinator, and perhaps larger disaster recovery team, as part of their HICS organization. Hospital should consider how and where the role and responsibilities of a disaster recovery coordinator fit into their HICS organization.

Hospital Recovery – Recovery Team

- 1. Recovery should be managed using the Hospital Incident Command System (HICS)**
- 2. Roles, responsibilities, and authorities of recovery team members should be clearly identified in the hospital emergency operations plan**
 - a. The Incident Commander (IC) is responsible for managing an incident from response through recovery. He/She should consider delegating recovery planning efforts if response efforts require his/her full attention**
 - b. The IC may consider delegating recovery planning to the Planning Section Chief, Finance Section Chief, or to a Deputy Incident Commander**
- 3. Hospitals should plan to use the staff they have as efficiently as possible**
 - a. Consider assigning staff who are not normally involved in response a role on the hospital recovery team**
 - b. Staff who have responsibilities assigned during both response and recovery should be phased out of their response roles as soon as possible in order to give them rest before they assume their recovery roles**

9. Integrating Recovery Functions into Emergency Operations Plans

Another step in recovery planning is to create appropriate structures and systems to manage all aspects of recovery including both short-term and long-term recovery needs. Hospitals should consider how each element of their emergency operations plan (EOP) that addresses how the hospital will respond to an incident will be affected and can be leveraged as an incident transitions from response to recovery. The section presents important information that hospitals should consider when developing recovery capabilities in their EOP. For clarity, the discussion of integrating recovery functions into hospital emergency operations plans has been organized into six interrelated categories: communications and information management,

materials and personnel management, behavioral health, safety and security, financial and legal, and volunteer and donations management.

FEMA Comprehensive Preparedness Guide 101: Developing and Maintaining EOPs

Traditional Functional EOP Format (excerpt)

1. Basic Plan

- A. Introductory Material
- B. Purpose, Scope, Situation Overview, and Assumptions
- C. Concept of Operations
- D. Organization and Assignment of Responsibilities
- E. Direction, Control, and Coordination
- F. Information Collection, Analysis, and Dissemination
- G. Communications
- H. Administration, Finance, and Logistics
- I. Plan Development and Maintenance
- J. Authorities and References

2. Functional Annexes

3. Hazard-, Threat-, or Incident-Specific Annexes (FEMA CPG 3-4)



RECOVERY

A. Communications and Information Sharing

A comprehensive communication plan is an integral component of an emergency operations plan, an incident action plan, and the recovery process. During recovery, sending and receiving messages as well as maintaining situational awareness may be challenging for hospitals. Hospitals should prepare to actively maintain situational awareness as they work from response through recovery. It will be important to leverage technology and systems innovations to enhance greater information sharing, accountability, and transparency. Hospitals should prepare to communicate both internally and externally during the recovery phase using redundant and resilient forms of communication as normal communication methods may be compromised.



Depending upon the incident, hospitals may be unable to take desired recovery actions until after an external agency has taken an action. This may mean waiting for the local public works department to clear debris from a roadway or waiting for a utility provider to restore electricity to the hospital. Similarly, a hospital may need to wait to pursue a recovery objective until after a regulatory or life-safety agency has inspected a space and deemed it appropriate for use. Incidents requiring a criminal investigation by a law enforcement agency or an arson investigation by the fire department will require effective communication and cooperation among public safety, public health, healthcare agencies, and emergency management. Primary recovery objectives such as rebuilding or cleaning a space will be delayed until investigators have collected the evidence they need. Clearly communicating the hospital's status, needs, and estimated timeframes to complete recovery tasks with both internal and external stakeholders is essential in managing expectations during recovery from an event. Following a disaster, the situation that both the hospital and the community it serves will face will rapidly change and new challenges or resources may present that will impact the strategies and tactics hospitals use to recover. Hospitals should provide regular situation reports and updates both internally and externally as early as possible and often as the hospital works through recovery. Actively monitoring and posting updates on social media sites can be an effective method of sharing information with and gathering information from the media, partner agencies, and the public during recovery.

B. Materials and Personnel Management

Recovery planning should develop a structure and system to manage recovery resource needs. The capabilities requested, the priority that requests are assigned, and how resources are allocated as they become available should be considered in relation to overall hospital recovery objectives. All requests for resources and services should flow through the Hospital's Incident Command System. Hospitals should consider developing an electronic process, with redundant non-electronic methods, to formally release and accept all resources internally, among lending and receiving hospitals as well as other response partners.



Over the past decade, routine resource management among many hospitals has transitioned from stockpiling resources in supply rooms to relying upon electronic inventory tracking and purchasing systems to order and deliver additional resources just-in-time when supplies become scarce. This just-in-time system is efficient, but hinges upon two key factors. In order for hospitals to receive supplies before they run out, both information technology systems and transportation networks need to be operational so hospitals can request and receive supplies from vendors. A planning target that many hospitals already use when considering the supplies they should have on-hand at any moment is the amount of resources that would be required to make the hospital capable of “standing-alone” for 96 hours. When planning how to manage limited resources, hospitals must consider all variables in their resource utilization estimates including on-hand supply, the rate of use, possible alternatives, when hospitals will be able to obtain new supplies of that resource, and possible competition for the resource during a major disaster. It is possible that hospitals will enter recovery facing either one of or a combination of the following challenges: a resource shortage, a higher than average rate of use for a resource, or a longer than expected delay in supply shipments. During pre-incident recovery planning, hospitals should first identify the resources they have on hand that are most likely to become limited if their supply chain was disrupted. Then hospitals should develop resource management triggers and strategies that will maximize the utility of those critical resources assuming different levels of scarcity.

After potential recovery needs have been identified, hospitals can work with vendors or partner agencies to establish agreements or contracts that would be used in the event that a hospital activates recovery functions. Hospitals should prepare to secure recovery resources from outside normal supply chains and should prepare to operate recovery functions with limited resource availability. Recent major events have disrupted supply chains of critical resources including fuel and medical supplies for at least 7-10 days after an emergency.

The most important resource for hospitals to consider during their recovery planning is their staff. A disaster that impacts the hospital may also significantly impact staff and their families.



Hospitals should develop plans to care for the physical and psychological needs of staff members and their families. This may require allowing staff time off to attend to personal matters, assisting with transportation to and from work, assisting with meals and temporary lodging, laundry services, or elder and child care services. Hospitals should also consider the financial support and/or payments that hospital staff will receive in the event that healthcare operations are disrupted either temporarily or for an extended period of time. Many clinical and non-clinical employees may be offered new employment or they may seek new employment following a disaster. Following a disaster, the loss of a large number of staff if they find new employment or move away may be an insurmountable obstacle for hospitals to overcome as they work through recovery. Additionally, hospitals may need to care for the behavioral health of their staff and/or family members. Considerations for behavioral health are discussed in more detail in the next section. Developing plans to care for the physical, mental, and economic needs of staff and their families during recovery will help hospitals to remain resilient in the face of a wide variety of hazards.

C. Behavioral Health

Hospitals need to consider how they will care for the mental health of their employees following a disaster. Hospitals should create behavioral health plans and prepare to take interventions that will help hospital workers recover from an event. When planning, hospitals should take into consideration that the signs of psychological trauma following a disaster may be delayed or difficult to recognize. Behavioral health plans should be scalable and flexible and may entail plans for individual, family, and group crisis counseling, distribution of educational literature, and an outline of how the hospital will connect staff, patients, their families, and members of the community with internal or external resources that they may need to restore psychosocial wellbeing after a disaster. Behavioral healthcare should include mental health services, treatments for substance abuse and other addictions, and a broad range of social or emotional supports designed to restore psychological wellbeing. Hospitals should regularly



promote the behavioral health resources that hospitals offer routinely and following a major event.

Following an event where hospital staff or patients are injured or killed, the psychological impacts of response may disrupt both clinical and support services throughout the entire hospital. Recovery can present its own challenges when attempting to care for the welfare of hospital staff, particularly following an incident where an injury or loss of life occurs at the facility. Hospitals should prepare to bring in outside clinicians and vendors to perform services that normally hospital staff would provide. This may mean bringing in traveling nurses to support clinical units or contracting with vendors for short-term support in other areas. If an employee or patient is hurt or killed at the hospital and cleaning or construction is required to restore an area, then hospital leaders should strongly consider using contracted services for those efforts. It is likely that the injured party is or the deceased was a colleague of the environmental services and facilities employees who would be assigned those tasks.

D. Safety and Security

Recovery efforts cannot begin at a hospital until the facility is safe. Hospitals should establish contracts for additional security staff, fences and barricades, and debris removal. If hospitals intend to seek reimbursement from the federal government or other sources, they should also establish debris removal monitoring contracts. Hospitals should also determine what local or state debris removal contracts they may be eligible to use in the event a disaster affects their facility. It is important for every hospital to identify the normal functions and support mechanisms that ensure the security and safety of their hospital. It is very likely that security and safety needs both inside the hospital and in the surrounding community will be increased following any disaster either natural or manmade. Hospitals should prepare for recovery situations when internal plans and resources that promote a safe environment of care have been disrupted during the response phase of an incident. Hospitals should also prepare for situations during recovery when local resources, including public safety agencies, may be



unavailable to assist with hospital safety and security needs at normal levels. Hospitals can address some potential internal and external gaps before an event by introducing redundant and resilient measures into their security and life-safety plans.

During day-to-day operations, hospitals rely upon detailed and tested life-safety procedures to promote an environment of care that is both safe and secure. These procedures address the unique characteristics of each hospital and rely upon trained staff, communication systems, and material resources working in concert to function properly. A disaster may disrupt or alter a hospital's community, the physical facilities of a hospital, or other internal resources that support established life-safety procedures. It is important for hospital emergency planners to consider that established life-safety procedures may not be fully effective during a hospital's recovery. Hospitals should plan to quickly and thoroughly assess hospital life-safety plans during the recovery phase of an incident to determine if changes to these plans need to be made.

Life-safety and security considerations following a disaster can relate to both routine and emergent operations. An example of a routine safety plan that hospitals should reevaluate during recovery is the plan for hospital access. Hospitals should plan for how safe access to their facilities for staff, patients, visitors, deliveries, ambulances, and contractors will be established and maintained if normal security measures and pathways for entrance and egress to and from the hospital are less than fully functional or are affected by recovery efforts. An example of an emergent safety plan that hospitals should reconsider during recovery is the hospital evacuation plan. Depending upon the condition of the hospital's facilities and the resources available following a disaster, there may be a need to establish interim or new shelter-in-place and evacuation plans.

It is important to remember that many of the challenges that a hospital will face during recovery related to safety and security can be addressed before a disaster occurs. Hospitals should prepare clear methods for communicating changes in life-safety plans among hospital



staff, appropriate partner agencies, patients, and the public. Hospital staff will likely be fatigued during the recovery phase and may be reluctant or too exhausted to consider the next emergency that a hospital may face. However unfortunate it is, the fact remains that significant events such as once-in-a-hundred-year natural disasters and man-made disasters do not occur on any regular timeframe and therefore hospitals must always hope for the best, but prepare for the worst.

E. Financial and Legal

If proper care and attention is not devoted to the financial and legal aspects of recovery before an incident occurs, then it can take hospitals years following a disaster to resolve issues that arise. Hospitals should develop a disaster cost recovery plan before a disaster occurs. A disaster cost recovery plan can help a hospital to manage losses and recover assets in order to ensure that the hospital remains financially viable in the event of a major disaster. Elements of a disaster cost recovery plan are described on page 22.

Hospitals should have a clear understanding of what their insurance plans will and will not cover during recovery efforts and should prepare clear and transparent documentation that can be shared with recovery stakeholders when applying for aid, assistance, or reimbursement. The availability of federal assistance following a disaster is not guaranteed. Hospitals should thoroughly review their insurance policies to determine their coverage and what information their insurance providers will require if the hospital is making a claim. Ideally, hospitals will be able to provide any organization they are requesting assistance from with documentation of damages using inventories and pictures of property collected both before and after the incident. Maintaining adequate insurance coverage will help hospitals quickly recover from a major disaster while failing to do so could compound the impact of a disaster. For example, hospitals located in a flood plain that fail to participate in the National Flood Insurance Program jeopardize their ability to secure insurance payments.³ Additionally, hospitals should

³ For more information on the National Flood Insurance Program visit: <http://www.floodsmart.gov>



prospectively discuss the details of the process for filing a major claim with their insurance providers. Repeatedly, hospitals damaged by severe weather have estimated their losses to be in excess of \$1 Billion (NYT, Hayes).

Hospital Recovery – Elements of a Disaster Cost Recovery Plan

- 1. Loss Management Strategies**
 - a. Create a protocol that supports tracking healthcare operations and related disaster losses/expenses during/after the response phase**
 - b. Identify potential uninsured costs/losses**
 - c. Pre-establish economical methods for the repair and/or replacement of damaged and/or depleted resources**
 - d. Discuss financial risks including long-term interruption of cash flow and litigation**
- 2. Insurance / Funding Assessment and Definitions**
 - a. Identify all insurance policies that the hospital carries and the terms of coverage⁴**
 - b. Determine policy deductibles, limits/sublimits, and exclusions**
 - c. Determine definitions as necessary (e.g. water damage / flood / storm surge)**
 - d. Review deadlines for reporting claims and identify what information insurers require when claims are submitted**
 - e. Anticipate that extra finance staff may be needed to quickly process claims and identify where and how additional finance personnel will be obtained**
 - f. Establish policies that address how hospital staff will describe disaster losses both publically and privately⁵**
 - g. Review the hospital's contract bid process for disaster repairs, supplies, and services to determine the number of bids the hospital needs to solicit and/or if insurers need to approve costs before work begins or supplies/services are obtained**
 - h. Discuss with insurers the conditions required to claim the maximum benefit of the hospital's policies**
 - i. Identify other funding sources including public assistance, grants, donors, etc. and outline the process the hospital will need to follow when applying for aid (ASHRM)**

⁴ Types of insurance coverage to consider include: property damage, business interruption, extra expense, expense to reduce loss, debris removal, code upgrade coverage, expediting insurance coverage, sue and labor coverage, contingent business interruption coverage, expanded business interrupting coverage, civil authority coverage, ingress/egress coverage, service interruption coverage, interdependency coverage, and salary continuance coverage (ASHRM 2).

⁵ Non-privileged communication may be used as evidence to decide disputes between a hospital and their insurers



Fortunately, many hospitals have never had the need to file insurance claims and reimbursements on the scale of tens of millions of dollars. Unfortunately, during the past ten years, several hospitals have suffered losses on the scale of a billion dollars because of natural disasters. The chart below outlines a few major disasters, the hospitals those disasters affected and some of the financial results for those affected institutions. Hospitals should consider all of their assets and be prepared to file a claim for the partial or complete loss of those assets. Hospitals should engage in frank discussions with the underwriters of their insurance policies as well as the major claim representatives from their insurance providers about the limits on their policies and what claims will be covered in the event that their hospital experiences catastrophic losses.

Disaster	Hospital(s) Affected	Damages and/or Reimbursements
Moore, OK EF5 Tornado 2013	Moore Medical Center	\$50-70M estimated insurance reimbursements from four policies (Hampton)
New York, New York Hurricane Sandy 2012	NYU Langone Medical Center and other NY hospitals and healthcare facilities	\$3B estimated total damages (Hurricane)
Joplin, MO EF5 Tornado 2011	St. John's Hospital	\$950M estimated cost of new medical facility to replace destroyed hospital (Community)
Galveston, TX Hurricane Ike 2008	University of Texas Galveston Medical Branch	\$1.2B estimated damages (UTMB)
New Orleans, LA Hurricane Katrina 2005	Charity Hospital	\$475M arbitrated reimbursement for damages (Moller)

Hospitals should also prepare to deal with uncompensated care following a disaster. As hospitals work to provide healthcare during the response to an incident, normal financial tracking methods may be unavailable and reimbursement for services provided can be challenging to obtain during recovery. Finally, hospitals should consider what their operating costs will be following a disaster and what it will take to balance their operating budget.



Renovations and staff turnover are two potentially crippling financial challenges that hospitals may face following a catastrophic disaster (GAO 4).

Following a disaster, hospitals may be able to secure financial assistance from sources other than FEMA, DHHS, or their insurance provider. Private non-profit hospitals may be eligible to apply for disaster relief grants that many large private businesses and foundations provide. Hospitals that serve or that are located in rural communities (typically defined as less than 50,000 people) may be eligible for assistance from programs or organizations that specifically target rural or agricultural communities.⁶

F. Volunteer and Donations Management

Whether volunteers and donations are considered a blessing or a burden depends upon what hospitals have done to prepare to manage assistance during recovery. Hospitals should prospectively prepare lists of donated materials they would accept or request. Hospitals may consider preparing or establishing an account where donations may be directed following a disaster. In this case, hospitals should also create detailed rules and management structures to ensure donations are effectively managed and appropriately spent.

The contributions of skilled and unskilled volunteers can be immensely helpful for hospitals that are working through recovery as long as volunteer efforts are properly managed. Hospitals should clearly explain to potential volunteers the positions they could fill within the hospital. Any hospital that plans to use volunteers should develop an intake procedure that includes registration, orientation to the hospital, and training volunteers for the tasks they will be expected to complete. The intake procedure should also verify any credentials or certifications volunteers state they have and background checks may be appropriate depending upon the tasks hospitals expect volunteers to complete. Hospitals in Massachusetts can turn to the

⁶ The Rural Assistance Center collects and maintains resources and strategies to improve rural health and human services on a variety of topics including emergency preparedness. The Rural Assistance Center's Emergency Preparedness and Response Guide is available online from: <http://www.raonline.org/topics/emergency-preparedness-and-response>



MDPH for assistance in locating volunteers who are registered through [MA Responds](#), a system that tracks and verifies credentials of both medical and non-medical volunteers.⁷

Even if recovery needs are currently being met at the hospital, it is wise for hospitals to consider encouraging volunteers or donors to provide their contact information or to contact the hospital again at a later date when the need for resources may again be scarce. For example, after some disasters, large numbers of people donate blood and the supply of blood can exceed the demand for blood in the short term. However, in the long term, there will likely be future blood shortages that could be eliminated if the donors inspired to donate immediately following a disaster spread out their donations over time rather than create a surplus by donating all at once.

Hospitals should follow the mantra of *redirect rather than refuse* volunteers and donations following a disaster. Effective plans for when, how, and where to direct donations and volunteers following a disaster require hospitals, public health, emergency management, non-governmental organizations, faith-based organizations, and other community groups to discuss their anticipated needs and how they will communicate real needs among each other and to the public following a disaster. Hospitals in Massachusetts may consider redirecting volunteers who hope to be involved in the response to public health emergencies to contact the local [Massachusetts Medical Reserve Corps](#) (MRC) unit or an organization that is involved with [Massachusetts Voluntary Organizations Active in Disasters](#) (MAVOAD).^{8,9} Another excellent resource for hospitals to consider when developing plans to redirecting donors or volunteers is the [United Way's Massachusetts 2-1-1 Helpline](#).¹⁰ Call made to 2-1-1 are answered by trained operators who can connect callers with appropriate community services in their area.



⁷ For more information on MA Responds visit <https://www.maresponds.org/>

⁸ For more information on MRC units visit: www.mamedicalreservecorps.org

⁹ For more information on MAVOAD visit: www.massvoad.org

¹⁰ For more information on MA 2-1-1 visit: www.mass211.org or call 2-1-1, (877) 211-6277, (508) 370-4890 TTY



10. Hospitals, Emergency Management, and Partner Agencies

A hospital's recovery functions and capabilities will be stronger if the hospital takes time to integrate into their community's existing emergency management structure. In addition to forming positive relationships with local police, fire, EMS, public health, and emergency management agencies it is important to reach out to other organizations active in the city or town where the hospital is located. This includes private sector partners and non-governmental organizations as discussed in the previous section. Local media outlets are also a key partner to plan with before an event occurs. External agencies will have response and recovery objectives that will not always align with hospital recovery objectives; however, hospitals cannot predict which organizations may be able to offer them support and assistance when they are faced with a challenging recovery.

Hospital Recovery – Local Agency/Organization Directories

Local Emergency Management Directors Listing –

Maintained by MEMA: [Local Emergency Management Directors Listing¹¹](#)

Local Board of Health Directory –

Maintained by MA Association of Health Boards: [Local Board of Health Directory¹²](#)

Massachusetts VOAD Resource Guide –

Maintained by MA VOAD: [Massachusetts VOAD Resource Guide¹³](#)

It is also important for hospitals to look beyond their local partners and consider their interdependence with the communities that make up their clinical catchment area or region. Hospitals should reach out to municipalities beyond where they are located, particularly if healthcare resources surrounding the hospital are scarce. The following pages contain some suggestions on how to integrate the hospital into community emergency preparedness.

¹¹ To access the MEMA Local Emergency Management Directors Listing visit:

<http://www.mass.gov/eopss/agencies/mema/emergency-management-directors-listing.html>

¹² To access the MAHB Local Board of Health Directory visit: <http://www.mahb.org/Directory.aspx>

¹³ To access the Massachusetts VOAD Resource Guide visit:

http://massvoad.org/news/wp-content/uploads/2011/05/MASTER_MA_VOAD_Disaster_Resource_Guide_2011.pdf

A. Invite Local First-Responders, Municipal Agencies, and other Key Stakeholders to Participate as Members of Your Hospital's Emergency Preparedness Committee

- Establish relationships with police, fire, EMS, public health, and emergency management agencies in the hospital's home municipality, and preferably with all adjacent cities and towns as well.
- It is a best practice, and encouraged by The Joint Commission, that representatives from these agencies be invited to join the hospital's Emergency Management Planning Committee. An honest dialogue regarding hospital and community capabilities will foster collaborative relationships and help prevent agencies from forming unrealistic expectations or invalid assumptions during a disaster.



- A strong relationship with first-responders will be critical to a successful recovery and these relationships must be forged prior to an event.
- Hospitals should discuss with agencies in their jurisdiction how local recovery plans are structured to determine if hospitals will work directly with the local emergency management agency or with the local public health agency in an ESF/RSF structure.



B. Participate in Your Local/Regional Emergency Preparedness Committee (REPC/LEPC)

- At a minimum, LEPC/REPCs provide a forum for emergency management agencies, first-responders, private businesses, and the public to work together to evaluate, understand, train, coordinate, and communicate about chemical hazards in the community and develop jurisdictional hazmat response plans.
- Over the past ten years, many LEPC/REPCs have expanded their scope beyond chemical hazards to addressing all hazards in the community.
- Ideally, the hospital would have representation on the LEPC/REPCs for each municipality in its Primary Service Area. If this is not feasible, the hospital should be represented on the LEPC/REPCs in the municipality where it is located as well as neighboring communities.
- One effective means of delegating this responsibility is to require each member of the hospital's Emergency Management Planning Committee belong to at least one LEPC.
- Representation on the LEPC(s) will establish the relationships necessary for an efficient recovery. The hospital will have a better understanding of the available resources in the community and how to access those resources. Similarly, and of equal importance, the community first-responders will have realistic expectations of the capabilities of the hospital.

Local Emergency Planning Committee (LEPC) Mission / Requirements

- **A response plan must be written for responding to a hazardous material incident with the jurisdiction(s). It must also be reviewed annually.**
- **Emergency responders (police, fire, emergency medical services, public works, etc.) must be trained to levels indicated in the plan. At a minimum, first-responders must be trained to the awareness level.**
- **The emergency response plan must be exercised at least once a year.**
- **The committee must create a system to collect, store, and respond to public requests. (MA EOPSS)**



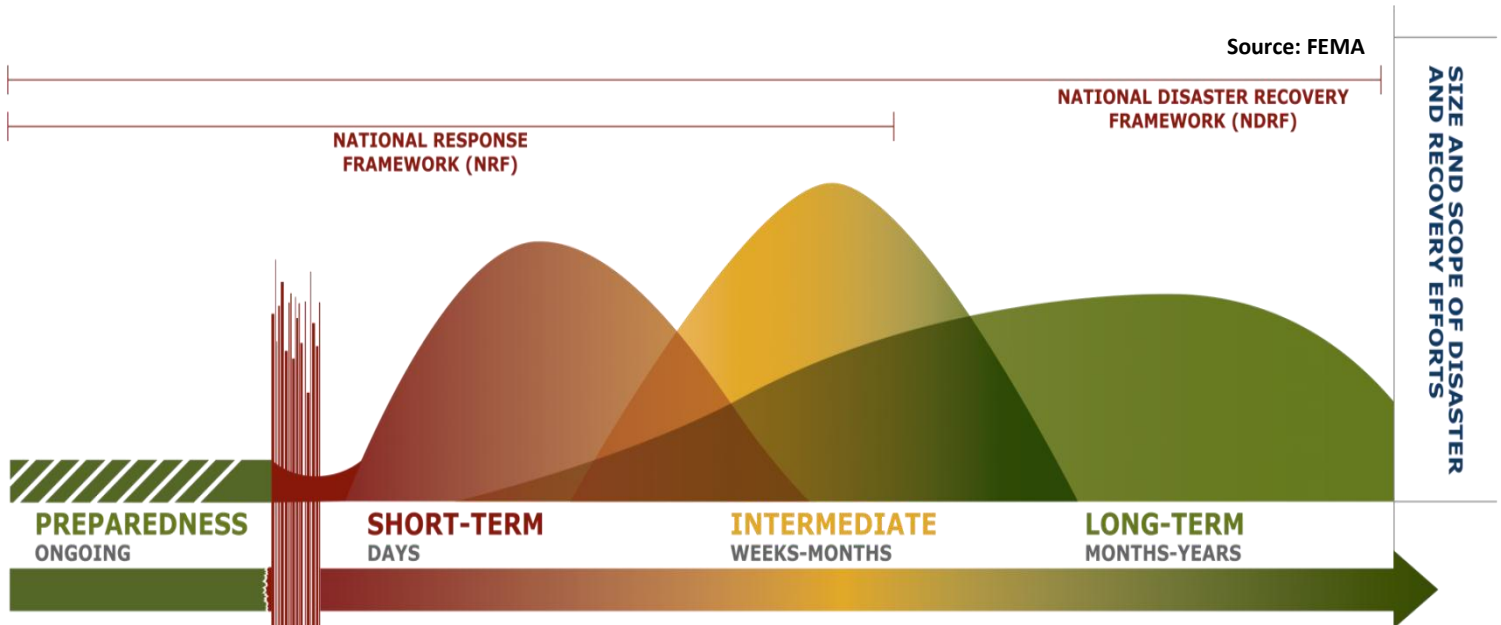
C. Represent Healthcare on a Regional Homeland Security Advisory Council

- Each region of Massachusetts has a Homeland Security Advisory Council. Each council has seats delegated for members of 12 different disciplines, including hospitals.
- A staff member of the hospital should contact the hospital representative serving on the Homeland Security Advisory Council. The council representative should provide the hospital with a summary of council projects and establish a time for someone from the hospital to sit in on a council meeting as an observer. If the position of hospital representative is vacant, the hospital should consider nominating someone to that position and work with the Homeland Security Advisory Council on the process of filling the vacant position.
- Integration with the Homeland Security Advisory Council will make the hospital aware of potentially available resources outside of the hospital's immediate community that often are underutilized.
- Additionally, by becoming involved in the Homeland Security Advisory Council the hospital will broaden its base of contacts from which to rely upon during a recovery.

Regional Homeland Security Planning Regions and Advisory Councils

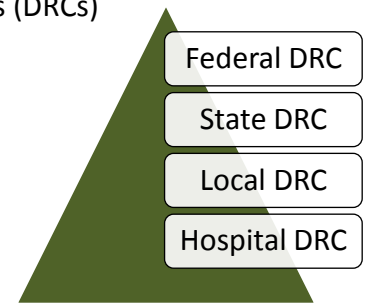
Each region of the Commonwealth has a multi-disciplinary and multi-jurisdictional advisory council of responders to ensure homeland security funds meet the planning, organization, equipment, training, and exercise needs of the region (MA EOPSS).

- **Metro Boston Homeland Security Planning Region and Advisory Council**
 - **MDPH Region 4C, Region 4B**
- **Northeast Homeland Security Planning Region and Advisory Council**
 - **MDPH Region 3, Region 4AB**
- **Southeast Region Homeland Security Region and Advisory Council**
 - **MDPH Region 5, 4AB**
- **Central Homeland Security Planning Region and Advisory Council**
 - **MDPH Region 2**
- **Western Homeland Security Planning Region and Advisory Council**
 - **MDPH Region 1**



D. Understand the National Disaster Recovery Framework

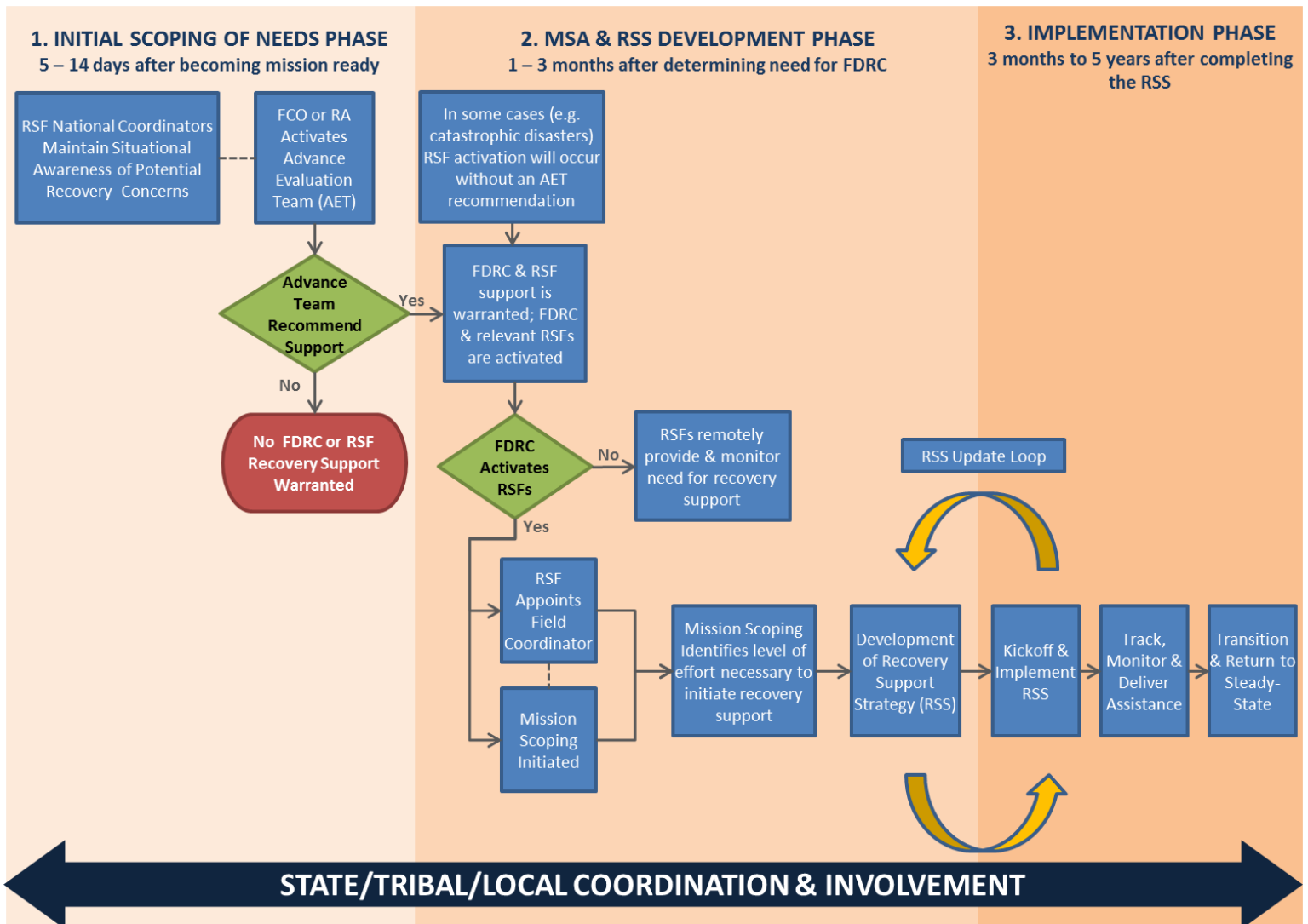
- The NDRF is built upon nine core principles that support three key elements:
 1. Leadership at every level: Disaster Recovery Coordinators (DRCs)
 - 1) Federal Disaster Recovery Coordinator
 - 2) State Disaster Recovery Coordinator
 - 3) Local (City/Town) Disaster Recovery Coordinator
 - 4) Hospital Disaster Recovery Coordinator
 2. Pre-disaster and post-disaster recovery planning
 3. Recovery Support Functions (RSFs)



When Recovery Support Functions (RSFs) are activated, hospitals are most likely to coordinate recovery efforts through the Health and Social Service (HSS) Recovery Support Function. At the Federal level, the Department of Health and Human Services coordinates the Health and Social Service RSF and provides state and local entities with assistance so they can address disruptions in public health services, healthcare operations, school systems, and many other areas. Within Massachusetts, recovery functions for the healthcare sector will be coordinated by MDPH in collaboration with MEMA. Statewide recovery plans for the Commonwealth are currently being revised to better align with federal structures outlined in the NDRF.

FDRC/RSF Activation – Deployment

Adapted: FEMA



NDRF activation occurs in three phases (see pages 31-32):

1. The **Advance Evaluation Team (AET)** coordinates their assessment with state/tribal officials and is responsible for the initial scoping of community needs and determining whether federal support is warranted. **(5 – 14 days)**
 - The activation of specific RSFs is dependent upon recovery issues and the ability of local/state authorities to manage those issues without federal support



- In some cases (e.g. catastrophic disasters) NDRF/RSF activation will occur without an AET's recommendation
 - NDRF/RSF activation is not automatically triggered by or dependent upon a Stafford Act disaster declaration being issued
 - Conditions that might indicate the need for the Health and Social Services Recovery Support Function include:
 - Federal ESF #6 and/or ESF #8 activation
 - Stafford Act Declaration
 - State or Tribe requests assistance with HSS recovery efforts
 - FCO/FDRC issues a Mission Assignment to the Coordinating Agency
 - Recovery activities involve more than one HSS RSF Primary Agency
 - HHS Secretary declares a Public Health Emergency
2. Next, activated Recovery Support Functions help to evaluate recovery needs and support the development of a **Mission Scoping Assessment (MSA)** that determines the level and type of support each RSF provides to the affected community. **(1-3 months)**
3. Finally, the Mission Scoping Assessment informs the **Recovery Support Strategy (RSS)** document that establishes initial recovery objectives and milestones. The RSS is updated as recovery operations progress. **(3 months – 5 years)**



11. After Action Reports and Improvement Planning

Hospitals should prepare a detailed after action report (AAR) following any significant event. An AAR should summarize the timeline of events as well as successes and challenges that a hospital encountered during response to and recovery from an incident. The Homeland Security Exercise and Evaluation Program (HSEEP) provides training and guidance for responders as well as templates that hospitals can use to create their own AARs.¹⁴

The Joint Commission requires a hospital designee whose sole responsibility during emergency response exercises is to monitor performance and document opportunities for improvement in EM.03.01.03 and specifies that all emergency response exercises include the identification of deficiencies and opportunities for improvement. Developing an AAR meets the criteria.

Recommended HSEEP AAR Format

Executive summary

Event overview

Background information

Date, time, location

Hazard/scenario type

Response/Recovery goals and objectives

Event synopsis

Analysis of mission outcomes related to *core healthcare preparedness capabilities*

Analysis of critical task performance

Conclusion

Appendix A: Improvement plan matrix

Root causes & observations

Recommendations

Due dates

Responsible organizations

¹⁴ For more information on HSEEP visit: <http://www.hseep.dhs.gov>



12. Recovery Planning Benchmarks

Hospitals should consider using the information in this section as a guide when working to develop recovery capabilities. Hospitals may also use these benchmarks to independently assess their recovery capabilities. The rationale behind each of these benchmarks comes from a variety of sources including ASPR Healthcare Preparedness Capabilities, Joint Commission Hospital Accreditation Standards, the NDRF, and lessons learned from both recovery-focused exercises and real-world disasters.

Benchmark #1 – Hospital Identifies a Disaster Recovery Coordinator

Identify an individual who will serve as the hospital’s disaster recovery coordinator and be responsible for managing recovery planning both within the institution and with external partners.

Discussion: The NDRF relies upon agencies and organizations at the federal, state, and local level to establish recovery leadership who are capable of coordinating recovery efforts before, during, and following a disaster. (See: [Hospitals, Emergency Management, and Partner Agencies, D. Understand the National Disaster Response Framework](#))

Related Criteria:

- ASPR HPP Capability 2, Function 1, P1
- TJC EM01.01.01

Benchmark #2 – Hospital EOP Effectively Addresses the Recovery Phase

Prepare to manage the recovery phase of an incident similar to the response phase by elaborating on the recovery section of the hospital emergency operations plan (EOP).

The hospital should specify recovery procedures, roles, and responsibilities that will apply to the Hospital Incident Management Team during emergency operations. This may involve defining triggers for recovery operations, adding prompts for recovery on relevant EOP/HICS documents, and/or describing how existing plans including medical surge, continuity of operations, IT recovery plans, etc. will support hospital-wide recovery efforts.

Discussion: Many Hospital EOPs do not effectively outline how emergency operations will be managed during recovery. (See: [Triggers for the Activation of Recovery Functions During Response](#))

Related Criteria:

- TJC EM02.01.01



Benchmark #3 – Recovery Planning is Assigned in EOP/HICS During Response

Identify the position in the HICS structure that will be responsible for initial recovery planning and advocating for recovery efforts during emergency operations.

Discussion: Unless the responsibility for recovery is assigned, recovery efforts can be forgotten during response. (See: [Recovery Team](#))

Related Criteria:

- TJC EM02.02.07

Benchmark #4 – Damage Assessment Plans are Comprehensive

Review, tailor, and use HICS disaster assessment forms to conduct hospital-wide damage assessments across all units, services, facilities.

This may include preparing methods to compile and share information across all units, services, and departments to create a common operating picture and discussing how external partners (i.e. first-responders/public health/emergency management/vendors) share information about hospital status or community needs to inform hospital operations.

Discussion: The ability to set recovery objectives depends upon situational awareness informed by many sources. (See: [Assessment and Documentation of Recovery Needs](#))

Related Criteria:

- ASPR HPP Capability 2, Function 1, P2
- TJC EM02.02.01

Benchmark #5 – EOP Includes Recovery Objectives (Standing and Incident-Specific)

Develop both standing recovery objectives and examples of incident-specific recovery objectives that are written to the S.M.A.R.T. standard.

Discussion: Many recovery objectives can be written before an event occurs. (See: [Setting Recovery Objectives](#))

Related Criteria:

- TJC EM02.02.01
- TJC EM02.02.03
- TJC EM02.02.05
- TJC EM02.02.07
- TJC EM02.02.09
- TJC EM02.02.11



Benchmark #6 – Contracts and Agreements Exist for Recovery Services

Negotiate and secure contracts with vendors and Memorandums of Agreement with partners for recovery services.

These services may include fencing, security, debris removal and monitoring, financial assistance and reimbursement processing, and cleaning and environmental services. Many MOU/MOAs do not discuss how resources and services will be managed when an incident transitions to the recovery phase. Hospitals should compare contracts with regional partners to minimize competition for scarce resources during recovery.

Discussion: Hospitals should prepare to secure resources and services during recovery that may not be included under routine agreements or contracts. Many recovery services become scarce following a disaster. (See: [Integrating Recovery Functions into EOPs, B. Materials and Personnel Management](#))

Related Criteria:

- TJC EM02.02.03

Benchmark #7 – EOP includes a Disaster Cost Recovery Framework

Develop a disaster cost recovery framework that realizes some losses are inevitable and aims to minimize financial loss to the institution.

A Disaster Cost Recovery Framework may include:

- baseline operating costs (to use as justification for disaster-related costs);
- a cost center to track both clinical and non-clinical disaster-related costs; and
- transparent procedures the hospital can use to quickly calculate response and/or damage costs.

Hospitals should review FEMA forms and hospital insurance coverage when designing this framework and the framework should be reviewed and updated annually along with the rest of the EOP.

Discussion: Hospitals cannot completely prevent disaster-related financial losses or costs; however, with effective planning hospitals can minimize losses and maximize reimbursement from insurance or other sources. (See: [Financial and Legal](#))

Related Criteria:

- TJC EM02.02.01
- TJC EM03.01.01



Benchmark #8 – Hospital Staff and Their Families are Supported During Recovery

Develop resources that staff and their families can access for support following disasters including robust mental health support services.

Discussion: Hospitals should consider diversifying and enhancing existing support resources to meet the complex psychosocial needs of hospital staff, patients, their families, and community members both immediately following a disaster and during an extended recovery.

(See: [Behavioral Health](#))

Related Criteria:

- TJC EM02.02.07

Benchmark #9 – Routinely Exercise Recovery Capabilities

Conduct an annual exercise on recovery and/or build recovery phase and challenges into all emergency preparedness exercises.

Discussion: Hospitals should include the recovery phase of emergencies in emergency preparedness exercises in order to assess, validate, and improve upon their recovery capabilities.

Related Criteria:

- TJC EM03.01.03

Benchmark #10 – Engage Partners in Recovery Planning

Engage public health and emergency management partners in defining how local, regional, and state partners will coordinate the recovery process with Federal partners.

Discussion: All phases of emergencies, including recovery, are managed at the local level. Hospitals should work through Health and Medical Coordinating Coalitions to engage their partners in discussion on how to prepare for and manage recovery operations. (See: [Hospitals, Emergency Management, and Partner Agencies](#))

Related Criteria:

- ASPR HPP Capability 2, Function 1, P1



13. Questions to Consider During Recovery Planning

A. Scope and Objectives

- What are your key planning assumptions for recovery?
- Who do you collaborate with internally and externally to define hospital priorities during emergency operations?
- What processes are in place to set recovery objectives? How do you identify, select, and prioritize recovery goals, objectives, and strategies?

B. Activation

- How do you transition from response to recovery?
- What is the process for activating recovery functions? Is it scalable?
- What are the criteria/triggers for activating the recovery functions?
- Who activates recovery functions during response?
- How are recovery functions activated?

C. Recovery Organizational Structure and Teams (HICS)

- What does your HICS structure look like during recovery?
- Who is in charge of recovery? How does s/he fit into the HICS?
- What are the roles and responsibilities in recovery?
- How are the teams staffed? Is there a difference in early vs. late recovery?
- Who has decision-making authority over recovery functions?

D. Risk Assessment / HVA / Identification of Recovery Needs

- Who assesses the hospital's recovery needs?
- How are they communicating with those working on recovery? How is this communicated to senior management (within HICS)?
- What processes are in place to identify and prioritize recovery needs?
- What are the risks and vulnerabilities that may impede recovery?



E. Continuity of Operations Plan (COOP) / Recovery Interplay

- Do you have a functional COOP? How and when is it activated?
- What is its organizational structure? Who is in charge of the COOP?
- Who sets the goals and objectives and how are these monitored?
- What are your COOP capabilities?
- What are your essential services in recovery?
- How is continuity of care (short-term and long-term) accomplished?
- How are short-term and long-term recovery needs identified and prioritized?
- How are resources used to support essential services? Have you included food services in your COOP plan?—many patients have specific dietary needs that must be met.
- Identify what units would reopen first, second, third, etc.; what surgeries or procedures would resume first, second, third, etc. Be as specific as possible.
- How do you transition back to normal operations?

F. Communications and Information Sharing

- What is your organizational structure?
- How long do you maintain a Joint Information Center (JIC) with partners?
- How is a JIC activated and staffed? Where is the structure located?
- Who at the local/state/federal-level do you communicate with during recovery?
- How do you communicate with external partners during recovery? What processes are in place?
- How do you communicate with your partners and other stakeholders during recovery? With the general public?
- Does your Health and Medical Coordinating Coalition have tools and capabilities to communicate and coordinate with its member organizations during recovery?



F. Communications and Information Sharing (continued)

- Who supports developing situational awareness among hospitals during recovery?
- What are your triggers to post/share recovery information internally or with partner agencies and the public?
- What recovery information is shared with staff, patients, partner agencies, and the general public?
- How will you leverage technology and systems innovations to achieve goals that result in greater information sharing, accountability, and transparency?
- Are your emergency communications protocols during recovery well-defined for all staff and regional partners?
- Are redundant forms of communication equipment tested and used regularly?
- Have you worked with regional/state partners to develop the sequential order that redundant forms of communications should be used during an incident?
- How does every hospital responding to or recovering from the disaster move to the same operational mode of communication redundancy if landlines, cellular phone systems, and internet are not functioning?
- What plans do you have to communicate with individuals who have functional and access needs?
- How will you use social media to enhance your communications during recovery?
- Who has authority to post, where would information be posted, what information should be posted; where and how would the hospital post information?

G. Materials Management

- Who is in charge of materials management during recovery?
- Do staff know their roles and responsibilities during recovery?



G. Materials Management (continued)

- How are recovery resource needs identified and prioritized? Are there criteria to rank needs?
- How are critical supplies monitored?
- How are resource needs requested and obtained? Where will you get support for resource requests?
- Is there an electronic process, with redundant capabilities, to formally release and accept all resources from lending and receiving hospitals?
- How are needs monitored throughout recovery?
- How are challenges identified and resolved?
- How does your hospital communicate status of operations and supply chains as well as restoration challenges and timelines to all partners?
- How does your hospital identify the process for how requests are handled (vendors/local/regional/state/federal)?

H. Personnel Management

- How do you manage staffing early into the response phase to assign staff to recovery efforts as early as possible?
- How will you identify staff who have lost their badges/credentials?
- How are the needs of personnel and their families identified and prioritized during recovery?
- How are requests for additional personnel managed during recovery?
- Do you have readily available surge staffing and management structures that support the increased workload during recovery?
- Have you established shifts of roles and responsibilities in stages of recovery?
- What are the challenges you would encounter in taking care of your staff during recovery? Have you identified ways in which staff can assist in recovery efforts from remote locations?



I. Behavioral Health

- Do you have a plan to deal with the short and long-term mental health and behavioral needs in relation to events induced or exacerbated by the disaster?
- How will you provide emotional and psychological care to employees and their families and to patients?
- How do you determine population exposure following an incident? How are disaster mental health needs estimated and assessed?
- When is mental health counseling made available to/promoted among hospital employees, patients, and their families?
- Have you assessed the capacity of mental health services that your hospital provides/uses?
- How do you track and record mental health counseling that your hospital provides?
- Does your hospital promote psychological first-aid and/or psychological resiliency among hospital staff, patients, and their family members? What routine services or outreach is available to hospital staff, patients, and their family members?
- Who are employees instructed to turn to when they are concerned about the wellbeing of a colleague, patient, or family members?
- How does your hospital request additional mental health resources from local/state/federal/non-governmental agencies?
- Following an emergency, how are mental health resources coordinated among hospitals and other providers at the local level, within your hospital's service area, and statewide?
- Does your hospital have plans to establish and operate a family assistance center (FAC)?
- What public information is your hospital prepared to disseminate informing the public how to seek mental health counseling following a disaster?



J. Safety and Security

- How will you implement and maintain site security?
- Who will provide security during the recovery phase?
- How will you ensure staff have identification cards/badges? It is important that verification is strictly enforced for entry into all patient care and IC locations.
- How will you ensure security guards can be easily and officially recognized? Contract services need to be identifiable. Consider one standardized uniform and badge system.
- How will you deal with debris removal to ensure safe passage to appropriate areas within and around your facility?
- Have you developed a plan to monitor the health and wellbeing of your staff?
- Who will monitor the health and wellbeing of your staff?
- How will this be accomplished?
- How will any issues be dealt with?
- How will the plan be communicated to staff?

K. Financial and Legal

- Does your hospital have a disaster cost recovery plan/framework?
- Who manages finances and budgets during recovery? How are financial decisions made and communicated?
- How are material and personnel resources that are requested and /or used monitored, tracked and how is this documented and shared within your organization?
- How will reimbursement, reconstitution and/or re-supply costs be estimated, finalized, and processed following a disaster?
- Do you have contracts or blanket purchase orders set up with vendors in advance to prepare for disaster assistance?



K. Financial and Legal (continued)

- Have you identified funding sources to manage disaster expenses/losses?
- Do you have a plan to support the development and maintenance of adequate financial monitoring and accounting systems—including systems that detect and deter fraud?
- How will you deal with uncompensated care after the event?
- How will you document all expenses incurred from the incident?
- Have you communicated with licensing and regulation agencies to know what needs to be done for various incidents? What are the challenges and barriers identified?

L. Volunteer and Donations Management

- Who is in charge of volunteer/donations management? What is your organizational structure?
- How are volunteer/donation needs identified and prioritized?
- Where, when, and how are unneeded donations/volunteers redirected?
- What are your procedures for the coordination, acceptance, control, receipt, storage, distribution, and disposal of donations-in-kind, volunteers, donated services, and funding? For these purposes, a volunteer is defined as a person who provides a service without compensation; donations are defined as materials, goods, and supplies which are given, not purchased.
- Identify a process for the timely release of information to the public regarding the needs of the incident, agencies involved in disaster relief, acceptable donations, and a readily available point of contact for donations management.
- Identify how donated goods will be transported to distribution points.
- Identify checkpoints and staging areas for donated goods.
- Identify process for disposal of excess donated material (unusable or unneeded).



14. FEMA Forms Hospitals Should Review¹⁵

Listed below are documents produced by the Federal Emergency Management Agency that hospitals should consider reviewing when preparing to develop plans to file for public assistance in their EOP/Disaster Cost Recovery Framework. If a hospital intends to apply for public assistance, its staff should review the documents listed below and prepare to thoroughly document disaster-related costs and damages in accordance with federal requirements and policies. Generally, hospitals will qualify for public assistance reimbursement for non-routine, non-insured costs that fall into one of two emergency work categories: Category A – Debris Removal or Category B – Emergency Protective Measures.

- [FEMA Public Assistance Applicant Handbook \(FEMA P-323\)](#)
- [Public Assistance Program Field Operations Pocket Guide \(FEMA P-1011\)](#)
- [FEMA Debris Management Guide \(FEMA-325\)](#)
- [FEMA Disaster Assistance Fact Sheet 9580.5 \(Elements of a Project Worksheet\)](#)
- [FF 90-049: Request for Public Assistance](#)
- [FF 90-02: Project Worksheet](#)
- [FF 90-120: Special Considerations Worksheet](#)
- [FF 9521 3: Private Nonprofit \(PNP\) Facility Eligibility](#)
- [RP9525.4: Emergency Medical Care and Medical Evacuations \(Allowable Costs\)](#)
- [Recovery Directorate Directive - Public Assistance Program Appeals](#)

Public and private nonprofit hospitals should discuss with their partners if there are any additional federal, state, and local regulations they will need to follow when procuring disaster and non-disaster related materials, supplies, and services in order for those services to remain eligible costs for Federal reimbursement. Understanding these policies before a disaster will help to minimize the chances that a hospital's reimbursement claims are disputed or rejected following a disaster. There is at least one documented case where a hospital and FEMA had to

¹⁵ All FEMA documents listed above are hyperlinked in the PDF version of this toolkit which can be accessed online from: www.hsph.harvard.edu/eprep



go to court to resolve issues around that hospital's reimbursement. This case took five years to resolve and resulted in the reduction of the reimbursement amount received by the hospital. Hospitals should prepare to thoroughly document all recovery actions, costs, and losses using a transparent methodology. Hospitals must have detailed records to support any appeal of reimbursement calculations and totals. Guidance released by the FEMA in April 2014 explains that following an applicant's initial appeal that disputes a federal reimbursement award, an applicant may not be able to present new information to support their reason for appeal (FEMA ORRRD).



Appendix A: Works Cited

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Appendix C: Acronyms

Advance Evaluation Team	AET
Assistant Secretary for Preparedness and Response	ASPR
Continuity of Operations	COOP
Department of Health and Human Services	DHHS
Element of Performance	EP
Emergency Management Institute	EMI
Emergency Operations Center	EOC
Emergency Operations Plan	EOP
Emergency Preparedness and Response Exercise Program	EPREP
Emergency Support Function	ESF
Federal Disaster Recovery Coordinator	FDRC
Federal Emergency Management Agency	FEMA
Harvard School of Public Health	HSPH
Hazard Vulnerability Analysis	HVA
Hospital Incident Command System	HICS
Hospital Preparedness Program	HPP
Incident Action Plan	IAP
Information Technology	IT
The Joint Commission on Accreditation of Healthcare Organizations	TJC
Local Emergency Planning Committee	LEPC
Massachusetts Association of Health Boards	MAHB
Massachusetts Department of Public Health	MDPH
Massachusetts Emergency Management Agency	MEMA
Massachusetts Voluntary Organizations Active in Disaster	MAVOAD
Medical Reserve Corps	MRC
Memorandum of Agreement/Understanding	MOA/MOU
Mission Scoping Assessment	MSA
National Disaster Recovery Framework	NDRF
National Response Framework	NRF
Non-Governmental Organization	NGO
Recovery Support Function	RSF
Recovery Support Strategy	RSS
Specific, Measurable, Accurate, Realistic, Time-Oriented	S.M.A.R.T.



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