

Knox/East Tennessee Healthcare Coalition Surge Test Tabletop Exercise



Ketcoalition.org

After-Action Report/Improvement Plan
March 6, 2018

EXERCISE OVERVIEW

Exercise Name	Knox/East Tennessee Healthcare Coalition Surge Test Tabletop Exercise (KET HCC Surge Test Tabletop Exercise)
Exercise Dates	March 6, 2018
Scope	This exercise is a tabletop exercise, planned for 4 hours at North Knoxville Medical Center. Exercise play is limited to healthcare coalition member organizations.
Mission Area(s)	Response and Recovery
Healthcare Preparedness Capabilities	1: Foundation of Healthcare and Medical Readiness 2: Healthcare and Medical Response Coordination 3: Continuity of Healthcare Service Delivery 4: Medical Surge
Objectives	<ul style="list-style-type: none">• Evaluate internal organizational plans ability to respond to a multi-hospital evacuation event representing 20% of the KET HC staffed beds.• Discuss the internal and external communications systems utilized during such events.• Evaluate the resource needs and methods for requesting additional support.• Define the organization's ability to coordinate with outside agencies with a focus on patient transfers, transport, and final admitting facility admission.• Discuss how to manage and recover from a multi-hospital evacuation event in the healthcare coalition.
Threat or Hazard	Natural Disaster extreme heat event resulting in the total loss of chillers (and HVAC) at three KET HC hospitals, requiring the need to evacuate all three hospitals
Scenario	After several weeks of extremely hot weather throughout the southeast, three area hospitals (Blount Memorial Hospital, Parkwest Medical Center, and Turkey Creek Medical Center) experience total loss of their chillers and,

	<p>therefore, their HVAC capabilities. All three facilities use the same HVAC vendor, and are told it will be at least a week before replacement chillers can be installed. They contact back up vendors and receive the same news. This forces the need to evacuate all three hospitals.</p>	
<p>Sponsor</p>	<p>Knox/ East Tennessee Healthcare Coalition (KET HCC) utilizing ASPR grant funding</p>	
<p>Participating Organizations</p>	<ul style="list-style-type: none"> • AMR • Big South Fork Medical Center • Blount County Emergency Management Agency • Blount Memorial Hospital • East TN Children’s Hospital • Fort Loudon Medical Center • Knox County Health Dept. • Knoxville / Knox County Emergency Management Agency • LeConte Medical Center • Medlink II– Regional Medical Communications Center • Methodist Medical Center • Morristown Hamblen Healthcare • Newport Medical Center • North Knoxville Medical Center • Parkwest Medical Center • Peninsula Psychiatric Hospital • Physicians Regional Medical Center • Roane County Office of Emergency Services • Roane Medical Center • TN Department of Health • TN Department of Health Office of EMS • Turkey Creek Medical Center • University of TN Medical Center 	
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ANALYSIS OF HEALTHCARE PREPAREDNESS CAPABILITIES

Aligning exercise objectives and healthcare preparedness capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Objective	Healthcare Preparedness Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Evaluate internal organizational plans ability to respond to a multi-hospital evacuation event representing 20% of the KET HC staffed beds.	1. Foundation of Healthcare and Medical Readiness	P			
Discuss the internal and external communications systems utilized during such events.	2. Healthcare and Medical Response Coordination		P		
Evaluate the resource needs and methods for requesting additional support.	2. Healthcare and Medical Response Coordination	P			
Define the organization's ability to coordinate with outside agencies with a focus on patient transfers, transport, and final admitting facility admission.	2. Healthcare and Medical Response Coordination		P		
Discuss how to manage and recover from a	3. Continuity of Healthcare Service		P		

Objective	Healthcare Preparedness Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
multi-hospital evacuation event in the healthcare coalition.	Delivery				
<p>Ratings Definitions:</p> <ul style="list-style-type: none"> • Performed without Challenges (P): The targets and critical tasks associated with the healthcare preparedness capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. • Performed with Some Challenges (S): The targets and critical tasks associated with the healthcare preparedness capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified. • Performed with Major Challenges (M): The targets and critical tasks associated with the healthcare preparedness capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws. • Unable to be Performed (U): The targets and critical tasks associated with the healthcare preparedness capability were not performed in a manner that achieved the objective(s). 					

Table 1. Summary of Healthcare Preparedness Capability Performance

The following sections provide an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement.

Capability 1: Foundation of Healthcare and Medical Readiness

Goal of Capability 1: The community's health care organizations and other stakeholders—coordinated through a sustainable HCC—have strong relationships, identify hazards and risks, and prioritize and address gaps through planning, training, exercising, and managing resources. (2017-2022 Health Care Preparedness and Response Capabilities

(<https://www.phe.gov/preparedness/planning/hpp/reports/documents/2017-2022-healthcare-pr-capabilities.pdf>)

Objectives:

Objective 1: Evaluate internal organizational plans ability to respond to a multi-hospital evacuation event representing 20% of the KET HC staffed beds.

Capability 1: Healthcare System Preparedness-

Objective 4: Train and Prepare the Health Care and Medical Workforce
Training, drills, and exercises help identify and assess how well a health care delivery system or region is prepared to respond to an emergency. These activities also develop the necessary knowledge, skills, and abilities of an HCC member's workforce. Trainings can cover a wide range of topics including clinical subject matter, incident management, safety and protective equipment, workplace violence, psychological first aid, or planning workshops. The HCC should promote these activities and participate in training and exercises with its members, and in coordination with the ESF-8 lead agency, emphasizing consistency, engagement, and demonstration of regional coordination.

- **Activity 3. Plan and Conduct Coordinated Exercises with Health Care Coalition Members and Other Response Organizations**

The HCC, in collaboration with its members, should plan and conduct coordinated exercises to assess the health care delivery system's readiness. The HCC should focus exercises on the outcomes of HVAs and other assessments that identify resource needs and gaps, identify individuals who may require additional assistance before, during, and after an emergency, and highlight applicable regulatory and compliance issues.

- **Activity 4. Align Exercises with Federal Standards and Facility Regulatory and Accreditation Requirements**

The HCC should consider the following when developing and executing exercises:

- Apply Homeland Security Exercise and Evaluation Program (HSEEP) fundamentals to both the exercise program and the execution of individual exercises
- Integrate current health care accreditation requirements such as the Joint Commission Emergency Management Standards, and health care regulatory requirements such as CMS3178-F Medicare and Medicaid Programs; Emergency Preparedness Requirements for Medicare and Medicaid Participating Providers and Suppliers
- Use a stepwise progression of exercise complexity for a variety of emergency response scenarios (e.g., workshop to tabletop to functional to full-scale exercises)

- **Activity 5. Evaluate Exercises and Responses to Emergencies**

The HCC should coordinate with its members and other response organizations to complete an AAR and an IP after exercises and real-world events. The same exercise or response may generate facility, member type, HCC, and community AAR/IPs – each with a somewhat different focus and level of detail. The AAR should document gaps in HCC member composition, planning, resources, or skills revealed during the exercise and response evaluation processes. The IP should detail a plan for addressing the identified gaps, including responsible entities and the required time and resources to address the gaps. The IP should also recommend processes to retest the revised plans and capabilities. Facility and organization evaluations should follow a similar process. AARs may also reveal leading practices that can be shared with HCC members and other HCCs. Successful HCC maturation depends on integrating AAR/IP findings into the next planning, training, exercise, and resource allocation cycle.

- **Activity 6. Share Leading Practices and Lessons Learned**

The HCC should coordinate with its members, government partners, and other HCCs to share leading practices and lessons learned. Sharing information between HCCs will improve cross-HCC coordination during an emergency and will help further improve coordination efforts.

Strengths

The full capability level can be attributed to the following strengths:

Strength 1: Healthcare facilities are familiar with the Incident Command system and utilize it frequently as it's called for during an event/exercise.

Strength 2: Exercise design and execution conforms to national standard set forth by the Homeland Security Exercise and Evaluation program. Planning is inclusive of the Joint Commission Emergency Management Standards and Emergency Preparedness Requirements for Medicare and Medicaid

Strength 3: Overall strong and effective collaboration in place between multiple community partners. This has been fostered by years of exercising and training together allowing key contacts to be notified early in an event. This also provides excellent opportunity for sharing lessons learned for all healthcare facilities through documentation, coalition meetings and the Knoxville/East Tennessee Heath Care Coalition website.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Additional training needs to be provided for new healthcare coalition partner's staff or staff who may fill in for roles in regards to Incident Command.

Capability 2: Healthcare and Medical Response Coordination

Definition:

Goal for Capability 2: Health Care and Medical Response Coordination Health care organizations, the HCC, their jurisdiction(s), and the ESF-8 lead agency plan and collaborate to share and analyze information, manage and share resources, and coordinate strategies to deliver medical care to all populations during emergencies and planned events.

Objectives:

Objective 2: Discuss the internal and external communications systems utilized during such events.

Capability 2: Healthcare and Medical Response Coordination

Objective 2: Utilize Information Sharing Procedures and Platforms

Effective response coordination relies on information sharing to establish a common operating picture. Information sharing is the ability to share real-time information related to the emergency, the current state of the health care delivery system, and situational awareness across the various response organizations and levels of government (federal, state, local). The HCC's development of information sharing procedures and use of interoperable and redundant platforms is critical to successful response

- **Activity 1: Develop Information Sharing Procedures**
Individual HCC members should be able to easily access and collect timely, relevant, and actionable information about their own organizations and share it with the HCC, other members, and additional stakeholders according to established procedures and predefined triggers and in accordance with applicable laws and regulations.
- **Activity 2: Identify Information Access and Data Protection Procedures**
The HCC may coordinate with state and local authorities to identify information access and data protection procedures
- **Activity 3: Utilize Communications Systems and Platforms**
The HCC should utilize existing primary and redundant communications systems and platforms—often provided by state government agencies—capable of sending EEIs to maintain situational awareness.

Partial capability level can be attributed to the following strengths:

Strength 1: Current systems in place (HRTS, TNHAN) are routinely used and familiar processes for current healthcare partners.

Strength 2: Current MOU's, facility specific and region-wide, provide quick access to healthcare needs during an event

Strength 3: Overall strong and effective communication methods in place between multiple community partners. This has been fostered by years of exercising and training together allowing key contacts to be notified early in an event. Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Specific patient information that is shared during an event needs to be formalized regionally to prevent delays based on HIPPA questions in regards to emergent situations. These discussions need to identify predefined triggers in accordance with applicable laws, including buy in from healthcare facilities and EMS. In addition to specifying what information can be shared, consideration needs to be given for avenues to make proper patient handoffs for transfers between medical staff and the evacuation/receiving facilities in order to avoid any EMTALA violations.

Objectives:

Objective 3: Evaluate the resource needs and methods for requesting additional support.

Capability 2: Healthcare and Medical Response Coordination

Effective response coordination relies on information sharing to establish a common operating picture. Information sharing is the ability to share real-time information related to the emergency, the current state of the health care delivery system, and situational awareness across the various response organizations and levels of government (federal, state, local). The HCC's development of information sharing procedures and use of interoperable and redundant platforms is critical to successful response

Objective 3: Coordinate Response Strategy, Resources, and Communications

The HCC should coordinate its response strategies, track its members' resource availability and needs, and clearly communicate this information to all HCC members, other stakeholders, and the ESF-8 lead agency. In addition, the HCC, in collaboration with its members, should provide coordinated, accurate, and timely information to health care providers and the public in order to ensure a successful emergency response.

Activity 1: Identify and Coordinate Resource Needs during an Emergency

Individual HCC members should be able to easily access and collect timely, relevant, and actionable information about their own organizations and share it with the HCC, other members, and additional stakeholders according to established procedures and predefined triggers and in accordance with applicable laws and regulations.

Full capability level can be attributed to the following strengths:

Strength 1: Current systems in place (HRTS, TNHAN) are routinely used and familiar processes for current healthcare partners.

Strength 2: Current MOU's, facility specific and region-wide, provide quick access to healthcare needs during an event

Strength 3: Overall strong and effective communication methods in place between multiple community partners. This has been fostered by years of exercising and training together allowing key contacts to be notified early in an event. Areas for Improvement

The following areas require improvement to achieve the full capability level:

None noted at this time.

Objective 4: Define the organization's ability to coordinate with outside agencies with a focus on patient transfers, transport, and final admitting facility admission.

Capability 2: Healthcare and Medical Response Coordination

Effective response coordination relies on information sharing to establish a common operating picture. Information sharing is the ability to share real-time information related to the emergency, the current state of the health care delivery system, and situational awareness across the various response organizations and levels of government (federal, state, local). The HCC's development of information sharing procedures and use of interoperable and redundant platforms is critical to successful response

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Activity 1: Identify and Coordinate Resource Needs during an Emergency

Individual HCC members should be able to easily access and collect timely, relevant, and actionable information about their own organizations and share it with the HCC, other members, and additional stakeholders according to established procedures and predefined triggers and in accordance with applicable laws and regulations.

Partial capability level can be attributed to the following strengths:

Strength 1: Current systems in place (HRTS, TNHAN) are routinely used and familiar processes for current healthcare partners.

Strength 2: Current MOU's, facility specific and region-wide, provide quick access to healthcare needs during an event

Strength 3: Overall strong and effective communication methods in place between multiple community partners. This has been fostered by years of exercising and training together allowing key contacts to be notified early in an event. Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Specific patient information that is shared during an event needs to be formalized regionally to prevent delays based on HIPPA questions in regards to emergent situations. These discussions need to identify predefined triggers in accordance with applicable laws, including buy in from healthcare facilities and EMS. In addition to specifying what information can be shared, consideration needs to be given for avenues to make proper patient handoffs for transfers between medical staff and the evacuation/receiving facilities in order to avoid any EMTALA violations.

Capability 3: Continuity of Healthcare Service Delivery

Goal for Capability 3: Continuity of Health Care Service Delivery Health care organizations, with support from the HCC and the Emergency Support Function-8 (ESF-8) lead agency, provide uninterrupted, optimal medical care to all populations in the face of damaged or disabled health care infrastructure. Health care workers are well-trained, well-educated, and well-equipped to care for patients during emergencies. Simultaneous response and recovery result in a return to normal or, ideally, improved operations.

Objectives:

Objective 5: Discuss how to manage and recover from a multi-hospital evacuation event in the healthcare coalition.

Objective 2: Plan for Continuity of Operations

Capability 3: Continuity of Healthcare Services Delivery

The foundation for safe medical care delivery includes a robust, redundant infrastructure and availability of essential resources. Health care organizations should determine their priorities for ensuring key functions are maintained during an emergency, including the provision of care to existing and new patients. Facilities should determine those services that are critical to patient care and those that could be suspended (e.g., closing a hospital's outpatient clinics to preserve staff to manage an elevated inpatient census). In addition, the HCC should have a plan to maintain its own operations. During continuity preparedness activities, health care organizations and the HCC should consider what disaster risk reduction strategies should be implemented in order to lessen the likelihood of complete and total failure. The HCC should facilitate each individual member's approach to risk reduction to promote a regional approach to addressing critical infrastructure (e.g., utilities, telecommunications, and supply chain).

Objective 6: Plan and Coordinate Health Care Evacuation and Relocation

Health care organizations should evacuate or relocate when continuity planning efforts cannot sustain a safe working environment or when a government entity orders a health care organization to evacuate. The HCC should ensure all members and other stakeholders are included in evacuation and relocation planning including but not limited to, skilled nursing facilities and long-term care facilities. The HCC plays a critical role in coordinating the various elements of patient evacuation and relocation.

- **Activity 1: Develop and Implement Evacuation and Relocation Plans**

The HCC and its members should prepare for evacuation or relocation with little or no warning. Evacuation and relocation plans assist health care organizations with the safe and effective care of patients, use of equipment, and utilization of staff when relocating to another part of the facility or when evacuating patients to another facility. Health care organizations may rely on the HCC and their affiliated corporate health systems to assist in planning, evacuation, and relocation processes.

- **Activity 2: Develop and Implement Evacuation Transportation Plans**

The HCC and its members, in collaboration with the ESF-8 lead agency, should develop and implement transportation plans for evacuating patients from one health care facility to another. The plans should:

- Articulate the HCC's role in coordinating EMS assistance
- Include a process to appoint a transport manager or similar position under the ICS operations section
- Identify a coordinating entity for public and private EMS agencies, including both ground and air medical services
- Identify transportation assets including non-medical transportation partners, such as commercial bus companies
- Identify processes to access specialized transportation assets through emergency management organizations (e.g., National Guard [State Active Duty], tractors, boats) Consider age- and size-related transportation equipment needs
- Develop processes to track patients and staff during transport Continuity of Health Care Service Delivery
- Establish processes for transport partners to communicate with sending and receiving facilities
- Establish processes to communicate with patients' families when transferring patients to the next health care provider

Partial capability level can be attributed to the following strengths:

Strength 1: Current systems in place (HRTS, TNHAN) are routinely used and familiar processes for current healthcare partners and expedite much of the evacuation coordination process. The State of Tennessee has invested in a statewide patient tracking system that is easy to use by all facilities and adaptable when changes are needed.

Strength 2: Facilities have strong Evacuation/Relocation plans.

Strength 3: Overall strong and effective communication methods in place between multiple community partners. This has been fostered by years of exercising and training together allowing key contacts to be notified early in an event. Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Transportation plans should extend beyond traditional Coalition partners. In the event of a wide spread evacuation situation, normal transportation avenues will be overwhelmed, delaying patient transfer.

APPENDIX A: IMPROVEMENT PLAN

This IP has been developed specifically for the Knox/East TN (KET HCC) Healthcare Coalition as a result of Knox/East Tennessee Healthcare Coalition Surge Test Tabletop Exercise conducted on March 6, 2018.

- The KET HCC accepts responsibility for assuring that the improvement plan issues identified will be integrated into an exercise in this or the next budget period.

Issue/Area for Improvement	Corrective Action	Capability Element ¹	Start Date	Completion Date
1. Core Capability 1: Foundation of Healthcare and Medical Readiness				
Additional training needs to be provided for new healthcare coalition partner’s staff or staff who may fill in for roles in regards to Incident Command.	The KET Coalition should coordinate training opportunities for Incident Command training	Training	03/31/18	06/31/19
Core Capability 2: Healthcare and Medical Response Coordination				
Specific patient information that is shared during an event needs to be formalized regionally to prevent delays based on HIPPA questions in regards to emergent situations and patient transfer. These discussions need to identify predefined triggers in accordance with applicable laws, including buy in from healthcare facilities and EMS.	Hospitals should address this question with their legal department and coordinate planning with EMS.	Planning	03/31/18	06/31/19

¹ Capability Elements are: Planning, Organization, Equipment, Training, or Exercise.

Core Capability 3: Continuity of Healthcare Service Delivery				
Transportation plans should extend beyond traditional Coalition partners. In the event of a wide spread evacuation situation, normal transportation avenues will be overwhelmed, delaying patient transfer.	Facilities should contact local alternate transportation partners and establish agreements for an event or an emergency.	Planning	03/31/19	06/31/19

APPENDIX B: EXERCISE PARTICIPANTS

Participating Organizations				
Coalition Member Type	# in Coalition	% Coalition Member Participation	<i>Additional Participants (Non Coalition Members)</i>	<i>Total Participants</i>
Federal Government				
Homeland Security Dist. 2	0	0	0	0
State & Local Government				
Local Health Department	3	100	0	3
Regional Health Department	1	100	3	4
EMS	2	100	0	2
Emergency Management	1	100	3	4
Non-government Coalition Members and Partners				
Hospital	49	75%	1	50
Mental Health	1	100		1
Long Term Care Facilities				
Dialysis Centers				
Community Health Center				
Public Utilities				
Medic				
Fire				
Other				
RMCC	1	100		1

Additional Information/Comments