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Medical Response & Surge Exercise (MRSE) Situation Manual

Hospital Preparedness Program

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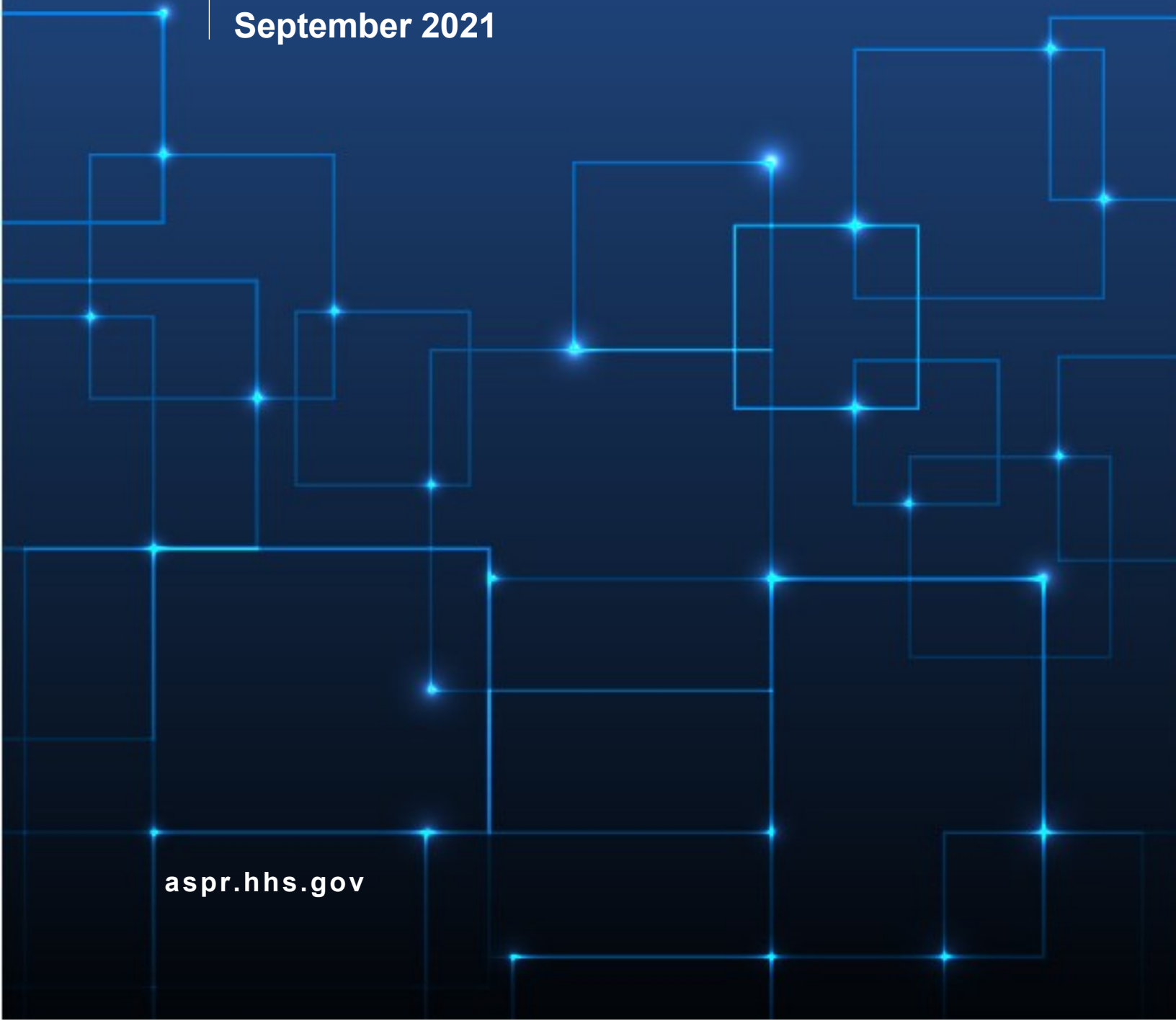

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1.0 INTRODUCTION

The **Medical Response & Surge Exercise** (MRSE) was created by the U.S. Department of Health and Human Services (HHS) Administration for Strategic Preparedness and Response (ASPR). The exercise procedures and supporting materials described in the Situation Manual (SitMan) are aligned with updated the Federal Emergency Management Agency (FEMA) Homeland Security Exercise and Evaluation (HSEEP) guidelines issued in 2020. The MRSE is a functional exercise, which HSEEP describes as "an operations-based exercise designed to test and evaluate capabilities and functions while in a realistic, real-time environment."

The MRSE and this SitMan were produced with input, advice, and assistance from the National Healthcare Preparedness Programs' (NHPP) Exercise Design Team (hereafter referred to as "Design Team"). This team included NHPP representatives as well as a number of emergency preparedness and response subject matter experts from federal, state, and private sector organizations.

This SitMan provides exercise participants, which include exercise players, subject matter experts, facilitators, observers, and evaluators from participating agencies and organizations, with background information on the exercise's scope, schedule, and objectives. It also presents the scenario narrative and discussion questions that will drive participant discussions during the exercise. The information in this document is current as of the date of publication and is subject to change. All exercise participants may view the SitMan.

For more information about this exercise and requirements of the Hospital Preparedness Program (HPP) Cooperative Agreement, please contact your regional HPP Field Project Officer.

1.1 RELATED DOCUMENTS AND TOOLS

This exercise requires the use of three documents:

- **Situation Manual (this document)** – The core document provided to all participants in an exercise. It provides in-depth instructions for how to plan and conduct the MRSE.
- **Evaluation Plan** – Outlines the goals and purpose of exercise evaluation for a health care coalition (HCC) and guides the Exercise Evaluator (see section 2.10 below) through assisting during the exercise, gathering information, and facilitating the After-Action Review (AAR). The Evaluation Plan helps the Exercise Evaluator turn information collected during the exercise into a meaningful After-Action Review and Improvement Plan (IP) in concert with exercise participants.

- **Exercise Planning and Evaluation Tool** – The Excel-based tool is used primarily by the Exercise Evaluator to document decisions and results throughout the exercise, including the *Phase I: Plan & Scope* and *Phase III: Review*. The tool includes sequentially organized tabs that may be viewed by clicking on each tab's name at the bottom of the screen. All required exercise data collection – including data for HPP Cooperative Agreement performance measures – will be completed in the Exercise Planning and Evaluation Tool.

2.0 EXERCISE OVERVIEW

2.1 BACKGROUND

ASPR leads the country in preparing for, responding to, and recovering from the adverse health effects of emergencies and disasters. ASPR's programs improve the nation's ability to withstand adversity, strengthen health and emergency response systems, and enhance national health security. This portfolio of programs and activities— which includes HPP— engages health care stakeholders from all 50 states, U.S. territories, freely associated states, major metropolitan areas, and Washington, D.C., as well as from across the health care industry – empowering private health care to share ownership in addressing the risks and vulnerabilities across the spectrum of disaster care delivery. The portfolio represents a collection of building blocks that form a comprehensive, national system for health care preparedness and response.

ASPR's HPP is the primary source of federal funding specifically for health care delivery system readiness. The program aims to improve patient outcomes, minimize the need for federal and supplemental state resources during emergencies, and enable rapid recovery from catastrophic events through the development of HCCs. HCCs incentivize and support diverse and often competitive health care organizations with differing priorities and objectives to work together to save lives during disasters and emergencies that exceed the day-to-day capacity and capability of individual health care and emergency response systems. HCCs serve an important communication and coordination role within their jurisdictions, given the many public and private entities that must come together to ensure health care delivery system readiness.

To describe what health care delivery system partners, including HCCs, health care organizations, and emergency medical services (EMS), must do to effectively prepare for and respond to emergencies, ASPR developed the **2017-2022 Health Care Preparedness and Response Capabilities**. Medical Surge, listed as Capability Four, is the ability to evaluate and care for a markedly increased volume of patients that exceeds normal operating capacity.

Providing an effective medical surge response is dependent on the planning and response capabilities developed by HCCs and other stakeholders. Medical surge requires building capacity and capability.[1]

Surge capacity is the ability to manage a sudden influx of patients. It is dependent on a well-functioning incident command system (ICS) and the variables of space, supplies, and staff. The surge requirements may extend beyond placing patients into beds, and should include all aspects related to clinical services (e.g., laboratory studies, radiology exams, operating rooms).

Surge capability is the ability to manage patients requiring very specialized medical care. Surge requirements span a range of medical and health care services (e.g., expertise, information, procedures, or personnel) that are not normally available at the location where they are needed (e.g., pediatric care provided at non-pediatric facilities or burn care services at a non-burn center). Surge capability also includes special interventions in response to uncommon and resource intensive patient diagnoses (e.g., Ebola, radiation sickness) to protect medical providers, other patients, and the integrity of the medical care facility.

The MRSE is designed to examine and evaluate the ability of HCCs and other stakeholders to support medical surge, and specifically, how coalitions help patients receive the care they need at the right place, at the right time, and with the right resources during medical surge; decrease deaths, injuries, and illnesses resulting from medical surge; and promote health care delivery system resilience in the aftermath of medical surge.

2.2 CONFIDENTIALITY

All exercise participants should use appropriate guidelines to ensure proper control of information within their areas of expertise and protect this material in accordance with current directives. Exercise participants should follow their existing policies and procedures with regard to information security and confidentiality. In accordance with the HIPAA 1974 Privacy Act, no individual patient information should be shared as a part of this exercise[2]. Information about surge patients provided in MRSE materials is hypothetical in nature and will not reflect

[1] Administration for Strategic Preparedness and Response. 2017-2022 Health Care Preparedness and Response Capabilities. https://aspr.hhs.gov/HealthCareReadiness/HPP/Documents/2017-2022%20Health%20Care%20Preparedness%20and%20Response%20Capabilities.pdf. Accessed August 2021.

[2] The Privacy Act of 1974. https://www.hhs.gov/foia/privacy/index.html. Accessed August 2021.

information related to any real patients.

Some exercise material is intended for the exclusive use of exercise planners and evaluators, but participants may view other materials that are deemed necessary to their performance. All exercise participants may view this SitMan. Authority for public release of exercise materials to third parties resides with HHS ASPR.

ASPR will use the information submitted by HCCs and HPP recipients to evaluate and inform progress in achieving evidence-based benchmarks and objective standards; performance measures data, including data from local health departments; outcomes of annual preparedness exercises including strengths, weaknesses and associated corrective actions; and accomplishments highlighting the impact and value of the HPP activities in their jurisdictions. Information provided by HCCs and HPP recipients from the MRSE may also be used to inform the future design of the national program. As such, HCCs and recipients are requested to ensure all data accurately reflect the HCC's experience during the exercise.

2.3 PURPOSE AND SCOPE

The purpose of the MRSE is to provide HCCs with an opportunity to test their surge response and preparedness capabilities. The scenario used in the MRSE is defined by the HCC, but all exercises will test an HCC and its members' capacity to accommodate a surge of patients equal to at least 20% of its staffed bed capacity[3] and to ensure availability of staffed beds, supplies and equipment, and personnel across its membership.

2.4 EXERCISE OBJECTIVES

The exercise includes six required objectives. However, HCCs may develop additional objectives to meet the needs of their members provided the standard actions in the exercise are followed in order to meet HPP Cooperative Agreement requirements. Due to the flexibility of the exercise scenario, HCCs may include additional objectives which support their members in meeting additional exercise requirements (e.g., Joint Commission, Centers for Medicare and Medicaid Services (CMS), state and local jurisdictional requirements, etc.) apart from HPP requirements.

The Design Team identified the following standard objectives for the MRSE functional exercise:

[3] Only certain bed types are included in this calculation. Additional bed types may be included based on the incident scenario defined by the HCC. The accompanying Exercise Planning and Evaluation Tool will calculate the number of patients based on inputs from the HCC.

- Assess an HCC's capacity to support a large-scale, community-wide medical surge incident
- Evaluate a multitude of coalition preparedness and response documents and plans, including specialty surge annexes, transfer agreements, coordination plans with other state HCCs, and all other relevant plans
- Evaluate coalition members' ability to communicate and coordinate quickly to find and match available staffed beds, transportation, supplies and equipment, and personnel during a large-scale surge incident
- Assist HCCs and their members with improvement planning based on MRSE outcomes
- Serve as a data source for performance measure reporting required by the HPP Cooperative Agreement
- Provide a flexible exercise which could be customized to meet the needs and/or exercise requirements of HCCs

2.5 EXERCISE OUTCOMES

ASPR identified the following required outcomes for the MRSE functional exercise. However, as with the exercise objectives, HCCs are encouraged to include additional expected outcomes based on the needs of their members, such as:

- The HCC has validated all applicable response plans and identified gaps which remain unaddressed.
- The HCC is better prepared to respond to a large-scale surge inpatients.
- HCC members have improved their capacity to assess the availability of and secure access to key resources such as staffed beds, personnel, supplies and equipment, and patient transport during a large-scale community incident.
- The HCC has strengthened its role in sharing information, situational awareness, and coordination during a large-scale community incident.

2.6 EXERCISE STRUCTURE

This MRSE functional exercise is an HCC-led, operations-based exercise. Participants are expected to act in their real-life roles when considering this scenario, offering observations to the forum, making strategic and operational decisions, and complying with real-world procedures. The exercise facilitator will ensure that the discussions move along at an appropriate pace, covering each discussion topic sufficiently and allowing all participants an opportunity to contribute.

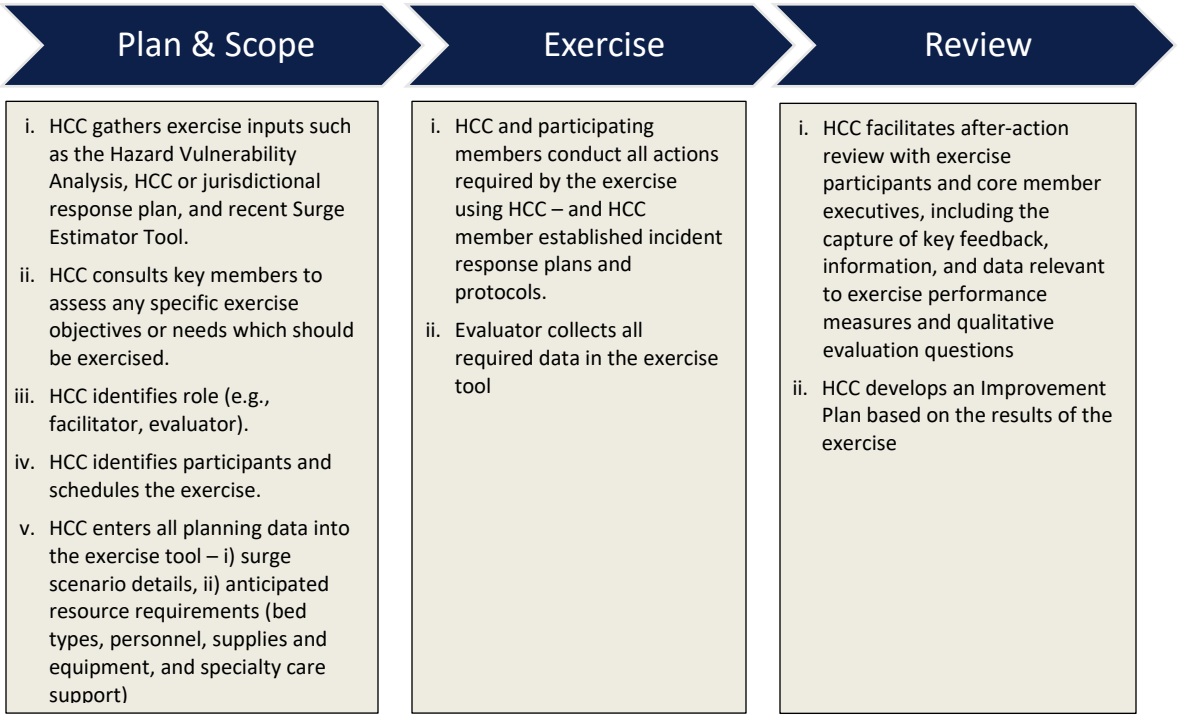
During the course of the MRSE functional exercise, participants will be asked to address topics such as alerts and notifications; situational assessment and information management; operational coordination; resource allocation and mobilization; workforce protection, patient movement and patient care; fatality management; and public information and warning. These discussion topics have been selected by the Design Team and will be used to guide participants' discussions and enable the recording of information for evaluation purposes during the AAR.

Although the exercise requires an HCC to follow as closely as possible its real-world procedures for managing a surge incident and no real patients will be moved or otherwise disturbed. Similarly, no real resources such as supplies, equipment, or EMS response resources will be moved or otherwise disturbed. HCCs may expand the exercise from a functional exercise to a higher-level exercise, if they choose to do so, provided it does not significantly alter the exercise objectives or the HCC's ability to report data related to HPP performance measures.

2.7 EXERCISE PHASES

The MRSE functional exercise follows three phases as illustrated in the figure below. Further detail about the requirements of each phase are discussed in the sections below.

Figure 1: Three Phases of the Medical Response & Surge Exercise



2.8 EXERCISE RULES

Participants should consider the following exercise ground rules to ensure that the objectives are met in a reasonable amount of time and that the exercise runs smoothly:

- Use the pre-established scenario to set parameters for exercise activities and participant discussions.
- Be honest in their assessment and reporting of information such as resource availability.
- Keep the overarching exercise objectives in mind throughout the exercise.
- Participate in the discussions as appropriate to your role.
- Comply with real-world response procedures; responses should be based on the current capabilities of your organization, using only existing abilities and resources.
- Participate openly and focus discussions on relevant topics—asking questions, sharing thoughts, and offering forward-looking and problem-solving suggestions are strongly encouraged, as these actions will enhance the exercise experience.
- Keep your comments focused and consider the time constraints of the exercise.
- Respect the observations, opinions, and perspectives of others, as the discussions will explore a variety of policies, decisions, actions, and relevant key issues from different sources.
- Frame the exercise as an open, low-stress environment to encourage participant discussion and recommendations to improve the current processes.
- Prioritize real-world emergency actions over exercise actions.

2.9 USING REAL-WORLD EVENTS IN LIEU OF THE MRSE

HPP Cooperative Agreement requirements allow for the use of some types of real-world events in lieu of the Medical Response & Surge Exercise. In the event that an HCC has a real-world incident which meets certain requirements, the HCC can use the data from the real-world event to respond to each applicable performance measure. HCCs who wish to utilize a real-world event in lieu of conducting the MRSE must meet the following requirements:

- The real-world surge incident must be equal to or greater than 20% of the required staffed bed types and other scenario-specific staffed bed types used in the MRSE (see the *Calculating the Scale of the Surge* in section 3.3).
- At least one executive from each of the participating core member organizations (acute care hospitals, emergency medical services (EMS), emergency management organizations, and public health agencies) must participate in the After-Action Review (AAR).

- The HCC should have an After-Action Review (AAR) and Improvement Plan (IP) available upon request.
- The HCC is able to capture the data points required to report all MRSE performance measures. To strengthen the possibility of meeting this requirement, HCCs can pre-identify resource needs for a range of surge incident types (e.g., from the HCC Hazard Vulnerability Analysis) as done in the *Identifying Anticipated Resources Required for the Surge* in section 3.4.
- The HCC must use the Real-world Incident Reporting Tool to document the real-world incident and provide data required by HPP (e.g., performance measures).
- The real-world surge incident has a discrete beginning and end ("bookends") and is not a slow surge build up. Preferred real-world incidents to be used in lieu of the MRSE last no more than one week. Generally speaking, the COVID-19 response cannot be used in lieu of conducting the MRSE unless there is a specific COVID-19 surge event lasting less than one week.

If HCCs have questions about using a real-world event in lieu of conducting the MRSE, please contact your regional HPP Field Project Officer.

2.10 PARTICIPANT ROLES AND RESPONSIBILITIES

Table 1:Required Exercise Roles (generally staffed at the HCC level)

Exercise Role	Role Description
HCC Readiness and Response Coordinator (RRC)	The lead role for planning and preparing for the exercise. RRCs should be familiar with the HCC's Hazard Vulnerability Analysis, Preparedness and Response Plans, Specialty Surge Annexes, Surge Estimator Tool, the coalition membership, and other jurisdictional response plans.

Exercise Role	Role Description
HCC Clinical Advisor(s) or Designee	This role will provide clinical guidance and coordination assistance pertaining to acute care medical surge readiness and response operations to include trauma, burn, infectious disease, pediatric, CBRNE (chemical, biological, radiological, nuclear, and high yield explosives), and evacuation emergencies. The individual(s) should be a physician, advanced practice provider, or registered nurse and should be from a lead or co-lead hospital or health care organization and be clinically active (i.e., works shifts/sees patients).
Exercise Facilitator	This role will guide the participants through the exercise actions, ensuring all HPP-required exercise tasks are completed. The Exercise Facilitator should be a separately-designated or delegated individual, but also serve as the RRC if no other individuals are available to fill the RRC role. It is generally recommended the RRC, Exercise Facilitator, and evaluator be different individuals given both the burden as well as best practice of the evaluator being an objective observer not involved in the implementation of the exercise actions. The Exercise Facilitator triggers the exercise incident response by contacting the Duty Officer (Notification System Representative).
Exercise Evaluator	The lead role for documenting the actions of the HCC and its members during the test and evaluating the exercise results. This role will summarize the exercise results and facilitate the AAR session. In principle, this person should be an objective observer and be designated separately from the RRC, but can be a staff person of the HCC or a member organization. The Homeland Security Exercise and Evaluation (HSEEP) guidelines suggest the Exercise Evaluator be involved in the full lifecycle of the exercise, including *Phase I: Plan & Scope* to understand the exercise objectives, performance measures, and the exercise materials such as the SitMan, MRSE Evaluation Plan, and the accompanying tool.

Exercise Role	Role Description
Duty Officer (Notification System Representative)	The Duty Officer is the individual(s) designated in the relevant HCC or jurisdictional response plan for receiving notice of emergency incidents, triggering the HCC's response plan, and determining the response level. Although some HCCs may not utilize this term or fund this role, the exercise refers to this role as the Duty Officer for simplicity. The HCC should utilize the same person or persons for this role as it would during a real-world event. This is a very limited role in the exercise and may be performed by an individual of the HCC's choosing.

2.11 EXERCISE FACILITATION

The exercise will be guided by the Exercise Facilitator. The facilitated exercise uses an approach based on the exercise objectives in order to create the decision-making environment for participants to act in their respective roles. The Exercise Facilitator will lead exercise participants through a discussion of the activities the HCC and its members would take in conjunction with each individually-defined exercise objective. In general, the Exercise Facilitator will:

- Keep discussions on track with exercise objectives and within established time limits to ensure that all issues are explored (time permitting).
- Keep side conversations to a minimum, controlling group dynamics and strong personalities, as needed.
- Speak competently and confidently about the subject at hand but will not dominate the conversation.
- Possess subject-matter expertise relevant to the issues presented in the exercise.
- Be aware of local plans and procedures.
- Solicit discussion on key activities and decisions that the participating organizations would perform in response to the exercise topic(s).
- Press the exercise participants, throughout the exercise, to discuss their biggest challenges and to make commitments on how to address those challenges.

3.0 PHASE I: PLAN & SCOPE

This phase should begin well in advance of the beginning of the actual exercise. In this phase,

HCCs will determine exercise roles, understand members' specific needs from the exercise, define their surge scenario, and begin to enter planning and scoping data in the exercise tool. By the end of this phase, the scenario, objectives (beyond those mandated by HPP), and desired outcomes for the exercise will be clearly defined and scheduled for a specific future date. Note although there is no requirement for low- or no-notice format of the exercise, HCCs are encouraged to consider this option to mimic a real-world incident.

3.1 CONSULTING HCC MEMBERS

The exercise is designed to be as flexible as possible in order to meet an HCC's tailored needs. Individual HCC members may be subject to other specific exercise requirements to retain certifications or for other purposes. For example, hospitals and long-term care facilities may be subject to certain emergency preparedness requirements as defined by CMS. To encourage member participation and to broaden the utility of the Medical Response & Surge Exercise, the HCC is encouraged to consult its members during *Phase I: Plan & Scope* in order to tailor the exercise to meet member needs beyond the requirements of the HPP Cooperative Agreement. Member needs can influence the exercise objectives, HCC-defined scenario, incident type, member participation, the scale of the exercise, the resources required to manage the surge (e.g., personnel), additional exercise outputs or reporting, and/or other aspects of the exercise. The RRC can build these additional member needs into the MRSE as needed. HCCs should document any outputs needed by members to meet these additional requirements. *Note: the exercise should not be altered in a way which would change the HPP-mandated core objectives of the exercise (section 2.4) or impede the HCC and/or HPP Cooperative Agreement recipients' ability to report performance measures per HPP requirements.* Sample text for consulting HCC members is provided in Table 3 at the end of the *Phase I: Plan & Scope* section.

3.2 DEFINING THE SURGE SCENARIO

The specific scenario used to drive exercise play is defined by the HCC. However, all exercises will test an HCC and its members' capacity to accommodate a surge of patients equal to 20% of its staffed bed capacity. The HCC is required to determine staffed bed availability from member facilities, identify available supplies, equipment, and personnel within the HCC and among facilities that the HCC is reaching out to for assistance. This includes health care facilities outside of the HCC. The HCC will select a surge incident from its Hazard Vulnerability Analysis or another incident scenario it would like to exercise. To shape the remainder of the exercise, the HCC will also classify its hazard by the medical surge categories from the 2017-2022 Health Care Preparedness and Response Capabilities. Information about the hazard, scenario, and surge type

is captured in the exercise tool during *Phase I: Plan & Scope*.

3.3 CALCULATING THE SCALE OF THE SURGE

In this planning step, the HCC will enter the total staffed beds within its member organizations by bed category. The exercise tool will automatically calculate the number of patients resulting from the incident based on the number of staffed beds in the HCC (i.e., 20% of staffed beds required for the incident). Staffed bed types included in the calculation include the required medical surge beds plus any optional beds relevant for the HCC's surge incident scenario as selected by the HCC. Staffed bed types are summarized in Table 2 below. If HCCs would like to utilize their Surge Estimator Tool (SET) to complete this step, Appendix A maps SET bed types to those required by the exercise.

Table 2: Required and optional staffed bed types used by the Medical Response & Surge Exercise

Staffed Bed Type	Calculation
Emergency Department Beds	Required for all exercises
General Medical Unit Beds	Required for all exercises
ICU beds (SICU, MICU, CCU)	Required for all exercises
Post Critical Care (Monitored / stepdown) Beds	Required for all exercises
Surgical Unit Beds (pre-op, post-op, & procedural)	Required for all exercises
Labor and Delivery Unit Beds	Based on surge type defined by the HCC
Psychiatric Unit Beds	Based on surge type defined by the HCC
General Pediatric Unit Beds	Based on surge type defined by the HCC
Pediatric and Neonatal ICU Beds	Based on surge type defined by the HCC
Oncology Unit Beds	Based on surge type defined by the HCC

EXERCISE SCALE – STAFFED BED CALCULATION EXAMPLE

An HCC has chosen to use pediatric surge as a scenario to test for the exercise. The coalition has determined that it has **1,000 staffed beds of the five types required** for all exercises, **and 100 pediatric and neonatal ICU beds that will serve as their scenario-based optional staffed beds**. In order to test 20% of its staffed bed capacity, the HCC uses the following calculation to determine the number of surge patients in the exercise:

20% of 1000 staffed beds of the five types required for all exercises = **200**

20% of 100 pediatric and neonatal ICU staffed beds = **20**

Total numbers of surge patients in the exercise = 200 + 20 = **220**

The exercise tool will automatically calculate the number of surge patients based on the number of staffed beds entered by the HCC**.**

In the tool, the HCC must allocate the total surge patients to the participating clinical care members (e.g., acute care hospitals). The number of patients allocated to a facility will be used to determine sufficiency of available resources such as appropriate, staffed beds, personnel, supplies and equipment, and EMS response resources required to triage and transport patients. This allocation is also a key input into some performance measures used for evaluation purposes during the exercise.

The Clinical Advisor or a designee filling this role should provide details regarding the patient injuries from the incident to be provided to facilities in *Phase II Exercise*. Please note that the goal is to provide the types of injuries patients will have, the number of patients that will be in critical condition, etc., rather than to create a list of conditions and injuries for each individual patient. Facilities will utilize this information to inform patient triage decisions, including estimating the number of surge patients who will require admission and inpatient care. The number of patients requiring admission for inpatient care is used to calculate MRSE performance measures.

3.4 IDENTIFYING ANTICIPATED RESOURCES REQUIRED FOR THE SURGE

This step should be completed with input from the HCC's Clinical Advisor or a designee filling this role. The exercise focuses on the HCC and participating members' ability to share information and ensure availability of key resources to care for patients during a large-scale

surge. The exercise is meant to be highly flexible and tailored to an HCC-defined incident. Therefore, in this step, the HCC will define other resources it anticipates being required to manage the surge. In addition to staffed bed types selected in the prior step, the resources include personnel, pharmaceutical supplies, equipment, and EMS response resources. HCCs should carefully identify the specific resources required for the incident scenario being exercised. Although lists of resources are provided as options, HCCs are encouraged to identify additional or alternative resource types critical to caring for surge patients during the incident. **This step is critical to the remainder of the exercise and serves as the foundation for some performance measures used for exercise evaluation purposes**. The exercise tool will guide the HCC through the selection process. At the beginning of the Exercise phase, the HCC will confirm its selections from *Phase I: Plan & Scope*.

3.5 IDENTIFYING EXERCISE PARTICIPANTS

HCCs will determine which of its member organizations will participate in the exercise. **All Core Members – hospitals, EMS, emergency management organizations, and public health agencies – are required participants.** The HCC should select additional members to participate based on the scenario or other needs. Key roles such as the Exercise Facilitator, Exercise Evaluator, and Duty Officer (Notification System Representative) are also to be assigned in this step during *Phase I: Plan & Scope*. Core members and additional invited members should be documented in the exercise tool. Similarly, individuals assigned to the required exercise roles should be documented in the exercise tool. The number of invited members to the exercise is used to calculate MRSE performance measures.

3.6 SCHEDULING THE EXERCISE

This exercise does not have a low- or no-notice component although some HCCs may wish to implement the exercise under those conditions. For scheduled exercises, HCCs will contact invited members to confirm a date and time. HCCs should provide guidance to invited members regarding the amount of time they will be expected to participate. However, there is no specific time requirement or time ceiling. In these communications, the HCC may wish to describe the incident scenario and conditions along with some details about the exercise structure. HCCs may determine whether to host the exercise in person or virtually according to their response plan. Sample member invitation language is provided in Table 3 below.

Table 3: Sample Communications – Phase I: Plan & Scope

Communication	Sample Text
Consulting HCC Members	Dear [*member name*], [*HCC name*] is making preparations for this year's Medical Response & Surge Exercise (MRSE), an operations-based exercise required for the Hospital Preparedness Program (HPP) Cooperative Agreement. The exercise will follow the [*response plan title*], focusing on response actions such as information sharing and resource mobilization for a large, community-wide surge incident. The proposed incident we are planning to exercise is [*scenario description]*. HPP encourages HCCs to consult members regarding other exercise requirements which could be met by the MRSE (e.g., Joint Commission or Centers for Medicare & Medicaid). HCCs can incorporate member needs provided they do not change the core objectives of the MRSE or impede our ability to report certain data. If you would like to use the MRSE to serve other exercise needs you have, kindly send us a summary of your requirements, including specific documents or outputs you may require for compliance. We will attempt to build them into this year's MRSE exercise. Kind regards, [*Name*] [*RRC*] [*HCC name*]
Participant Invitation	Dear [*member name*], [*HCC name*] will conduct this year's Medical Response & Surge Exercise (MRSE) on [*expected date*] at [*time*]. The exercise is expected to last [*expected duration*]. The MRSE is an operations-based exercise required by the Hospital Preparedness Program (HPP) Cooperative Agreement. The exercise will follow the [*response plan title*], focusing on response actions such as information sharing and resource mobilization for a large, community-wide surge incident. The incident we are planning to exercise is [*scenario description]*. Based on the scenario we plan to exercise, we have identified [*member name*] as an essential participant in this this year's exercise. To satisfy HPP cooperative agreement requirements – all core HCC members (hospitals, emergency medical services, emergency management organizations, and public health agencies) are required participants. Further, HPP requires executives from core member institutions to participate in the After-Action Review, which is scheduled for [*date/time*]. [*instructions for how to participate in the exercise*] Kindly confirm your intention to participate by responding to this message with the name/s of the individual/s who will represent your organization. [*Name*] [*RRC*] [*HCC name*]

4.0 PHASE II: EXERCISE

This phase begins when the Exercise Facilitator kicks off the exercise on the scheduled day. This phase will largely follow the standard response actions included in the Health Care Coalition Response Plan or other jurisdictional response plan.[4] The participants may consult the Situation Manual, but the Exercise Planning and Evaluation Tool will guide the Exercise Facilitator and Evaluator through the exercise actions and provide guidance for data collection required at each step.

4.1 RESPONSE ACTIONS IN THE EXERCISE

The exercise follows the standard response actions included in the HCC's jurisdictional response plan (i.e., the HCC Response Plan). The participants will conduct these actions in concert with scenario-specific challenges designed to stress the health system. The exercise is intended to be very challenging and stress the overall surge capacity of the HCC; it is expected that most HCCs will not be able to complete all tasks fully. Pushing such stresses on the community health system is important for testing your current response systems, identifying gaps in preparedness, and informing improvement planning. The exercise tool will guide the participants through required tasks and collect all data required to support evaluation of the exercise. The HCC should conduct incident response actions as they are defined in the HCC or other jurisdictional response plan. The general flow of the exercise includes the following actions:

1. HCC **recognizes** event through appropriate channels (exercise starts).
2. HCC **activates** its response plan or equivalent.
3. HCC **notifies** exercise participants that an incident has occurred and provides preliminary information to include anticipated patient numbers type(s), resource requirements, and any other relevant information to assist hospitals in preparing for the surge (e.g., timelines).
4. HCC **mobilizes** its incident management team (if applicable) or will work within its existing jurisdictional response framework.

[4] Assistant Secretary for Preparedness and Response. 2017. Healthcare Coalition Response Plan. https://asprtracie.hhs.gov/technical-resources/resource/4525/healthcare-coalition-response-plan

5. Exercise participants manage a series of challenges related to **ongoing situational awareness, information sharing**, **resource coordination**, and **patient tracking.**
6. End exercise.

4.2 Step 1: Start Exercise

The Exercise Facilitator triggers the exercise incident response by contacting the Duty Officer (Notification System Representative). Reading from the script provided in the exercise tool, the Exercise Facilitator initiates direct communications with the Duty Officer (Notification System Representative). Although the exercise materials refer to this role as the "Duty Officer" for simplicity, the HCC should follow its governing response plan for receiving notice of the incident.

The Exercise Facilitator provides details of the incident to the Duty Officer: i) incident location, ii) anticipated scale, and iii) likely number of patients and injuries. The Exercise Facilitator will clearly communicate that the incident is an exercise, no patients will be moved or otherwise disturbed, and no actual resources will be used or moved. The Duty Officer (Notification System Representative) recognizes the incident as defined in the HCC's response plan.

The Exercise Evaluator documents the start time in the exercise tool.

4.3 Step 2: Activation

In this step, the Duty Officer (Notification System Representative) begins the process to activate the response, designating the response level appropriate to the surge incident communicated by the RRC. The response level should follow the HCC's response plan or other jurisdictional response plan.

4.4 Step 3: Notification

The HCC should determine which of its members should be notified based on the surge type and scale as per the HCC or other jurisdictional response plan. HPP encourages HCCs to notify all members regardless of their formal participation in the exercise. The HCC completes the required notification steps using the defined notification channels. Notified members are requested to acknowledge and respond to initial emergency notification by a deadline determined by the HCC. Sample notification text is provided in Table 4 below. In the Exercise Planning and Evaluation Tool (exercise tool), the Exercise Evaluator documents the list of notified members.

In the exercise tool, the Exercise Evaluator documents the notified members who acknowledged

and responded to the notification, and whether they acknowledged the notification within the time requested by the HCC. The tool will also calculate the percent of contacted members who acknowledged and responded to the initial emergency notification (MRSE PM14).

4.5 Step 4: Mobilization

In this step, the HCC will mobilize the response team (e.g., Incident Management Team, if applicable) using the defined process in the HCC's response plan. The Exercise Evaluator documents the time the HCC or team was mobilized and meets for the first time (virtual or in person per the HCC's response plan). The Exercise Evaluator documents attendance at the first meeting of the HCC against the participants identified in *Phase I: Plan & Scope* (Performance Measure N1). The tool will calculate the time (in minutes) between the incident trigger (start of the exercise) and the time the HCC was mobilized and met for the first time.

4.6 Step 5: Incident Operations

Once the HCC is mobilized, the members will confirm the anticipated resource needs documented during *Phase I: Plan & Scope*. The members will review the incident scenario, scale, total number of patients, as well as the anticipated resource requirements pre-established in the exercise tool. They will confirm or modify all resource needs – staffed bed types, personnel, pharmaceuticals, supplies and equipment, EMS-related assets, and other first responder resources. This final set of requirements will serve as the foundation for the remainder of the exercise. Final selections are documented in the exercise tool by the Exercise Evaluator.

Information Sharing and Resource Coordination

In this step, the HCC will be communicating with participating members to maintain situational awareness, share information, assess resource availability, and support identification and sharing of resources. Communication with members during this step should follow the channels articulated in the HCC's governing response plan, although HCCs are encouraged to maintain situational awareness with all HCC members and not only exercise participants. Sample communication language for each need is provided in Table 4 below although HCCs may adapt this language to their needs.

Confirm Availability of EMS Resources. The HCC begins by contacting participating EMS agencies to request current availability of pre-identified, critical EMS-related resources defined in *Phase I: Plan & Scope* (and confirmed in Step 5 above). These EMS resources are required to triage and transport patients during the incident. Sample communications to EMS participants

are provided in Table 4 below. In the exercise tool, the Exercise Evaluator documents the list of EMS agencies contacted, whether they responded (MRSE PM15), whether they responded by the requested deadline, and the HCC's determination regarding the sufficiency of the EMS resources to triage and transport incident patients (MRSE PM18). If HCCs do not have direct relationships or communication with EMS agencies, they should follow the protocol established in their response plans to confirm EMS resource availability (e.g., through an EMS Council, Emergency Communication Center, local Emergency Operations Center, Public Safety Answering Point). The principle goal of this step is to document the availability of appropriate EMS-related resources required to triage and transport surge patients.

Conduct Staffed Bed Census and Patient Allocation. In parallel, the HCC will conduct a current staffed bed census of participating clinical care members for the required and additional bed types. Additional staffed bed types are those identified by the HCC as relevant for the selected surge type during *Phase I: Plan & Scope* (and confirmed in Step 5 above). The exercise tool will clearly state which beds should be censused. In the same communication, the HCC will allocate surge patients to each participating clinical care member (facility). The HCC will send each facility the total number of patients to expect along with their anticipated injuries defined by the Clinical Advisor in *Phase I: Plan & Scope*. Note that injuries are not assigned for each patient. This information will be used by facilities to inform patient triage and determination of the number of patients who will require inpatient care and admission versus outpatient care. Patients who require inpatient care and admission will need an appropriate, staffed bed while patients in need of outpatient care will not in this exercise.

Sample communications for participating clinical care members are provided in Table 4 below. Contacted members are requested to reply within the time limit set by the HCC's response plan. If there is no time limit set in the response plan, the HCC should include a time limit during the exercise via the communication to the member facility. If any surging facility either reports having limited availability of appropriate staffed beds or the HCC determines staffed bed availability is at risk of being insufficient, the HCC may contact other HCC members, neighboring HCCs, or the State Health Authorities for assistance. In the exercise tool, the Exercise Evaluator documents (i) the list of clinical care members (facilities) contacted, (ii) whether they responded (MRSE PM15), (iii) whether they responded by the deadline requested by the HCC, and (iv) the staffed bed counts in their responses.

Confirm Availability of Personnel, Pharmaceutical Supplies, and Equipment. Either after or in the same communication as the staffed bed census request, the HCC will request participating clinical care members to assess the sufficiency of current stock levels of supplies and equipment

identified in *Phase I: Plan & Scope* and confirmed in Step 5. The assessment is based upon the number of surge patients the facility will receive as assigned by the HCC in *Phase I: Plan & Scope*. Participants are asked to determine sufficiency of resource availability for the patients they are receiving due to the incident. The resources are those required for the scenario as defined by the HCC during *Phase I: Plan & Scope* and include personnel, pharmaceuticals supplies, and equipment. Participants should report the sufficiency of each resource type separately. Table 4 below contains sample communications text that HCCs may adapt to their needs. For each category or resource (e.g., personnel, staffed beds, and other critical resources) catalogued in the exercise tool, the Exercise Evaluator documents: i) the number of HCC members (including facilities and EMS) who were contacted with an initial information request about resources, ii) the number of HCC members contacted about resources who responded by the deadline requested by the HCC (MRSE PM15), and iii) whether or not sufficient quantities of every pre-identified critical resource type were available at all facilities (MRSE PM16, partially MRSE PM17). If one or more members reports insufficient availability of any one of the resource types, that type should be noted as insufficient for managing the surge.

Support Resource Sharing. The HCC should review responses and assess the availability of the various resource types. If any surging clinical care member either reports having limited/insufficient resource availability or the HCC determines resources are at risk of being insufficient, the HCC contacts other HCC members, neighboring HCCs, or the State Health Authorities to identify available supplies or equipment for the at-risk member. If the HCC identifies alternative sources of insufficient resources, it should also ensure transportation for the resources is available. For each of personnel, staffed beds, and other critical resources, catalogued in the exercise tool, the Exercise Evaluator updates the tables of critical resources, personnel, and staffed beds to reflect any changes in availability. For example, if the one member facility had insufficient critical care physicians, but the HCC was able to identify physicians from another member (where sufficient agreements or privileges are in place) to support the surging facility, the Exercise Evaluator would classify critical care physicians as being sufficient. Table 4 below contains sample text that HCCs may use when communicating with stakeholders about resource sharing. Where additional resources (personnel, pharmaceutical supplies, equipment) are secured to support the surge, adjustments can be made in the exercise tool in the respective tables (MRSE PM16 adjustments, MRSE PM17 adjustments).

Patient Tracking

Confirm Staffed bed Availability for Patients. In this action, the HCC contacts all clinical care facilities receiving surge patients to report: i) number of existing patients at the beginning of the exercise, ii) number of those patients who could be safely discharged to accommodate surge patients, iii) number of surge patients requiring admission for inpatient care based on triage assessment, iv) number of surge patients requiring outpatient care who will not be admitted based on your triage assessment, and v) number of surge patients admitted for inpatient care with an appropriate, staffed bed and after safe discharge of patients from the original patient census.

Table 4 below provides sample communications text that HCCs can adapt to their needs. In the exercise tool, the Exercise Evaluator documents the list of surging facilities contacted as well as the contents of their responses as described in this paragraph.

Tracking Patient Transfer. If patients at one or more facilities do not have an appropriate, staffed bed, the HCC provides the transferring facility with options for receiving facilities and requests the transferring facility to identify an appropriate, staffed bed for patients at receiving facilities as well as engage EMS to identify appropriate transport for each patient. Facilities may use their own transport and both internal and contracted patient transport services, as appropriate for the patient.

Participating surging facilities that have patients without an appropriate, staffed bed are requested to report back to the HCC to confirm: i) the number of patients requiring transport to a receiving facility, ii) the number of patients requiring inpatient care for whom the facility was able to place at a receiving facility with an appropriate, staffed bed *and* with appropriate transport to the receiving facility, iii) the number of patients requiring inpatient care for whom the facility was able to identify an appropriate staffed bed at a receiving facility, but for whom it was unable to identify transport to the receiving facility, and iv) the number of patients for whom it found neither staffed beds nor transport (MRSE PM19 adjustments).

In the exercise tool, the Exercise Evaluator documents the responses from each facility.

Table 4: Sample Communications – Phase II: Exercise

Communication	Sample Text
Incident notification to all HCC members	***EXERCISE | EXERCISE | EXERCISE | EXERCISE*** Incident Notification Today, the [*HCC name*] is conducting the Medical Response & Surge Exercise, an operations-based exercise. [*incident description*] has occurred. We estimate [*number of surge patients*] will require immediate triage, transport, and care from our members. If you have been identified as an essential participant in today's exercise, stay alert for forthcoming communications. We request you to acknowledge receipt of this notification by [*deadline*]. [*HCC Representative Name*] [*Title*] [*HCC name*]
EMS agencies – request availability of transport and other resources	***EXERCISE | EXERCISE | EXERCISE | EXERCISE*** Today, the [*HCC name*] is conducting the Medical Response & Surge Exercise, an operations-based exercise. We are expecting approximately [*number of surge patients*] to require triage and transport services in the area as a result of [*scenario description*]. Their injuries include [*description of patient conditions or injuries*]. **Note: this is an exercise so there are no actual surge patients, and no resources or patients are to be moved or otherwise affected during the exercise.** Please confirm the current number of the following resources you have available by [*deadline*]. • [*List of pre-identified, critical EMS resources*]. Kind regards, [*Name*] [*Exercise Facilitator*] [*HCC name*]
Clinical care members – current staffed bed census	EXERCISE | EXERCISE | EXERCISE | EXERCISE Today, the [*HCC name*] is conducting the Medical Response & Surge Exercise, an operations-based exercise which evaluates our capacity to manage a large-scale, community-wide patient surge. We are expecting approximately [*number of surge patients*] to require care across our region, including [*number expected at this member facility*] at your facility as a result of [*scenario description]*. The patients will have injuries, including [*patient injuries and conditions*]. You must determine how many will require admission for inpatient care and how many patients will be cared for in outpatient settings. **Note: this is an exercise so there are no actual surge patients, and no resources or patients are to be moved or otherwise affected during**

Communication	Sample Text
	the exercise. Please confirm the current number of staffed beds you have immediately available by the types below. Please respond by [*deadline*]. • Emergency Department beds. • General Medical Unit beds. • ICU beds (SICU, MICU, CCU). • Post Critical Care (Monitored / stepdown) beds. • Surgical Unit beds (pre-op, post-op, & procedural). • *[List of additional pre-identified, critical bed types].* Kind regards, [*Name*] [*Exercise Facilitator*] [*HCC name*]
Clinical care members – resource availability (personnel and supplies and equipment)	EXERCISE | EXERCISE | EXERCISE | EXERCISE Today, the [*HCC name*] is conducting the Medical Response & Surge Exercise, an operations-based exercise which evaluates our capacity to manage a large-scale, community-wide patient surge. We are expecting approximately [*number of surge patients*] to require care across our region, including [*number expected at this member facility*] at your facility as a result of [*scenario description]*. Their injuries include [*description of patient conditions or injuries*]. **Note: this is an exercise so there are no actual surge patients, and no resources or patients are to be moved or otherwise affected during the exercise.** If you receive [*number of patients expected at this facility*], will you have sufficient or insufficient immediate availability of the following resources? For those resources which may experience shortages, please indicate if you require HCC support in identifying alternative sources. **Kindly reply by [*deadline*].** • *[List of pre-identified, critical personnel types required to manage patient surge].* • [*list of pre-identified, critical supplies and equipment required to manage patient surge*]. • Would you require HCC support in identifying alternative sources of these resources? If so, which? Kind regards, [*Name*] [*Exercise Facilitator or other title*] [*HCC name*]

Communication	Sample Text
Clinical care – confirm staffed bed availability	EXERCISE | EXERCISE | EXERCISE | EXERCISE In the context of today's Medical Response & Surge Exercise conducted by [*HCC name],* we are contacting you to request information about staffed bed availability and patient needs. As a reminder, you have received [*number of surge patients expected at this member facility*] that require admission to your facility. Their injuries include [*description of patient conditions or injuries*]. **Note: this is an exercise so there are no actual surge patients, and no resources or patients are to be moved or otherwise affected during the exercise.** Based on the number of patients expected at your facility, could you kindly note the following by [*deadline*]? a) Number of existing patients at the beginning of the exercise. b) Number of those patients who could be safely discharged to accommodate surge patients. c) Number of surge patients requiring admission for inpatient care based on your triage assessment. d) Number of surge patients requiring outpatient care who will not be admitted based on your triage assessment. e) Number of surge and existing patients requiring admission for inpatient care with an appropriate, staffed bed after patients are discharged. f) Number of patients requiring admission for inpatient care without an appropriate, staffed bed who require transfer to another facility for inpatient care. g) Of those requiring transfer to another facility for care, for how many are you able to identify an appropriate, staffed bed at a receiving facility *and* appropriate transport? h) Number of patients for whom you **are unable** to find an appropriate, staffed bed at a receiving facility and/or appropriate transport? Kind regards, [*Name*] [*Exercise Facilitator or other title*] [*HCC name*]
Seeking additional resources from HCC member or other organization	**EXERCISE | EXERCISE | EXERCISE | EXERCISE** Today, the [*HCC name*] is conducting the Medical Response & Surge Exercise, an operations-based exercise which evaluates our capacity to manage a large-scale, community-wide patient surge. We are expecting approximately [*number of surge patients*] to require care across our region due to [*scenario description]*. Their injuries include [*description of patient conditions or injuries*]. We have identified a need for additional [*personnel / staffed beds / supplies and equipment*] to care for patients. **Note: this is an exercise so there are no actual surge patients, and no resources or patients are to be moved or otherwise affected during the exercise.** Please confirm the availability of the following resources to be shared with members

Communication	Sample Text
	of [*HCC name*] to accommodate the large-scale surge inpatients. Kindly reply by [*deadline*]. • [*list and quantity of resources required*]. Kind regards, [*Name*] [*Exercise Facilitator or other title*] [*HCC name*]

4.7 END EXERCISE

If the HCC has set a time limit for the exercise, the Exercise Facilitator should stop the exercise at the designated time. If no specific time limit was established in *Phase I: Plan & Scope*, the HCC should determine the amount of time it wishes to continue to identify available resources and patient transport options to meet the surge requirements. In these cases, the Exercise Facilitator and the RRC may determine when to stop the exercise. The timing of the scheduled AAR in *Phase III: Review (After-Action Discussion and Improvement Planning)* may determine the end of the exercise. As executives are expected to be present during the AAR, scheduling the review in advance will be important to ensure their participation. When the exercise is ended by the Exercise Facilitator, all participating members will be notified and invited to *Phase III: Review* activities. In the exercise tool, the Exercise Evaluator marks the time of the end of the exercise and beginning of the Review phase.

Note: The Medical Response & Surge Exercise is designed to mimic extreme stress on the local health care system. If the exercise is performed correctly, it is expected that most HCCs will not be able to meet 100% of its pre-identified resource requirements to respond to the surge incident. The exercise results – even when "unsuccessful" in some respects – will assist the HCC in determining where challenges exist in its ability to respond to large-scale patient surges.

5.0 PHASE III: REVIEW (AFTER-ACTION DISCUSSION AND IMPROVEMENT PLANNING)

Before beginning *Phase III: Review*, the Exercise Evaluator will ensure all required data are

entered in the exercise tool. Key findings will be documented through the AAR which outlines participant discussion topics, highlighting strengths, areas for improvement, decisions, and recommendations identified by participants during the exercise. The AAR may also identify gaps in: (i) existing resources, roles, and responsibilities, (ii) notification and activation procedures, and (iii) information sharing coordination processes and protocols. It may also capture courses of action and specific resources necessary to implement response activities. The HCC should follow the AAR by creating an IP. *Guidance for both AAR facilitation and documentation as well as IP creation is provided in the Exercise Planning and Evaluation Tool and in the MRSE Evaluation Plan.*

5.1 CONVENING EXECUTIVES FOR THE REVIEW

Although executives are not required to participate in the exercise itself, *HPP requires that at least one executive from each HCC core member organization participates in the Review phase's AAR.* The RRC should ensure participation of executives in the review by confirming their participation in advance. The Exercise Facilitator and Exercise Evaluator will convene the participants for the Review phase. In the exercise tool, the Exercise Evaluator will have already listed the expected participants in the AAR. Once the review begins, the Exercise Evaluator will document which core member organizations were represented by at least one executive (MRSE PM20).

5.2 REVIEWING THE EXERCISE RESULTS

The Exercise Planning and Evaluation Tool and the MRSE Evaluation Plan should be the primary source of guidance for conducting the AAR. The Exercise Evaluator may begin by reviewing the exercise objectives and discussing to what extent the exercise achieved them. The exercise objectives are included in the introduction of this document but are also presented here for convenience:

- Assess an HCC's capacity to support a large-scale, community-wide medical surge incident
- Evaluate a multitude of coalition preparedness and response documents and plans, including specialty surge annexes, transfer agreements, coordination plans with other state HCCs, and all other relevant plans
- Evaluate coalition members' ability to communicate and coordinate quickly to find and match available staffed beds, transportation, supplies and equipment, and personnel during a large-scale surge incident

- Assist HCCs and their members with improvement planning based on MRSE outcomes
- Serve as a data source for performance measure reporting required by the HPP Cooperative Agreement
- Provide a flexible exercise which could be customized to meet the needs and/or exercise requirements of HCCs

QUANTITATIVE RESULTS

The Exercise Evaluator tracks a significant amount of data during the exercise. These data include those data elements required to calculate/evaluate performance measures but also numerous data points for use by the HCC in evaluating its actions during the exercise. The exercise tool provides a dashboard which the Exercise Evaluator should summarize during the AAR, highlighting successes and gaps in the response.

Performance measures as well as evaluation guidelines and assistance for interpreting quantitative results from the exercise can be found in the MRSE Evaluation Plan.

QUALITATIVE DISCUSSION QUESTIONS

The Exercise Planning and Evaluation Tool provides discussion questions in each phase and most actions of the exercise. With the Exercise Evaluator, participants can use these questions to guide AAR discussion and reflect on improvement planning. The responses to these questions are documented in the exercise tool by the Exercise Evaluator in discussion with the RRC, the Exercise Facilitator, and other participants. The Exercise Evaluator can review the responses to these questions to stimulate discussion amongst the review participants.

5.3 IMPROVEMENT PLANNING

In this step, the Exercise Evaluator – in conjunction with the RRC and Exercise Facilitator – leads a discussion with participants to use the outputs of the AAR to develop plans for HCC improvement, including action items, timelines, and associated owners. These plans will be documented in the *Phase III Improvement Plan* tab of the Exercise Planning and Evaluation Tool.

Appendix A: Crosswalk of Staffed Bed Types Between the Surge Estimator Tool and the Medical Response & Surge Exercise

Some HCCs may wish to utilize their most recent SET as the source for staffed bed counts required in *Phase I: Plan & Scope*. To facilitate the use of the SET, below is a crosswalk between the bed types from the SET and their equivalent in the MRSE.

SET Bed Type	MRSE Staffed Bed Type Equivalent
Adult Psychiatric	Psychiatric Unit Beds
Burn Floor Beds	Post Critical Care (Monitored / stepdown) Beds
Burn ICU	ICU Beds (SICU, MICU, CCU)
Closed / Inactive Floor Beds	Not Included in the MRSE
Floor Beds	General Medical Unit Beds
ICU Beds	ICU Beds (SICU, MICU, CCU)
Monitored / Stepdown Beds	Post Critical Care (Monitored / Stepdown) Beds
Neonatal ICU (NICU)	Neonatal ICU Beds
Nursery Beds	Labor and Delivery Unit Beds
Operating Room Beds	Surgical Unit Beds (pre-op, post-op, & procedural)
Pediatric ICU	Pediatric ICU Beds
Pediatric Psychiatric	Psychiatric Unit Beds
Pediatrics Floor Beds (Inpatient)	General Pediatric Unit Beds
Pre-induction, Post Anesthesia and Procedural Beds	Surgical Unit Beds (pre-op, post-op, & procedural)

Appendix B: Glossary

Term	Definition
After-Action Review (AAR)	A document intended to capture observations of an exercise and make recommendations for post-exercise improvements. The final AAR and Improvement Plan (IP) are printed and distributed jointly as a single AAR/IP following an exercise. See Improvement Plan.
Centers for Medicare and Medicaid Services (CMS)	A federal agency that administers the nation's major health care programs including Medicare, Medicaid, and Children's Health Insurance Program (CHIP). It collects and analyzes data, produces research reports, and works to eliminate instances of fraud and abuse within the health care system. The CMS Final Rule – which applies to many HCC member types – includes requirements for drills and exercises. Some of these requirements may be met by MRSE in certain situations.
Community	A political entity that has the authority to adopt and enforce laws and ordinances for the area under its jurisdiction. In most cases, the community is an incorporated town, city, township, village, or unincorporated area of a county; however, each State defines its own political subdivisions and forms of government.
Community-wide	A means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests.
Critical Care	Critical care helps people with life-threatening injuries and illnesses. It might treat problems such as complications from surgery, accidents, infections, and severe breathing problems. It involves close, constant attention by a team of specially-trained health care providers. Critical care usually takes place in an ICU or trauma center.

Term	Definition
Disaster	A hazard impact causing adverse physical, social, psychological, economic, or political effects that challenges the ability to respond rapidly and effectively. Despite a stepped-up capacity and capability (call-back procedures, mutual aid, etc.) and change from routine management methods to an incident command/management process, the outcome is lower than expected compared with a smaller scale or lower magnitude impact (see "emergency" for important contrast between the two terms).
Emergency	A hazard impact causing adverse physical, social, psychological, economic, or political effects that challenges the ability to respond rapidly and effectively. It requires a stepped-up capacity and capability (call-back procedures, mutual aid, etc.) to meet the expected outcome, and commonly requires change from routine management methods to an incident command process to achieve the expected outcome (see "disaster" for important contrast between the two terms).
Emergency Management	Includes Federal, State, territorial, tribal, substate regional, and local governments; non-governmental organizations (NGOs); private sector organizations; critical infrastructure owners and operators; and all other organizations and individuals who assume an emergency management role.
Emergency Medical Services (EMS)	Services, including personnel, facilities, and equipment required to ensure proper medical care for the sick and injured from the time of injury to the time of final disposition (which includes medical disposition within a hospital, temporary medical facility, or special care facility; release from the site; or being declared dead). EMS specifically includes those services immediately required to ensure proper medical care and specialized treatment for patients in a hospital and coordination of related hospital services.

Term	Definition
Emergency Support Function-8 (ESF-8)	ESF-8 provides the mechanism for coordinated federal assistance to supplement state, tribal, and local resources in response to the following: • Public health and medical care needs. • Veterinary and/or animal health issues in coordination with the U.S. Department of Agriculture (USDA). • Potential or actual incidents of national significance. • A developing potential health and medical situation. Reference: "Emergency Support Functions." Public Health Emergency. http://www.phe.gov/Preparedness/support/esf8/Pages/default.aspx#8. Accessed 6 Aug. 2020.
Evacuation	The organized, phased, and supervised withdrawal, dispersal, or removal of patients, personnel, and visitors from dangerous or potentially dangerous areas.
Exercise	An instrument to train for, assess, practice, and improve performance in *prevention, protection, response,* and *recovery capabilities* in a risk-free environment. Exercises can be used for: testing and validating policies, plans, procedures, training, equipment, and interagency agreements; clarifying and training personnel in roles and responsibilities; improving interagency coordination and communications; identifying gaps in resources; improving individual performance; and identifying opportunities for improvement.
Functional Exercise	A single- or multi-agency operations-based exercise designed to evaluate capabilities and multiple functions using a simulated response. Characteristics of a functional exercise include simulated deployment of resources and personnel, rapid problem solving, and a highly stressful environment.
Hazard	Something that is potentially dangerous or harmful, often the root cause of an unwanted outcome.

Term	Definition
Hazard vulnerability analysis (HVA)	A systematic approach to identifying all hazards that may affect an organization and/or its community, assessing the risk (probability of hazard occurrence and the consequence for the organization) associated with each hazard, and analyzing the findings to create a prioritized comparison of hazard vulnerabilities. The consequence, or "vulnerability," is related to both the impact on organizational function and the likely service demands created by the hazard impact.
Health care coalition (HCC)	A group of individual health care and response organizations (e.g., hospitals, EMS, emergency management organizations, public health agencies, etc.) in a defined geographic location. HCCs play a critical role in developing health care delivery system preparedness and response capabilities. HCCs serve as multi-agency coordinating groups that support and integrate with ESF-8 activities in the context of incident command system (ICS) responsibilities.
Health care coalition (HCC) member	An entity within the HCC's defined boundaries that actively contributes to HCC strategic planning, operational planning and response, information sharing, and resource coordination and management. Membership is evidenced by memoranda of understanding (MOU), letters of agreement, and/or attendance at an HCC meeting in the past fiscal year. Representation can be achieved through an authorized representative from the member organization or an authorized representative of a group or network of member organizations (e.g., an integrated health care delivery system or corporate network). In instances where there are multiple entities of an HCC member type, there may be a subcommittee structure that establishes a lead entity to communicate common interests to the HCC (e.g., multiple dialysis centers forming a subcommittee). For example, if a subcommittee lead participates in an HCC meeting, the members engaged in that subcommittee (through MOU, letters of agreement, and/or attendance at a subcommittee meeting in the past budget year) are also considered represented.

Term	Definition
Health care executive	A decision-maker for his/her respective organization and should have decision-making power that includes, but is not limited to, allocating or reallocating resources, changing staffing roles and responsibilities, and modifying business processes in his/her organization. Typical titles of executives with decision-making power include: Chief Executive Officer, Chief Operating Officer, Chief Medical Officer, Chief Clinical Officer, Chief Nursing Officer, State and/or Local Director of Public Health, Director of Emergency Management, Administrator on Duty, or Chief of EMS, among others.
Health care facility	Any asset where point-of-service medical care is regularly provided or provided during an incident. It includes hospitals, integrated health care systems, private physician offices, outpatient clinics, nursing homes, and other medical care configurations. During an emergency response, alternative medical care facilities and sites where definitive medical care is provided by EMS and other field personnel would be included in this definition.
Homeland Security Exercise and Evaluation Program (HSEEP)	Doctrine and policy provided by the U.S. Department of Homeland Security for the design, development, conduct, and evaluation of preparedness exercises. The terminology and descriptions related to exercise in this document is a Homeland Security industry application of emergency management concepts and principles.
Improvement Plan	Identifies specific corrective actions, assigns them to responsible parties, and establishes targets for their completion.
Incident	An occurrence, natural or human-caused, that requires a response to protect life or property. Incidents can, for example, include major disasters, emergencies, terrorist attacks, terrorist threats, civil unrest, wildland and urban fires, floods, hazardous materials spills, nuclear accidents, aircraft accidents, earthquakes, hurricanes, tornadoes, tropical storms, tsunamis, war-related disasters, public health and medical emergencies, and other occurrences requiring an emergency response.

Term	Definition
Incident command system (ICS)	The combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.
Incident management team (IMT)	An Incident Commander and the appropriate Command and General Staff personnel assigned to an incident. The level of training and experience of the IMT members, coupled with the identified formal response requirements and responsibilities of the IMT, are factors in determining "type," or level, of IMT.
Joint Commission	An independent, not-for-profit organization that accredits and certifies health care organizations and programs in the United States. Joint Commission accreditation and certification standards are the basis of an objective evaluation process designed to help health care organizations measure, assess, and improve performance. The Joint Commission in EM03.01.03 requires two emergency response exercises (at least one to include an escalating event where the local community is unable to support the event), and at least one to include participation in a community-wide exercise. MRSE may meet a hospital's Joint Commission exercise requirements in some cases.
Jurisdiction	A range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authority. Jurisdictional authority at an incident can be political or geographical (e.g., Federal, State, tribal, local boundary lines) or functional (e.g., law enforcement, public health, school).
Medical Surge	The ability to evaluate and care for a markedly increased volume of patients that exceeds normal operating capacity.
Member	HCC members that represent a type of facility or organization (e.g., all nursing facilities, all hospitals, or all EMS agencies within one HCC).
Participating	A member organization or executive is considered participating if they are physically or remotely connected to the exercise and AAR in real time.

Term	Definition
Resources	Personnel and major items of equipment, supplies, and facilities available or potentially available for assignment to incident operations and for which status is maintained.
Response	Activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes the execution of emergency operations plans and of mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes.
Stakeholders	Includes HCC core members—hospitals, EMS, emergency management organizations, and public health agencies—additional HCC members, and the ESF-8 (Public Health and Medical Services) lead agency.
Surge Capacity	The ability to manage a sudden influx of patients. It is dependent on a well-functioning ICS and the variables of space, supplies, and staff. The surge requirements may extend beyond placing patients into staffed beds and should include all aspects related to clinical services (e.g., laboratory studies, radiology exams, operating rooms).
Surge Capability	The ability to manage patients requiring very specialized medical care. Surge requirements span a range of medical and health care services (e.g., expertise, information, procedures, or personnel) that are not normally available at the location where they are needed (e.g., pediatric care provided at non-pediatric facilities or burn care services at a non-burn center). Surge capability also includes special interventions in response to uncommon and resource intensive patient diagnoses (e.g., Ebola, radiation sickness) to protect medical providers, other patients, and the integrity of the medical care facility.

Appendix C: Guidance for Using the MRSE Real-World Incident Reporting and Evaluation Tool

The MRSE Real-world Incident Reporting Tool is designed to capture data elements for a real-world incident which meets the requirements to be used in lieu of an exercise. Health Care Coalitions (HCCs) may utilize information from the tool meet the HPP requirements associated with the MRSE, including reporting program performance measures. Real-world incidents must adhere to the parameters articulated in the Questionnaire tab of the tool. Guidance for how to complete the Real-world Incident Reporting and Evaluation Tool follows below.

Prerequisites for Using a Real-world Incident in Lieu of a MRSE Exercise

There are specific parameters your incident and response must meet in order to be used in lieu of a standard MRSE exercise. They are:

- The real-world surge incident must be equal to or greater than 20% of the required staffed bed types and other scenario-specific staffed bed types used in the MRSE (see the Calculating the Scale of the Surge in section 3.3).

- At least one of each of the HCC core members must participate in the real-world incident response.

- At least one executive from each of the participating core member organizations (acute care hospitals, emergency medical services (EMS), emergency management organizations, and public health agencies) must participate in the After-Action Review (AAR).

- The HCC should have an After-Action Review (AAR) and Improvement Plan (IP) available upon request.

- The HCC is able to capture the data points required to report all MRSE performance measures. To strengthen the possibility of meeting this requirement, HCCs can pre-identify resource needs for a range of surge incident types (e.g., from the HCC Hazard Vulnerability Analysis) as done in the *Identifying Anticipated Resources Required for the Surge* in Section 3.4.

- The HCC must use the Real-world Incident Reporting and Evaluation Tool to document the real-world incident and provide data required by HPP (e.g., performance measures).

- The real-world surge incident has a discrete beginning and end ("bookends") and is not a slow surge build up. Preferred real-world incidents to be used in lieu of the MRSE last no more than one week. Generally speaking, the COVID-19 response cannot be used in lieu of conducting the MRSE unless there is a specific COVID-19 surge event lasting less than one week.

Questionnaire

Information about the HCC's real-world incident response must first be collected in this tab to determine if the real-world incident and related response will satisfy the annual HPP MRSE requirement. Section 2.9 of this manual stipulates specific prerequisites/ parameters which must be met in order for the incident to qualify. The HCC must answer all screening questions, as well as provide additional details regarding the HCC's role in this response.

The real-world incident must include a large number of surge patients equal to or greater than 20% of the HCC members' total staffed beds for the five required bed types plus 20% of any optional bed categories used during the response. In the tool, the HCC will enter the total staffed beds, by type, within its member organizations for all five required bed categories and any additional (optional) bed categories that were utilized to manage surge patients during this response. This is information is based off of the current or recent number of staffed beds at all HCC member facilities (regardless of availability) and is not related to facility census data or the number of beds available at the time of the incident. HCCs may use a recent Surge Estimator Tool (SET) or other source of bed counts (see Appendix X for a crosswalk of MRSE and SET bed types). The tool will automatically calculate the number of patients which serves as the minimum threshold the real-world incident must meet (i.e., 20% of staffed beds required for the incident).

The HCC must have core member executive participation in the incident's After-Action Review (AAR) and should have an AAR/Improvement Plan (IP) available upon request. **Once the questionnaire has been completed, it must be submitted to the HCC's HPP recipient and Field Project Officer (FPO) for final review and approval, prior to completing the remainder of the tool**. HCCs should contact their HPP recipient and FPO for additional guidance on the real-world incident response prerequisites/parameters or the Questionnaire tab.

Real-world Incident Details

The HCC will provide information on which of its member organizations participated in the real-world incident, including the member organizations' essential (critical) resources required to support the real-world incident response, and the HCC member organizations considered as essential (critical) to support this specific incident. In consultation with the HCC Clinical Advisor or other designee, the HCC should review the real-world incident and the resources that were identified in the HCC's response plan or Hazard Vulnerability Analysis (HVA) as being required to meet surge needs for this type of incident. If resources for this incident type were not specified in these plans, the HCC, in consultation with its Clinical Advisor, should identify those resources which would be essential (critical) to support this type of incident. **All HCC Core Members – acute care hospitals, emergency medical services (EMS), emergency management organizations, and public health agencies – are required participants**. The HCC should select additional members that participated based on the scenario or other needs. The number of members that participated in the real-world incident is used to calculate MRSE performance measures. All sections in this sheet must be completed.

Real-world Incident Initial Actions

On this sheet, the HCC will provide detailed information on the real-world incident actions, including incident recognition, communications and coordination, and the activation, notification, and demobilization processes. HCCs should consult their records to document the actions of the real-world incident response such as mobilization of the HCC response team. It can review its communications systems to document responsiveness of its members to information requests and other communications sent by the HCC. All sections in this sheet must be completed.

Real-world Incident Operations

This sheet allows the HCC to provide critical information on the real-world response actions detailed in the HCC's response plan, including real-world incident information sharing, total number of patients, resource needs – bed types, personnel, pharmaceuticals, supplies and equipment, EMS-related assets, and other first responder resources. The HCC should report the number of patients for whom its members were able to secure an appropriate staffed bed within a reasonable amount of time (as recommended by the HCC Clinical Advisor). Additionally, it should document surging facilities' resource availability, including any shortages of staffed beds, personnel, or supplies and equipment during the real-world incident.

If any patients required transport between facilities to receive an appropriate, staffed bed and associated care, HCCs can document this in the tool. The HCC should attempt to answer all relevant qualitative questions to support improvement planning. All sections in this sheet must be completed.

After-Action Review

Before starting this section, the HCC will need to ensure that all required data are entered in the preceding sheets of the real-world incident tool.

In the first table in this section, all HCCs are required to enter whether each essential (critical) HCC member organization participated in the real-world incident response (used to calculate Performance Measure 21: Percent of all pre-identified, critical HCC members that participated in the real-world incident), and whether an executive from each core member organization participated in the AAR (used to calculate Performance Measure 20: Percent of HCC core members with at least one executive participating in the real-world incident AAR).

This AAR support tool provides guidance for development and completion of an AAR, and does not replace your already completed AAR (if you submitted one prior to completing the MRSE Real-world Incident Tool). Please note that data entered by the HCC in previous tabs will pre-populate into this sheet.

Improvement Plan

Please note that completion of this sheet is optional. The improvement plan tracks strengths the HCC observed during the real-world incident. If the HCC chooses to complete this section, they are required to enter at least one strength observed during the real-world incident and can enter no more than three. When entering the strengths, HCCs must also select the emergency planning (POETE) element, capability, and to which objectives the strengths relate. Please note that you can select multiple POETE elements, capabilities, and objectives to cover all listed strengths. This information will be aggregated.

Performance Measures

This sheet automatically calculates the MRSE performance measures for HCCs using data points that have been captured in previous tabs. Please note that ASPR will maintain the same performance measures across exercise and real-world incident requirements. This real-world incident reporting and evaluation tool gathers proxy data for each element of the performance measures such that the real-world incident can be measured along with the exercise measures. In this context, 'pre-identified' and 'critical' refer to the resources that your HCC identified as essential (critical) in the Real-world Incident Details Tab. In addition, 'exercise' in this context refers to the real-world incident. If you have any questions, or require additional guidance, please contact your HPP recipient and FPO.

Participant Feedback Form

Please note that completion of this sheet is optional. The HCC's observations, comments, and input are greatly appreciated, and provide invaluable insight to good practices and areas for improvement of the Real-world Incident Reporting Tool. Any comments provided will be treated in a sensitive manner and all personal information will remain confidential. Please keep comments concise, specific, and constructive.