

Hospital Preparedness Program (HPP) Cooperative Agreement

Hospital Preparedness Program (HPP) Measure Manual:
Implementation Guidance for the HPP Program Measures



*Hospital Preparedness Program (HPP)
Budget Period 2 (BP2): 1 July 2013 – 30 June 2014*

VERSION 1.0

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**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
ASSISTANT SECRETARY FOR PREPAREDNESS AND RESPONSE**



Hospital Preparedness Program (HPP) Measure Manual: Implementation Guidance for the HPP Program Measures

July 1, 2013 — June 30, 2014

The *Hospital Preparedness Program (HPP) Measure Manual, Implementation Guidance for the HPP Program Measures* (hereafter referred to as *Program Measure Manual*) is a highly iterative document. Subsequent versions will be subject to ongoing updates and changes as reflected in HPP policies and direction. Previous versions were entitled *Hospital Preparedness Program (HPP) Performance Measure Manual*.

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Preface: How to Use This Manual

HPP created this manual to assist awardees of the Hospital Preparedness Program (Awardees) in collecting reliable and valid program measure results. HPP envisions this document as a “go to” resource to clarify the meaning of the program measures and their component indicators. Rather than reading the manual cover-to-cover, HPP expects that Awardees will use the manual as a reference tool for specific questions. HPP designed the indicators outlined under each program measure to demonstrate achievement or progress towards achieving the relevant program measure. Fulfilling all of the indicators for each program measure is a goal that will require extended efforts over a remaining four years in the project period. Therefore, in the short term, each Awardee should prioritize meeting as many of the indicators as possible.

Any Awardee receiving funds from the HPP should understand that the federal government requires program measures. Program measures should describe and illustrate an Awardee’s progress toward meeting its goals and achieving program outcomes. It is the responsibility of the program’s participants, in this case Awardees, to provide performance information through program measures. This information allows the HPP the ability to assess both the Awardee and its effectiveness in implementing the National Healthcare Preparedness Capabilities and achieving the associated program measures.

This document is available to the public and includes all relevant BP2 HPP Program Measure information. This manual provides:

- Common definitions and vocabulary for meaningful HPP program evaluation
- A brief history of HPP program measurement
- The rationale and intent for the new HPP Program Measures
- Full descriptions of the program measures, indicators, and assessment factors
- The method by which program measure results will be calculated from indicator responses
- Guidance on how to interpret key terms and phrases

Document Organization

This document is organized into four main sections: an Introduction, the HPP-Specific Program Measure indicators, the Healthcare Coalition (HCC) Developmental Assessment (HCCDA) factors, and the HPP Site-Visit Tool. Each section outlines how the Awardee should report on the evaluation components in that section

The HPP-Specific Program Measure section is broken down in to chapters. Each HPP Program Measure chapter follows the structure below:

1. Introduction: Description of the HPP Program Measure
2. Indicators: A table outlining for each indicator the:
 - Applicable capability(ies) and function(s) the indicator corresponds to in the *Healthcare Preparedness Capabilities* document
 - Unit of measurement
 - Objective of the indicator (preparedness, response, recovery, or mitigation)

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3. Interpretation: Detailed technical guidance information and instructions for understanding and accurately reporting on each indicator included under the program measure

The document also contains four key appendixes:

- A. Glossary
- B. Indicator, Capability, and Factor Table
- C. HPP- Public Health Emergency Preparedness (PHEP) Joint Measures
- D. BP2 Reporting Template

Definitions: HPP Program Measures

Table 1 provides a short introduction to key terms referenced throughout the *HPP Program Measure Manual*. It assists with navigating the manual. For further information, Awardees should consult the more detailed definition specific to each program measure.

Table 1. Introductory Key Terms

Term	Definition
Program Measure	An objective, quantifiable set of indicators used to demonstrate the implementation of activities, creation of outputs, or to quantify progress toward outcomes
Indicator	Data which provide information about the current conditions of the program measures
Result	An indicator or program measure outcome submitted by a reporting entity. Indicator results are combined to calculate a more nuanced program measure result.
Target	A goal or an objective toward which effort is directed
Capability	A skill, knowledge, and/or set of resources that makes an organization competent to achieve a specific outcome
Unit of measurement	A quantity used as a standard of measurement
Function	Any activity, input, or exercise intended for a particular outcome
Resource Element	An output that corresponds with an expected product

Responses for HPP Program Measure Indicators/Healthcare Coalition Developmental Assessment (HCCDA) Factors

For BP2, we have developed two Program Measures: Medical Surge and Continuity of Healthcare Operations. Each Program Measures consists of seven indicators, for a total of 14 indicators that the Awardee or HCC (depending upon the unit of measurement) must use to report their current status. Additionally, HCCs must report on 19 HCC Developmental Assessment factors using the Likert scale outlined in Table 2.

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Table 2. Scaling System for the HPP Program Measure Indicators and HCCDA Factors

Scaling Code	Response	Description
“1”	Strongly Disagree	Does not meet indicator/factor to a very large extent
“2”	Disagree	Does not meet indicator/factor to a large extent
“3”	Moderately Disagree	Does not meet indicator/factor but making minimal progress
“4”	Slightly Disagree	Does not meet indicator/factor but making some progress
“5”	Neither Agree nor Disagree	Undecided
“6”	Slightly Agree	Meets achievement of the indicator/factor with minimal progress
“7”	Moderately Agree	Meets achievement of the indicator/factor with some progress
“8”	Agree	Meets achievement of the indicator/factor to a large extent
“9”	Strongly Agree	Meets achievement of the indicator/factor to a very large extent
— Though most indicators are to be answered by healthcare coalitions, some indicators within the Medical Surge Program Measure are specifically directed for reporting at the Awardee-level unit of measurement.		

The nine-point Likert scale identifies anchor points and increases the sensitivity of the scale to help ASPR, our Awardees, and HCCs better define their current status or baseline. The baseline data collected in BP2 will be used to measure progress over the remaining project period (BP3-5). Establishing the baseline in BP2 provides Awardees and HCCs with an opportunity to develop plans to achieve goals and/or milestones that will improve their functionality and capabilities for BP3-5. Since it is imperative that this baseline data be as accurate as possible, HPP is developing a Site-Visit Tool for Field Project Officers (FPOs) to verify and validate the reported data.

Sensitivity refers to the likelihood that the scale will detect a change in the dimension being measured, if one occurs. Literally, the more Awardees and HCCs are rated on this scale, the more sensitive the scale will be to detect change or progress over time. This scaling will allow Awardees and HCCs to corroborate ratings between the different sources of data (i.e. 14 program indicators, 19 HCC Developmental Assessment factors) to develop valid and reliable self-assessment performance responses of where they are and what they need to do to increase their functionality.

The scaling system (scaling code, response, and an associated description) for use with the HPP Program Measures is described in Table 2. A scaling code reflecting level of agreement must be selected for each indicator. HPP Awardees and/or HCCs are expected to achieve each of the indicators within the HPP measures during the four years remaining HPP Cooperative Agreement project period.

Measure Results: HPP Program Measures

In Budget Period 2 (BP2), ASPR reduced the number of program measures and created a HCC Developmental Assessment tool. Instead of eight program measures, HPP focuses on two in BP2 (Medical Surge and Continuity of Healthcare Operations). Awardees are expected to gather performance measure indicators and report their data to HPP. Of note, the unit of measurement for the majority of HPP-specific indicators is at the HCC level. The Awardee will need to collect and aggregate HCC-level

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indicators and report these along with Awardee-level data. To meet HPP requirements, Awardees must submit a response for each performance measure indicator to the Office of the Assistant Secretary for Preparedness and Response (ASPR).

Sufficient Documentation

Awardees should maintain appropriate documentation for all data reported on the HPP-specific Program Measures and HPP-PHEP joint measures. Documentation should contain sufficient information to substantiate program measure data submitted to ASPR. ASPR may request documentation to clarify or verify information submitted by Awardees. Awardees may document their program measure data via an automated electronic system; however, this is not required. Awardees may manually record all indicators.

Introduction

For budget period 2 (BP2), HPP refined its program measure process to better assess its Awardees' preparation, response, recovery, and mitigation capabilities. The first step of the refinement process was to **reduce** the required number of end-of-year 2012 (BP1) indicators. Next, HPP **refined** the remaining indicators to improve the assessment of national healthcare preparedness and better determine Awardee progress on program measures (previously called performance measures).

The BP2 HPP Program Measure development process integrates strategic thinking from the *2012 Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness* (the Capabilities),¹ the 2009 National Health Security Strategy (NHSS)², the disaster spectrum cycle,³ and Healthcare Coalition (HCC) development. The BP2 HPP Program Measures highlight the importance of HCCs in creating community resiliency. The key components of community resiliency are infrastructure, connectedness, health, organizational, psychological, and economic (see appendix A).

National healthcare preparedness has a limited scientific foundation. The BP2 HPP Program Measures strengthen this foundation--better describing national healthcare preparedness enhancing the collection of meaningful data. Awardee reported information can be verified for achievement, improvement, and progress over time. Additionally, the refined program measures will allow HPP to develop baseline data for standardized analysis to better compare and measure collective national preparedness over time.

In the BP1 implementation guidance, the performance measures (now called program measures) related to each of the eight capabilities outlined in the *National Guidance for Healthcare System Preparedness*. In BP2, HPP reduced the program measures to Medical Surge and Continuity of Healthcare Operations. While HPP has reduced the number of program measures, the refined indicators under the remaining two measures incorporate the critical components of the Capabilities. In BP2, HPP is also introducing HCC Developmental Assessment factors (HCCDA) that determines a HCC's ability to perform essential functions. The HCCDA encourages and fosters communication between the HCC and Awardee and gauges the level of HCC development over time and across the disaster spectrum.

This manual explains the program measures and indicators for Awardees and HCCs. HPP acknowledges the variation among HCCs across and among Awardee jurisdictions and considers its program measure process to be aspirational. HPP is committed to helping its Awardees enhance HCC development and performance. These updated program measures allow ASPR to better prepare a nation for potential disasters.

Healthcare Coalitions (HCC)

Definition of Healthcare Coalition. An HCC is a formal collaboration among healthcare organizations and public and private sector partners that is organized to prepare for and respond to an emergency, mass casualty or catastrophic health event. HCCs can include hospitals, public health departments, emergency

¹ On January 19, 2012 the Assistant Secretary for Preparedness and Response (ASPR) released the Hospital Preparedness Program (HPP) Capabilities document, "The Healthcare Preparedness Capabilities: National Guidance for Healthcare System Preparedness".

² The purpose of the NHSS is to refocus the patchwork of disparate public health and medical preparedness, response, and recovery strategies in order to ensure that the nation is prepared for, protected from, and resilient in the face of health threats or incidents with potentially negative health consequences.

³ The disaster life cycle describes the process through which emergency managers prepare for emergencies and disasters, respond to them when they occur, help people and institutions recover from them, mitigate their effects, reduce the risk of loss, and prevent disasters from occurring.

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management and response agencies, and other types of healthcare organizations. The multi-agency coordinating body assists with mitigation, preparedness, response, and recovery activities related to disaster operations. Activities include planning, organizing, equipping, and training HCC members to respond to a disaster. To improve response, HCCs plan and conduct exercises and after-incident or after-exercise evaluations. During response, HCCs provide multi-agency coordination, advice on decisions made by incident management, information sharing, and resource coordination. An HCC can coordinate preparedness and response in ways that individual institutions cannot.

Characteristics of highly developed HCCs. HCCs vary based on their tenure and community. ASPR created the HCCDA to identify the differences and commonalities across reported HCCs. In order to be considered highly developed and functional, a HCC must be able to demonstrate preparedness, response, recovery, and mitigation functionality. The HCCDA, in conjunction with the HPP Site-Visit Tool (discussed below) and program measures, allows HPP to assess and track the level of functionality within the HCCs over time.

Evaluation and Healthcare Preparedness

Since 2002, ASPR awarded funding through the HPP Cooperative Agreements to the 50 states, eight territories, and four metropolitan localities. The HPP Cooperative Agreement intends to enable eligible entities to improve surge capacity and enhance community and hospital preparedness for public health emergencies. HPP funding helps Awardees address gaps in healthcare preparedness and refine and maintain medical surge capacity and capability at the state and local levels through associated planning, personnel, equipment, training, exercises, and HCC development.

Evaluating Awardees' performance provides critical information needed to assess and report on how well this federal investment has improved the nation's ability to prepare for and respond to medical emergencies. The primary emphasis of this initiative was program improvement and accountability.

The mid-year BP1 data collection effort provided HPP with an opportunity to better understand how to evaluate Awardee performance. It was recognized that the previous reporting effort was a considerable burden on Awardees. To minimize this burden, HPP launched a thorough investigation of the performance measures with the goal of targeted reduction and further refinement. The investigation was a three-step process:

1. **An environmental scan/document review:** A research team reviewed and gathered background research about preparedness, best practices, and performance measures that impact program measures for healthcare disaster preparedness. This list includes, but is not limited to: policy documents from the Department of Homeland Security, the Healthcare Preparedness Capabilities document, National Incident Management System (NIMS) references, relevant scientific and healthcare journal articles, and online newspaper and web articles referencing key lessons learned from actual events.
2. **Quantitative analysis of the data collected in the mid-year BP1 template:** In ASPR's work, concepts such as healthcare system preparedness, emergency operations coordination, and medical surge do not have natural measurement units associated with them. Under these circumstances, a common approach is to operate with a number of proxy variables that share correlation with that (latent) variable, but also contain measurement error. A popular tool to analyze such problems is confirmatory factor analysis (CFA). This multivariate statistical technique assesses the researcher's theory that suggests the number of latent (or unobserved)

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factors and their relation to the observed variables, or indicators. The quantitative data analysis utilized CFA for determination of which data indicators to retain for end-of-year 2012 (BP1) or to retire for their respective performance measures. Evaluators use CFA when observed variables (i.e. indicators) are believed to jointly represent an unobserved latent construct (i.e. performance measure). Utilizing maximum likelihood estimation procedures, evaluators derived estimates (in the form of factor loading scores) to partially guide decision-making processes for exclusion/inclusion of indicators.

- 3. Qualitative analysis through focus groups and key informant interviews with HCC representatives, HPP Awardees, HHS personnel, and other subject matter experts:** The mid-year template data was limited and did not sufficiently explain why an Awardee had not completed or fulfilled an indicator and lacked a substantive explanation in the supplemental information. To provide a more complete picture, evaluators conducted focus groups and key informant interviews to determine:
- How well provisional performance measures were able to convey practical preparedness for a particular capability,
 - The extent to which data availability, data collection, data reporting, and information burden impacted performance measure reporting, and
 - The extent to which training and technical assistance strategies helped Awardees under the intent of provisional performance measures.

Working in close collaboration with internal and external subject matter experts (SMEs), HPP Awardees, national partner organizations and our primary federal partner, the Centers for Disease Control and Prevention (CDC) Division of State and Local Readiness (DSLRL) in CDC's Office of Public Health Preparedness and Response (OPHPR), and other partners, ASPR developed a set of new program measures (a new term which replaces performance measures) for BP2 that:

- Supports **program improvement and inform policy** by translating analytical findings into information that decision-makers need to make course corrections as needed. Through evidence-based decision making, levers for program improvement may be identified.
- Develops **objective and quantifiable program targets and incremental milestones** that correspond with the new HPP and PHEP Program Measures, against which HHS can gauge progress toward the medical and public health preparedness goals of the Cooperative Agreements and direct technical assistance, as needed.
- Ensures that **program measures and targets remain consistent** across the remaining four-year project period and that any future measures be comparable to determine whether Awardees are making progress toward meeting short- and long-term medical and public health preparedness goals of the Cooperative Agreements.
- Increases **transparency** by disseminating the program progress and achievements through reports, publications, and presentations. The National Health Security Strategy (NHSS) emphasizes that "more attention should be given to systematic quality improvement methods to extract and disseminate 'lessons learned'."
- Enhances **situational awareness** by assessing healthcare service delivery system capacity and operational capabilities throughout the nation.

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- Helps guide **technical assistance** and other training to support Awardee needs by identifying gaps and providing the appropriate support to mitigate challenges.
- Promotes **sound stewardship** of federal tax dollars by using the data to assess impact of public funding and ensure that the American taxpayer sees a return on his or her investment. The development of program measures and continuous quality improvement enables HSEB to critically evaluate the ability of the HPP program to perform its intended goals.

BP2 HPP Program Measure Development Process

HPP developed the BP2 Program Measures using a three-step process of reduction, refinement, and recalibration (see Figure 1) of BP1 performance/program measures⁴:

1. **Reduce:** During BP1, the mid-year data collection consisted of eight provisional performance measures and 83 associated indicators. HPP analyzed the performance measures and indicators (both quantitatively and qualitatively) to clarify ambiguous and omit non-informative indicators. As a result, HPP retired over 60 indicators. The reduction process between mid-year and end-of-year BP1 is summarized in Table 3.

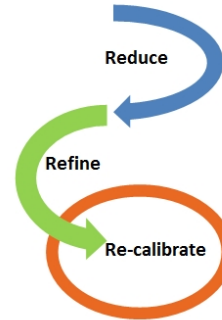


Figure 1. The three-tiered approach used to develop the BP2 Program Measures

Table 3. Reduction of BP1 Provisional Performance Measures

Performance Measure	Mid-year BP1	End-of-year BP1
Emergency Operations Coordination (EOC)	11	1
Fatality Management	12	2
Volunteer Management	12	1
Responder Safety and Health	9	2
Information Sharing (IS)	7	4
Medical Surge	6	2
Preparedness	11	4
Recovery	15	5
Total # of Indicators	83	21

2. **Refine:** During BP2, the eight performance measures underwent realignment with the NHSS goals. This consisted of incorporating the disaster cycle within each performance measure, as well as refining the language of the remaining indicators that remained after the reduction phase. As a result, a new concept of performance measures emerged, which re-categorized eight BP1 performance measures into two BP2 HPP Program Measures: Medical Surge and Continuity of Healthcare Operations (see Figure 2). The definitions for the two BP2 HPP Program Measures are contained in Table 4. The performance/program measure refinement process resulted in the development of an assessment tool that could evaluate HCC development and maturation over time.

⁴ Prior to 2013, performance measure was the term used. Starting in 2013 the correct term is program measure.

BP2 HPP PROGRAM MEASURE DEVELOPMENT PROCESS

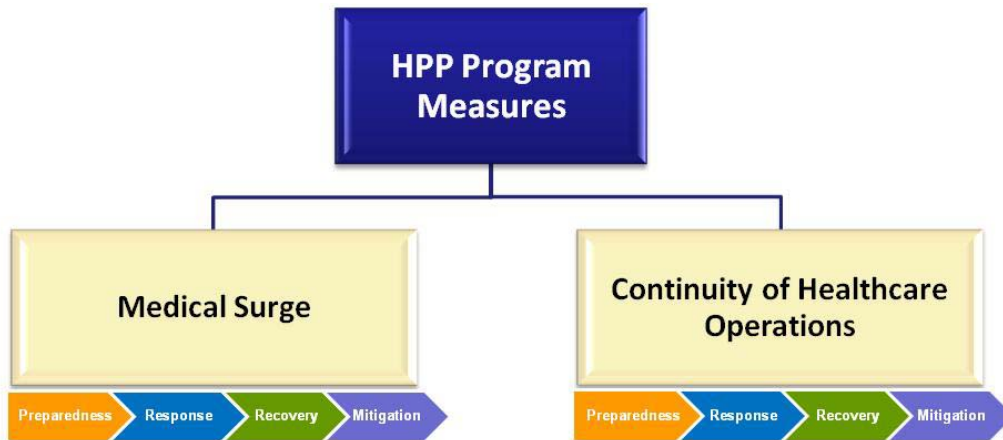


Figure 2. BP2 HPP Program Measures.

Table 4. BP2 HPP Program Measures

HPP Program Measures	
Medical Surge	The goal of Medical Surge is to increase surge capacities and capabilities of Awardees, HCCs, and their members for preparedness, response, recovery, and mitigation activities.
Continuity of Healthcare Operations	The goal of Continuity of Healthcare Operations is to maintain vital public health and medical services to allow for optimal federal, state, local, and tribal operations in the event of a public health emergency.

- 3. Recalibrate:** From BP3 through BP5 (EOY 14-16), ASPR will utilize the existing evidence base, refined program measures, and baseline HCC data to finalize stable performance targets and incremental milestones. During this time, ASPR will consider quality improvement techniques, return on investment, priority setting, pilot recalibrated program measures and root cause analysis when developing milestones and considering future measurement options. The recalibrated targets and milestones will allow ASPR the ability to monitor Awardee progress and will inform ASPR’s improvement, technical assistance, and policies.

Following the reduction phase, ASPR refined its indicators. These new indicators form the basis for the BP2 reporting template (see appendix D). The refined indicators include new, succinct language that stabilizes reporting and reduces Awardee burden. The refinement process better integrates the HPP program and evaluation components of program measurement and integrates and aligns measures with the National Health Security Strategy. ASPR integrated the disaster cycle within each program measure and developed the HCC Developmental Assessment tool to evaluate HCC development over time.

BP2 HPP PROGRAM MEASURE DEVELOPMENT PROCESS

Alignment between BP2 HPP Program Measures and the Healthcare Preparedness Capabilities

The Healthcare Preparedness Capabilities (the Capabilities) guide outlines preparedness efforts at the Awardee and HCC level. Their successful implementation assists local healthcare system resource needs during response and recovery so that:

1. Community resilience is enhanced through the continued delivery of essential healthcare services to the community post-disaster (Continuity of Healthcare Operations Program Measure)
2. There is a strong emergency response system to provide for effective management for surges of patients, deaths, and concerned citizens (Medical Surge Program Measure)

The two BP2 HPP Program Measures outlined in this document demonstrate progress towards the objectives described above. The 14 BP2 indicators have been further divided into mission areas that closely match the core capabilities of the National Preparedness System and Presidential Policy Directive 8: National Preparedness (PPD-8). The mission areas match the phases of the disaster cycle, which are preparedness; response, recovery, and mitigation (see Figure 3). Each program measure contains indicators that assist a jurisdiction in achieving the two objectives. Throughout this implementation guide, technical assistance will be provided based on the Capabilities. The technical assistance explains how an indicator meets the overarching objective. Awardees can use the manual and the Capabilities document as a roadmap to develop successful healthcare preparedness programs. Table 5 summarizes the BP2 HPP Program Measure realignment and refinement process.



Figure 3. The Disaster Cycle

Table 5. Alignment of Healthcare Preparedness Capabilities to BP2 Program Measures

Capability	BP2 Program Measure
Health Care System Preparedness	Continuity of Healthcare Operations/Medical Surge
Health Care System Recovery	Continuity of Healthcare Operations/Medical Surge
Emergency Operations Coordination	Continuity of Healthcare Operations
Fatality Management	Medical Surge
Information Sharing (IS)	Joint IS & Continuity of Healthcare Operations
Medical Surge	Medical Surge
Responder Safety and Health	Continuity of Healthcare Operations
Volunteer Management (VM)	Joint VM

BP2 HPP PROGRAM MEASURE DEVELOPMENT PROCESS

The primary objectives of the Capabilities correlate with the goals of ASPR’s National Health Security Strategy⁵ discussed in the following section. Figure 4 depicts the alignment between the *Healthcare Preparedness Capabilities*, BP2 HPP Program Measures, and HPP-PHEP Joint Measures.

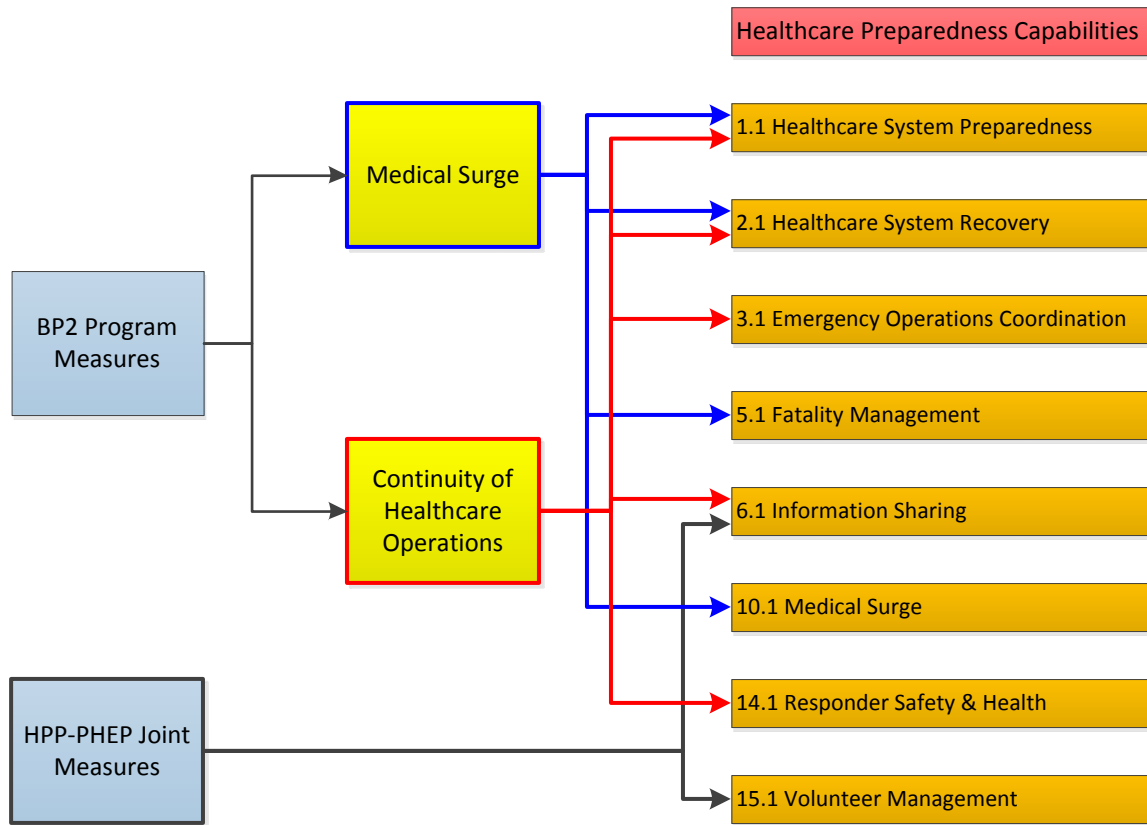


Figure 4. BP2 HPP Program Measure Alignment with the *Healthcare Preparedness Capabilities*. The mapping of the BP2 HPP Program Measures (Medical Surge lines in blue, Continuity of Healthcare Operations lines in red) and HPP-PHEP Joint Measures (black lines) to the Healthcare Preparedness Capabilities illustrates that all capabilities are accounted for in BP2.

Alignment with the National Health Security Strategy

The *National Health Security Strategy* (NHSS) guides the nation’s efforts to minimize the risks associated with a wide range of potential large-scale incidents that threaten the health of its citizens.⁶ In this context, national health security occurs when the nation and its people are prepared for, protected from, respond effectively to, and are able to recover from incidents with potentially negative health consequences.⁷ The two main goals of the NHSS are:

- Build community resilience
- Strengthen and sustain health and emergency response systems

⁵ <http://www.phe.gov/Preparedness/planning/authority/nhss/strategy/Pages/default.aspx>

⁶ National Health Security Strategy, pg 2 at: <http://www.phe.gov/Preparedness/planning/authority/nhss/strategy/Documents/nhss-final.pdf>.

⁷ Id.

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The program measures developed for BP2 align with the NHSS and provide a larger picture of national health security. ASPR designed each measure and indicator to accurately assess a HCC’s progress toward disaster preparedness improvement and alignment with the strategic objectives outlined in the NHSS.

ASPR’s approach integrates the NHSS, Healthcare Preparedness Capabilities, and the disaster cycle into a uniform approach to preparedness (Figure 5).

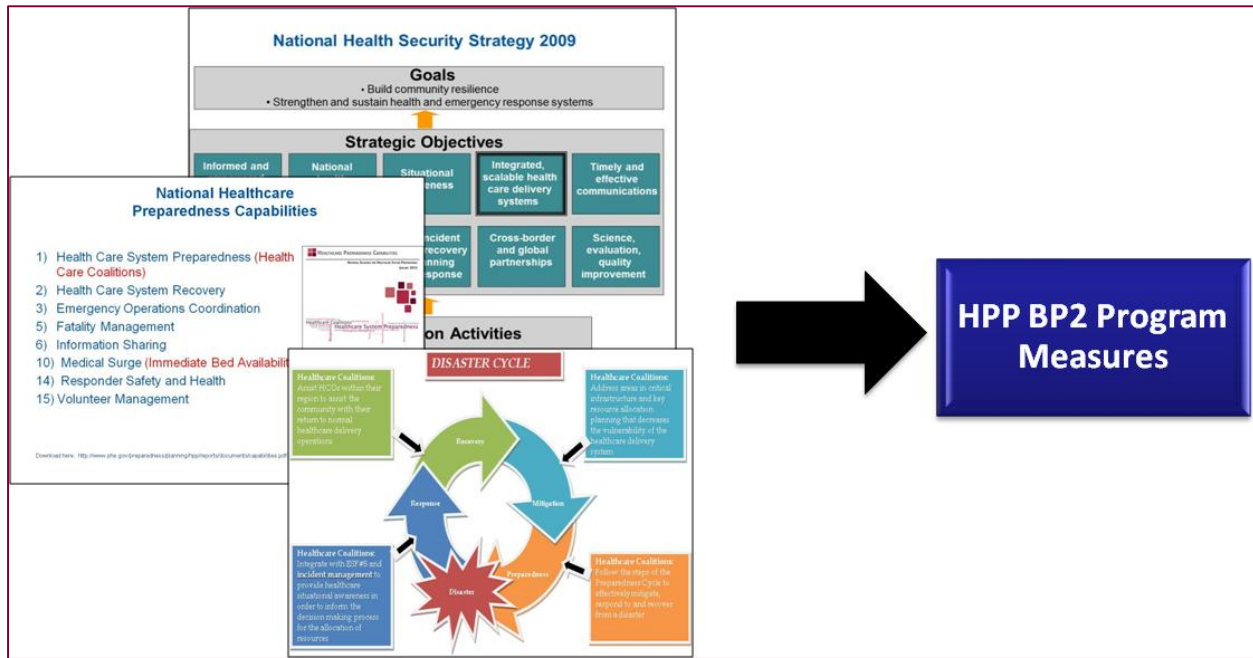


Figure 5. ASPR’s Approach to BP2 HPP Program Measures

Reporting Requirements

For BP2, HPP developed new program measures and evaluation tools. ASPR, in conjunction with CDC, is also developing a new web-based IT system to facilitate data entry by Awardees and increase data sharing between ASPR and CDC. HPP requires its 62 Awardees to report on program measures and related evaluation and assessment data annually in the end-of-year report. End-of-year reporting shall occur no later than September 30 following the close of the budget period. In addition, ASPR may ask Awardees to report data at mid-year under certain circumstances (e.g., in the presence of a new data request, or provisional recalibrated measures). Awardees are responsible for collecting HCC-level information from their HCC’s to report to ASPR.

HPP-PHEP Joint Measures

In line with HPP and PHEP grant alignment priorities, HPP and PHEP worked collaboratively to develop and refine the HPP-PHEP Joint Measures for information sharing and volunteer management. To reduce Awardee burden HPP removed information sharing and volunteer management from the HPP-specific measures. The HPP-PHEP Joint Measures are located in appendix C of this document.

HPP Data Collection Process

Data collection forms the basis for three primary sources of information, including the HPP Program Measures and the HCC Developmental Assessment. This approach provides ASPR an opportunity to better validate reported data.

1. Program Measures

Medical Surge: Seven indicators (three measured at the Awardee level, four measured at the HCC level) that inform improved preparedness and response capabilities, and surge capacity of hospitals and other healthcare organizations with respect to mass casualties and public health emergencies.

Continuity of Healthcare Operations: Seven indicators (all measured at the HCC level) that inform the maintenance of vital public health and medical services for optimization of federal, state, local, and tribal healthcare operations in the event of a public health emergency.

- HCC Developmental Assessment:** 20 factors (all measured at the HCC level) designed to determine an HCC's ability to perform certain functions, encourage and foster communications between the HCC and Awardee and gauge the level of HCC development over time and across the disaster spectrum

Types of measures included in HPP Program Measures

The HPP BP2 Program Measures address aspects of healthcare preparedness planning, healthcare response, healthcare recovery, and healthcare mitigation. These terms are defined as follows:

- **Healthcare Preparedness Planning**— process measures that assess crucial preparedness activities such as: identifying and coordinating with partners, defining risk, developing plans, developing resources, testing plans, evaluating training and exercises, defining operational roles, defining triggers for action, and identifying barriers to public health participation in response and recovery.
- **Healthcare Response** — measures of performance while actually conducting, demonstrating or achieving a capability during an incident, planned event, or exercise.
- **Healthcare Recovery** — measures of performance that describes the extent to which healthcare delivery services are restored within communities following an incident.
- **Healthcare Mitigation** – measure of performance that indicates a method has been developed to address gaps based on findings from trainings, exercise, or real-life incidents. Mitigation activities reduce the impact or likelihood of a hazard.

Table 6 includes a brief description of the reporting criteria and exceptions or notes associated with each measure.

The Operational Unit of Measurement

The operational unit of measurement represents the entity (HCC or Awardee) responsible for providing data for a given indicator. The unit of measurement for each indicator is listed in the appropriate section. For example, the HCC respondent answers the HCC-level questions, and the Awardee respondent answers the Awardee-level questions. Ultimately, the HPP Awardee is responsible collecting answers

BP2 HPP PROGRAM MEASURE DEVELOPMENT PROCESS

from its HCCs. The HCCs will send their data to the Awardee and the Awardee will provide the data to ASPR. ASPR will calculate the final result for each program measure.

Table 6. Program Measure Objective Types

Type of Measure	Reporting Criteria	Exceptions or Notes
Healthcare Preparedness Planning	Report annually, irrespective of the allocation of HPP funds towards the capability	In BP2, ASPR will collect information from all Awardees at the end-of-year.
Healthcare Response	Report annually if an incident, exercise, or planned event utilizes the capability, irrespective of HPP funds allocated towards the capability	None
Healthcare Recovery	Report annually, irrespective of the allocation of HPP funds towards the capability	Encompasses both short-term and long-term efforts for the rebuilding and revitalization of affected communities.
Healthcare Mitigation	Report annually irrespective of the allocation of HPP funds towards the capability	None

BP2 Data Analysis Methodology

HPP will analyze program measures and HCC Developmental Assessment (HCCDA) factors using a variety of analytic strategies and methods (see Figure 6). This multivariate approach will determine the strength of association between the program measures and HCCDA factors as data items of Medical Surge and Continuity of Healthcare Operations.

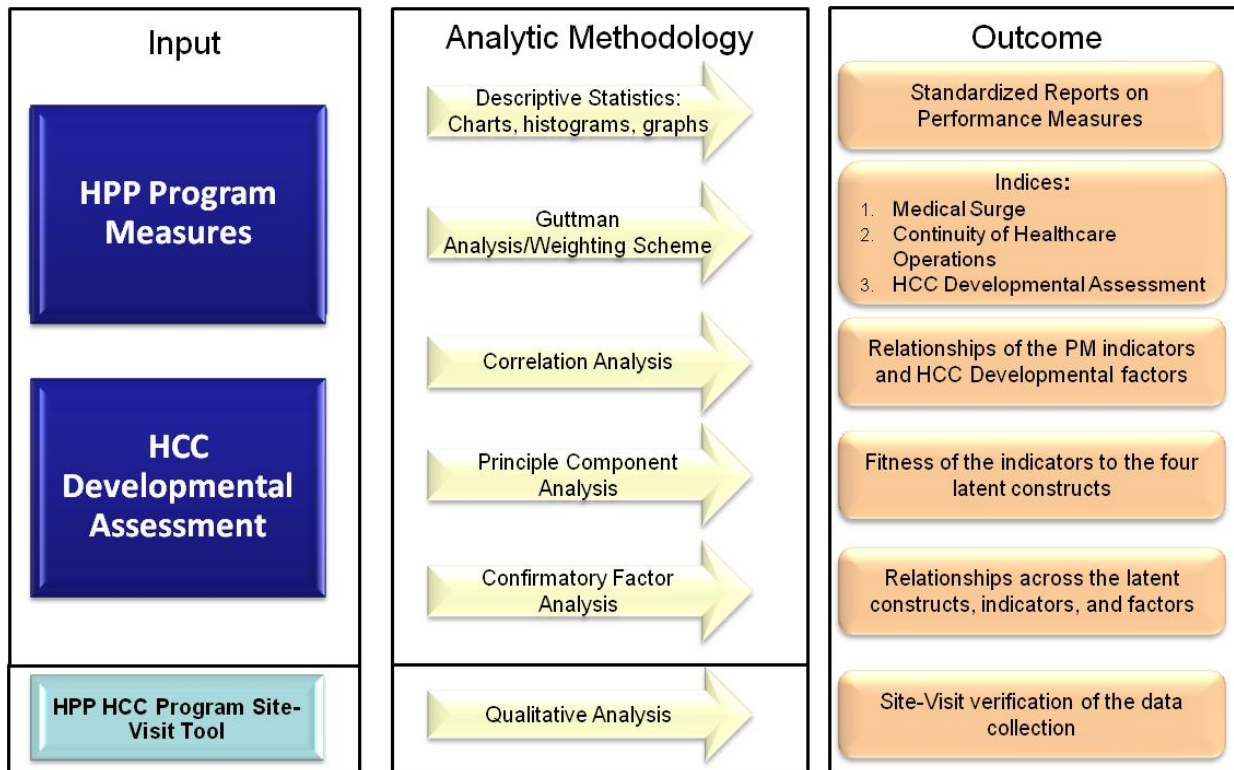


Figure 6. BP2 Data Analysis Framework

HPP will conduct path analysis to assess relationships among the HPP Program Measures and HCCDA factors. Path analysis will show how well specific measures can inform, explain, and predict other measures. Since the HPP Site-Visit Tool incorporates the HCCDA factors and the program measure indicators, HPP will use Cronbach’s alpha test to assess the ability of the measurement items to reflect whether Awardees have met the goals and objectives of the Hospital Preparedness Program. Insight into the reliability of these measures will improve the ability of site visits to evaluate Awardee preparedness.

The findings of the multivariate analysis, path analysis, Cronbach’s alpha test or other descriptive analysis will provide internal consistency for the program measures and HCCDA factors. Findings of the analysis will also explain how closely related the HCCDA factors and program measure indicators are as a group. The Cronbach alpha test will indicate to what degree the measurement of Awardee progress is consistent across HCCDA factors and program measure indicators. In theory, scores should be relatively similar, as the different indicators measure the same general construct. HPP will assume that the capacity of Awardees and their HCCs to respond to all hazards is influenced by its location and HCC maturity. Key statistical terms that will be used in the BP2 analysis are provided in Table 7 below.

Table 7. Statistical Key Terms

Term	Definition
Correlation	Any statistical relationship between two random variables or two sets of data
Confirmatory Factor Analysis	Explanatory procedure which analyzes a priori measurement models in which both the number of factors and their correspondence with indicators is explicitly specified
Cronbach's Alpha	A measure of internal consistency, that is, how closely related a set of items are as a group.
Latent Construct	Explanatory variables presumed to reflect a continuum that is not directly observable
Path Analysis	Structural model illustrating the directed dependencies among a set of variables
Principal Components Analysis	Exploratory procedure which reduces a set of potentially correlated variables into a set of linearly uncorrelated indices

Healthcare Preparedness Program Site-Visit Tool

In January 2012, ASPR published the *Healthcare Preparedness Capabilities* (Capabilities) in order to provide a capability-based approach to healthcare system preparedness. ASPR developed the capabilities document as a flexible but consistent approach to state and local healthcare system preparedness and response. Almost immediately, a gap arose between the interpretation of the Capabilities that affected Awardee implementation and HPP Field Project Officers (FPOs) monitoring and technical assistance. This gap hindered successful completion and tracking of the Capabilities implementation. Inaccurate tracking could lead to an overall misunderstanding of actual Awardee preparedness and possibly inadequate preparedness at the local level. The release of these revised program measures and guidance manual provides an important step forward to address this gap.

To that end, HPP is developing an HPP FPO Site-Visit Tool that will be used to systematically verify capability and program measure completion.

The HPP Site-Visit Tool will provide:

1. guidance to awardees for planning, training, exercise, and resource development
2. methods to monitor continuous Awardee progress from year to year
3. a means to validate the reported BP2 Program Measure indicators and HCCDA factors

The Site-Visit Tool will assist both HPP FPO and Awardee with needs identification, priority setting, and program progress.

The estimated date of Site-Visit Tool completion is September 2013.

Summary

The four main pillars that form the foundation for HPP BP2 reporting are:

1. HPP Program Measures – Medical Surge and Continuity of Healthcare Operations and their associated indicators.
2. HCC Developmental Assessment factors – the HCCDA evaluates the ability of an HCC to perform certain functions. The HCCDA encourages and fosters communications between the HCC and Awardee and gauges the level of HCC development over time and across the disaster spectrum.
3. HPP-PHEP Joint Measures – the Joint Measures evaluate information sharing and volunteer management capabilities of the Awardees.
4. HPP Site-Visit Tool – provides a systematic tool that can be used by Field Project Officers (FPOs) to review and verify the self-reported data (Program Measure indicators and HCCDA factors) the Awardees submit.

The HPP Program Measures and HCC Developmental Assessment will be discussed in detail in the next sections. The HPP-PHEP Joint Measures implementation guidance can be found in appendix C of this document. Finally, the HPP Site-Visit Tool will be used by Field Project Officers (FPOs) to review and verify the self-reported data the Awardees submit.

BP2 HPP PROGRAM MEASURES

HPP Program Measure: Medical Surge

Introduction

Medical and public health systems in the United States must prepare for major emergencies or disasters involving human casualties. Such events will severely challenge the ability of healthcare systems to adequately care for large numbers of patients (surge capacity) and/or victims with unusual or highly specialized medical needs (surge capability). These events may result in a number or type of patients that overwhelm the day-to-day, acute care medical capacity.

Medical surge is the capability to rapidly expand the existing healthcare system (e.g., hospitals, long-term care facilities, community health agencies, acute care facilities, alternate care facilities and public health departments) in order to provide triage and subsequent medical care during incidents that severely challenge or exceed the normal medical infrastructure of the community.⁸ This includes providing definitive care to individuals at the appropriate clinical level of care, within sufficient time to minimize morbidity and mortality and foster recovery through restored continuity of operations of the healthcare system. Depending on the scale of incident, a range of responses will be required from providers, health care organizations, HCCs, and public health agencies. The range of these responses will depend on the severity of the incident. According to the Institute of Medicine (IOM),⁹ the response "...can be envisioned as occurring along a continuum based on resource availability and demand for health care services. One end of this continuum is defined by conventional responses—those services that are provided in health care facilities on a daily basis and are expanded for disaster planning and response. At the other end of the continuum is crisis care, when the best possible care is provided to the population of patients as a whole because of the very limited resources available.

The goal and target for the Medical Surge Program Measure and the interpretation for the indicators are described below:

Goal: Increasing the surge capacities and capabilities of Awardees, HCCs, and their members for preparedness, response, recovery, and mitigation activities.

Program Measure Target: 100% achievement of each of the indicators by the end of the current project period (BP2 data will be used to establish baselines).

How is the Indicator Calculated?

Numerator: Number of HCCs that have met established indicators.

Denominator: Number of HCCs identified by Awardees.

Indicator Scaling: Awardees are asked to rate their agreement with each statement on a scale from 1 to 9.¹⁰

The BP2 Medical Surge Program Measure indicators address the key and essential aspects along that continuum of care. Table 8 is a road map that lists the:

- Indicator

⁸ Medical Surge Capacity and Capability: The Healthcare Coalition in Emergency Response and Recovery, May 2009. <http://www.phe.gov/Preparedness/planning/mscc/Documents/mscctier2jan2010.pdf>

⁹ Institute of Medicine, Crisis Standards of Care, A Systems Framework for Catastrophic Disaster Response, March 2012, Vol1, pp 36-37.

¹⁰ See Table 2. Scaling System for the HPP Program Measure

HPP PROGRAM MEASURE: MEDICAL SURGE

- Indicator objective
- Corresponding capability and function
- Unit of Measurement

Table 8. Capability Roadmap for Medical Surge

Indicator	Objective	Capability and Function	Unit of Measure
#1: The Awardee has posted its approved Crisis Standards of Care plan on the ASPR Communities of Interest SharePoint Site.	Preparedness	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> Capability 10: Medical Surge <ul style="list-style-type: none"> ▪ <i>Function 4: Develop Crisis Standards of Care guidance</i> 	Awardee
#2: The Awardee has completed mass fatality management plans that have been adopted by HCC members.	Preparedness	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> Capability 5: Fatality Management <ul style="list-style-type: none"> ▪ <i>(all functions)</i> Capability 10: Medical Surge <ul style="list-style-type: none"> ▪ <i>Function 3: Assist healthcare organizations with surge capacity and capability</i> 	Awardee
#3: The HCC has developed a strategic plan with participation from its membership.	Preparedness	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ <i>Function 1: Healthcare Coalition Development</i> 	HCC
#4: The HCC has demonstrated, through exercise or real incident, its ability to both deliver appropriate levels of care to all patients, as well as to provide no less than 20% immediate availability of staffed members' beds, within 4 hours of a disaster.	Response	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> Capability 10: Medical Surge <ul style="list-style-type: none"> ▪ <i>Function 3: Assist healthcare organizations with surge capacity and capability</i> 	HCC

HPP PROGRAM MEASURE: MEDICAL SURGE

Indicator	Objective	Capability and Function	Unit of Measure
#5: The HCC has demonstrated the ability to do the following during an incident, exercise, or event: 1) Monitor patient acuity and staffed bed availability in real-time, 2) Off-Load Patients, 3) On-Load Patients, 4) Track and document patient movement	Response	<p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ <i>Function 1: Healthcare organization multi-agency representation and coordination with emergency operations</i> ▪ <i>Function 2: Assess and notify stakeholders of healthcare delivery status</i> ▪ <i>Function 3: Support healthcare response efforts through coordination of resources</i> <p>Capability 6: Information Sharing</p> <ul style="list-style-type: none"> ▪ <i>All functions</i> <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations</i> ▪ <i>Function 3: Assist healthcare organizations with surge capacity and capability</i> 	HCC
#6: The Awardee’s Recovery Plan addresses how it will meet post-disaster behavioral and mental healthcare needs of communities (i.e., HCC member staff).	Recovery	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> <p>Capability 2: Healthcare System Recovery</p> <ul style="list-style-type: none"> ▪ <i>Function 1: Develop recovery processes for the healthcare delivery system</i> <p>Capability 5: Fatality Management</p> <ul style="list-style-type: none"> ▪ <i>Function 3: Mental/behavioral support at the healthcare organization level</i> <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ <i>Function 3: Assist healthcare organizations with surge capacity and capability</i> 	Awardee
#7: The HCC has a mechanism to obtain feedback to help resolve member conflicts that have the potential to affect the overall performance of the HCC.	Mitigation	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ <i>Function 1: Develop, refine or sustain Healthcare Coalitions</i> ▪ <i>Function 6: Improve healthcare response capabilities through coordinated exercise and evaluation</i> <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ <i>Function 4: Demobilize and evaluate healthcare operations</i> 	HCC

HPP PROGRAM MEASURE: MEDICAL SURGE

Indicator #1: The Awardee has posted its approved Crisis Standards of Care plan on the ASPR Communities of Interest SharePoint Site

Interpretation:

Devastating catastrophes underscore how quickly and completely health systems can be overwhelmed. Disasters, whether they occur suddenly and are unexpected or are caused by slow, sustained public health emergencies, can stress health care systems to the breaking point and disrupt delivery of vital medical services.

In its 2009 Letter Report, the Institute of Medicine (IOM) Committee on Guidance for Establishing Standards of Care for Use in Disaster Situations defined crisis standards of care (CSC) to be a “substantial change in the usual health care operations and the level of care it is possible to deliver....justified by specific circumstances and...formally declared by a state government in recognition that crisis operations will in effect for a sustained period.”¹¹ CSC planned and implemented in accordance with ethical values are necessary for the allocation of scarce resources. Public health disasters justify temporarily adjusting practice standards and/or shifting the balance of ethical concerns to emphasize the needs of the community rather than the needs of individuals. One of the major objectives of CSC planning is to increase the healthcare system’s ability to remain in conventional and contingency continuums of care through preparedness and anticipation of resource needs prior to serious shortages. A second objective of CSC planning is to return as quickly as possible from crisis back across the continuum to conventional care. Put simply, the development of CSC plans is the means to mount a response to an incident that far exceeds a community’s usual health and medical capacities and capabilities.

To better help our states, territories, tribes, healthcare coalitions, and local communities prepare for a catastrophic event, ASPR has developed a “Communities of Interest” (COI) website that serves as a forum (or intersection point) for sharing the most promising Crisis Standards of Care (CSC) and Allocation of Scarce Resources (ASR) guidelines. These CSC and ASR documents include those developed by subject matter experts, relevant published literature, and the existing planning documents written by states who are integrally involved in CSC and ASR planning. Although the COI site facilitates medical surge planning, it is not the entire solution for achieving Immediate Bed Availability strategies that will be coordinated at the HCC level. The COI site will be functional by summer 2013 and is found at PHE.GOV. The COI site includes:

- Institute of Medicine Crisis Standards of Care Research, (Phases I-2); Phase 3 research will be posted in fall of 2013.
- AHRQ/RAND Comparative Effectiveness Review on Allocation of Scarce Resources (2012)
- Relevant journal article and white paper citations
- Tools (e.g., for community engagement)
- Immediate Bed Availability (IBA) Briefings
- Existing “Communities of Interest” CSC and ASR plans from states, territories, tribes, healthcare coalitions, and localities, etc.

Expected Output (Resource): Crisis Standards of Care Plan

¹¹ IOM Letter Report, 2009, p3

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Expected Output Activity: In order to rate a positive result for this indicator, the Awardee must have developed and posted to the Awardee/state's Crisis Standards of Care Plan to the ASPR COI Site (located at PHE.GOV/COI).

Description of Output: Awardees may submit independent plans or annexes to their medical surge plans which address crisis standards of care, allocation of scarce resources, and ethical decision-making in a resource constrained medical environment, and public engagement processes.

This plan corresponds closely with the HCC Developmental Assessment factors 2 and 16.

Indicator #2: The Awardee has completed mass fatality management plans that have been adopted by HCC members.

Interpretation:

Fatality management is the ability to coordinate with organizations (e.g., law enforcement, healthcare, emergency management, medical examiner/coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental/behavioral health services for family members, responders, and survivors of an incident. Coordination also includes the proper and culturally sensitive storage of human remains during periods of increased deaths at healthcare organizations during an incident.

Expected Output (Resource): Fatality management plan

Expected Output Activity: In order to rate a positive result for this indicator, the Awardee has developed a fatality management plan, which has then been adopted or integrated with jurisdictional HCCs.

Description of Output: The fatality management plan must address the information and resource management processes that describe how HCCs and their members receive situational awareness related to the fatality situation and how to get fatality management resources.

Information/communication planning: There should be protocols that outline the process to provide the status of resources (situational awareness provided to HCOs) as well as the identification of needs (situational awareness received from HCOs).

Resource planning: There should be risk-based estimates of potential fatalities (risk assessment), an assessment of available resources to manage those casualties (resource assessment), a description or matrix of possible conflicting priorities (resource de-confliction), and the process to obtain the resources (resource request process including contact information). The Department of Homeland Security (DHS) Comprehensive Preparedness Guide provides a five-step process for conducting a threat and hazard identification and risk assessment.¹²

This plan would correspond closely with the HCC Developmental Assessment factors 2, 7, and 11-14.

¹² Department of Homeland Security, *Threat and Hazard Identification and Risk Assessment Guide Comprehensive Preparedness Guide (CPG) 201*, First Edition, April 2012, <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=5823>.

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Indicator #3: The HCC has developed a strategic plan with participation from its membership.

Interpretation:

Strategic planning serves as a vital component to any organization, and healthcare coalitions are no exception. A strategic plan will identify the strengths and weakness, while providing a road map as to where the HCC is going. Developing a strategic plan is an important part of an HCC's evolutionary process. As communities grow and the healthcare services need is more complex, HCCs must adapt to the changing culture and environment. Due to this change it is important to not operate from crisis to crisis in a reactionary mode rather than a proactive mode. If HCCs do not embrace the concept of strategic planning, they will continue to only plan for and address issues in their present state and not for the future.

A few key benefits of good planning and great execution:

1. **Better Decisions** - Information communicated through vision and strategy allows decision makers to make the best decisions
2. **Increased Energy** – Resulting from rallying behind a cause and elimination of conflict and confusion of priorities.
3. **Increased Capacity** – People are focused on what is important and less concerned about what is not.
4. **Better Solutions** – Uncovering the enormous intellectual and creative capacity of an organization that collectively works toward solutions rather than a relying on select few.

Expected Output (Resource): Healthcare Coalition Strategic Plan

Expected Output Activity: In order to rate a positive result for this indicator, the HCC and its HCOs must have developed a strategy to how they will maintain the administrative functions of the HCC and how they plan to prepare for (organize, plan, equip, train, exercise, and evaluate), respond to, and recover from a disaster.

Description of Output: The strategic plan would include these two components: Administrative plan and Preparedness Concept of Operations (CONOPS).

Administrative plan: This outlines the organization requirements including, participants, participation guidelines, funding, resource development processes, meetings, documentation of activity, and other administrative guidelines. This could resemble a charter, by-law, or other document that contain the key concepts of HCC development. This plan would correspond closely with the HCC Developmental Assessment factors 1-6, 8, and 9

Preparedness CONOPS: This document provides the strategy in which the HCC will engage to prepare. This includes how, who, and when the HCC will engage in planning, organizing, equipping, training, exercising, and evaluating. This outlines the resource development process to address gaps and should describe the funding model to develop resources or lack thereof. This plan would correspond closely with the HCC Developmental Assessment factors 2, 10, and 17-19.

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Indicator #4: *The HCC has demonstrated, through exercise or real incident, its ability to both deliver appropriate levels of care to all patients, as well as to provide no less than 20% immediate availability of staffed members' beds, within 4 hours of a disaster.*

Interpretation:

In 2013, the GAO noted concern about the ability of health care systems to ‘surge,’ that is, to have the staff and resources in place to adequately care for increased numbers of affected individuals or individuals with unusual or highly specialized needs. Today’s health system has little if any additional capacity, and utilizes a “just in time” approach to resources, resulting in daily emergency department crowding. In the context of those challenges, medical surge remains an important capability as described in the National Guidance for Healthcare System Preparedness published by the Hospital Preparedness Program, Office of the Assistant Secretary for Preparedness and Response in January 2012. Recognizing the daily delivery of care limitations and the critical need to develop “medical surge”, Immediate Bed Availability is a new, evidence informed approach to medical surge within our current health care system.

“Immediate Bed Availability” is a phrase used to describe major concepts of medical surge. Being able to provide no less than 20% availability of staffed members’ beds within four hours of a disaster will increase a HCC’s ability to create medical surge capacity for both “no notice” and slower evolving disasters. Medical surge, in concept and in practice, requires more than the immediate availability of beds alone – it requires staffed beds. For the purposes of this document, “Immediate Bed Availability” is a phrase inclusive of all the concepts and practical realities of rapidly creating medical surge capacity.

IBA is built on four pillars: continuous monitoring across the health system, off-loading of patients who are at low risk for untoward events through reverse triage, on-loading of patients from the disaster, and documenting and tracking patient movement. The goal of IBA is to quickly provide higher-level care to more serious patients during a disaster with no new space, personnel, or equipment.

Expected Output (Resource): Medical surge plan and documentation of implementation (After Action Report Improvement Plan (AAR/IP))

Expected Output Activity: In order to rate a positive result for this indicator the HCC must have worked with the appropriate partners to:

1. Develop and adopt the state, regional, or local medical surge plan
2. Implement this medical surge plan in an exercise or real incident.

Description of output: The output for this measure includes both plan development and plan implementation.

Plan development: The medical surge plan would include components of prehospital and hospital surge coordination and management, and would address continuous monitoring, off-loading, and on-loading.

Information/communication planning: There should be protocols that outline the process to provide the status of resources (situational awareness provided to HCOs) as well as the identification of needs (situational awareness received from HCOs).

Resource planning: There should be risk-based estimates of potential surge (risk assessment), an assessment of available resources to manage the surge (resource assessment), a description or matrix of possible conflicting priorities (resource de-confliction), and the process to get the resources (resource request process including contact information).

HPP PROGRAM MEASURE: MEDICAL SURGE

Plan implementation: Implementation of this plan would effectively test the HCCs ability to deliver appropriate levels of care to all patients, as well as to provide no less than 20% availability of acute hospital based staffed members’ beds, within four hours of a disaster. This process would adhere to the established HPP exercise and reporting requirements. This would result in an AAR/IP that would provide details of the completion of the objective.

This plan would correspond closely with the HCC Developmental Assessment factors 2, 7, and 11-15.

Indicator #5: The HCC has demonstrated the ability to do the following during an incident, exercise, or event:

- Monitor patient acuity and staffed bed availability in real time*
- Off-load patients*
- On-load patients*
- Track and document patient movement*

Interpretation:

Immediate Bed Availability (IBA) is the ability of a Healthcare Coalition (across the entire HCC, not specific to a single HCO) to provide no less than 20% bed availability of staffed members’ beds within four hours of a disaster. The previous indicator (Medical Surge indicator 4) described the overarching process for IBA. This indicator focuses on the components of IBA that must be efficiently conducted to achieve the overall goal. There are four basic components to successfully accomplish IBA:

1. Monitor patient acuity and staffed bed availability in real-time.
2. Off-load patients by executing rapid bed turnover, discharging/transferring lower acuity patients, and deferral of elective admissions and/or procedures.
3. On-load patients by redeploying existing resources to allow for higher-acuity admissions.
4. Track and document patient movement to ensure continuity of medical care rendered and ensure family members know the location of their loved ones at all times.

Expected Output (Resource): Medical surge plan and documentation of implementation (AAR/IP)

Expected Output Activity: In order to rate a positive result for this indicator the HCC must have worked with the appropriate partners to:

1. Develop and adopt the state, regional, or local medical surge plan
2. Implement this medical surge plan

Description of Output: The output for this measure includes both plan development and plan implementation.

Plan development: The medical surge plan would include components of prehospital and hospital surge coordination and management, and would address continuous monitoring, off-loading, and on-loading.

Information/communication planning: There should be protocols that outline the process to provide the status of resources (situational awareness provided to HCOs) as well as the identification of needs (situational awareness received from HCOs).

HPP PROGRAM MEASURE: MEDICAL SURGE

Resource planning: There should be risk-based estimates of potential surge (risk assessment), an assessment of available resources to manage the surge (resource assessment), a description or matrix of possible conflicting priorities (resource de-confliction), and the process to obtain the resources (resource request process including contact information).

Plan Implementation: Implementation of this plan would effectively test the HCCs' ability to deliver appropriate levels of care to all patients, as well as to provide no less than 20% availability of staffed members' beds, within four hours of a disaster. This process would adhere to the established HPP exercise and reporting requirements. This would result in an AAR/IP that would provide details of the completion of the objective.

This plan would correspond closely with the HCC Developmental Assessment factors 2, 7, and 11-15.

Indicator #6: The Awardees Recovery Plan addresses how it will meet post-disaster behavioral and mental healthcare needs of communities (i.e., HCC member staff).

Interpretation:

Careful attention to mental and behavioral health concerns should be an integral part of preparedness, response, and recovery for disasters and emergencies that have consequences for the public's health. Dealing effectively with these issues can increase the effectiveness and efficiency of the immediate response to a disaster, reduce the long-term health burden and associated costs, and improve public confidence in a state's ability to deal with future emergencies. Historically, the attention and priority mental and behavioral health issues deserve were not effectively integrated within a comprehensive response, and were sometimes not represented at all.

Mental and behavioral health, in the context of disasters and emergencies, include a wide range of interrelated factors—psychological (emotional, cognitive, behavioral), physiological, and social—that influence people's ability to cope with and recover from extreme situations. Examples of pertinent issues include fear and anxiety resulting from safety concerns, the death of loved ones, separation from family members and uncertainty as to their fate, and loss of homes and possessions; noncompliance with government directives (such as evacuation orders or infection control measures) resulting from loss of confidence in authorities; breakdown in community social cohesion intensified by a disaster or emergency and likely persisting for a long time afterward; and, increased incidence of diagnosable disorders such as post-traumatic stress disorder (PTSD), adjustment difficulties, anxiety, and clinical depression. Loss of jobs and of control over one's life, coupled with persistent uncertainty about the prospects for recovery and rebuilding, can set the stage for a cascade of problems, including anger, shame, depression, substance abuse, domestic violence and even suicide. Other damaging long-term outcomes can include exacerbation of physical illness, difficulties in personal and family relationships, absenteeism from work and school, and other consequences harmful to individual quality of life and the functioning of society in general.

Integration of disaster mental and behavioral health efforts will help to:

- Promote compliance with public health directives
- Enhance individual and community resilience
- Augment prevention through education

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- Facilitate rapid identification of people in need of immediate care
- Improve accuracy in diagnosis and treatment by health care providers
- Reduce the development of longer-term mental health problems
- Facilitate adjustment to loss and coping with adverse circumstances
- Further cost-effective and seamless care
- Identify potential barriers to treatment adherence and compliance
- Encourage mobilization and allocation of resources for at-risk and special needs groups
- Support culturally informed and culturally sensitive policies and services
- Foster confidence and trust in government
- Empower individuals to care for themselves more effectively
- Foster cohesion and collective efficacy in the affected community and a rapid return to normal functioning.

Expected Output (Resource): Recovery Plan (with a behavioral and mental healthcare annex)

Expected Output Activity: In order to rate a positive result for this indicator, the Awardee and HCCs must have developed a healthcare recovery plan.

Description of Output: The recovery plan or associated response plan must address short- and long-term behavioral and mental healthcare needs of the affected community. This will include resource planning to address this need.

Resource planning: There should be risk-based estimates of potential mental and behavior health needs (risk assessment), an assessment of available resources to manage those needs (resource assessment), a description or matrix of possible conflicting priorities (resource de-confliction), and the process to get the resources (resource request process including contact information).

This plan would correspond closely with the HCC Developmental Assessment factors 2, 7, 11-14, 16, and 17.

Indicator #7: The HCC has a mechanism to obtain feedback to help resolve member conflicts that have the potential to affect the overall performance of the HCC.

Interpretation:

Increasingly, the field of national health security relies on HCCs as the structure that advances healthcare preparedness, aligns organizations to respond more effectively in disasters, and supports healthcare system recovery. How HCCs function and manage the relationship among organizational members contributes to the HCC's ability to meet critical preparedness outcomes. The ability to manage and resolve conflicts is central to ensuring the success of an HCC.

Managing conflict is imperative for HCCs focusing on emergency preparedness, response, and recovery due to the already high level of stress surrounding disasters or public health incidents. By managing

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conflict within the network before it spirals out of control, healthcare coalitions can ensure that the needs of all members are met to satisfy HCC interests and create a win-win situation.

HCCs, by nature, are an array of complex relationships that can cause strain or tension on the whole network if conflict is not handled between members. Multiple members come from various organizations with differing missions, organizational structures, methods of operation, and degrees of power, as well as differing stakeholders and funders. Networks deal with a multitude of issues, and the variety of governance structures available to HCCs can cause conflict, especially if there is a lack of transparency and accountability among HCC members. These areas of conflict among network members can destabilize the network if not properly handled.

One way to handle conflict in healthcare coalitions is to use a collaborative problem-solving approach or interest-based negotiation. This type of problem-solving negotiation takes into consideration the needs of all network members and seeks an integrative solution.

Expected Output (Resource): Healthcare Coalition Administrative Plan

Expected Output Activity: The HCC shall develop a process to solicit feedback from its members and resolve any identified conflicts that may impact the overall function or administration of the HCC.

Description of Output: The administrative plan is one of two components of the strategic plan and includes: Administrative plan and Preparedness CONOPS.

Administrative plan: This outlines the organization requirements including, participants, participation guidelines, funding, resource development processes, meetings, documentation of activity and other administrative guidelines. This could resemble a charter, by-law, or other document that contain the key concepts of HCC development.

This plan would correspond closely with the HCC Developmental Assessment factors 1-6, 8, and 9.

Preparedness CONOPS: This document provides the strategy in which the HCC will engage to prepare. This includes how, who, and when the HCC will engage in planning, organizing and equipping, training, exercise and evaluation. This outlines the resource development process to address gaps and should describe the funding model to develop resources or lack thereof. This plan would correspond closely with the HCC Developmental Assessment factors 2, 10, and 17-19.

HPP Program Measure: Continuity of Healthcare Operations

Introduction

Continuity of Healthcare Operations planning is based on improving a healthcare entity’s preparedness, response, recovery, and mitigation capabilities from natural disasters and technological emergencies of all kinds. The healthcare entity would ideally identify and mitigate risks, engage in preparedness and planning activities, develop effective response strategies and techniques, and engage in short and long-term recovery planning to facilitate an effective and efficient return to normal healthcare delivery operations. The focus is to maintain operations and, if directly affected, expedite the return to normalcy or a new standard of normalcy for the provision of healthcare delivery to the community. The increasing interconnectedness of health delivery with all facets of the community makes business continuity planning a cornerstone of community resilience. Business preparedness reduces the disruption to employees, productivity, and profitability—and enables an organization to play a stabilizing role in the community. Continuity of Healthcare Operations includes (but is not limited to):

- sustaining essential financial payment and reimbursement services,
- withstanding disruptions to power outages, information technology (IT) systems, or other critical infrastructure,
- planning for cyber security attacks,
- testing occupational safety and health processes to preserve and support the healthcare system workforce,
- recovering and preserving patient records and medical supplies, and
- continuing to provide routine healthcare services that are performed on a daily basis.

Successful healthcare service delivery during and after a disaster is contingent on the resilience that is built through an integrated set of plans, procedures, and resources that may be used to maintain and recover essential functions impacted from an event causing any interruption of healthcare delivery.

Working with partners such as public health, business, education, and emergency management can help to plan and advocate for the rebuilding of public health, medical, and mental or behavioral health systems to at least a level of functioning comparable to pre-incident levels and improved levels where possible. The focus should be on an effective and efficient return to normalcy or a new standard of improved normalcy for the provision of healthcare delivery to the community.

The goal and target for the Continuity of Healthcare Operations Program Measure and the interpretation for the indicators are described below:

Goal: Maintaining vital public health and medical services to allow for optimal federal, state, local, and tribal operations in the event of a public health emergency.

Program Measure Target: 100% achievement of each of the indicators by the end of the project period (BP2 data will be used to establish baselines).

How is the Indicator Calculated?

Numerator: Number of HCCs that have met established indicators

Denominator: Number of HCCs identified by Awardees

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Indicator Scaling: Awardees are asked to rate their agreement with each statement on a scale from 1 to 9.¹³

Table 9 is a road map that lists the:

- Indicator
- Indicator objective
- Corresponding capability and function
- Unit of Measurement

Table 9. Capability Roadmap for Continuity of Healthcare Operations

Indicator	Objective	Capability/Function	Unit of Measure
#1: The HCC has access to a risk-based HVA which prioritizes the risks to its members.	Preparedness	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> 	HCC
#2: The HCC has conducted a gap analysis to identify resource shortfalls during an event and is implementing plans to close those resource gaps.	Preparedness	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> ▪ <i>Function 4: Determine gaps in the healthcare preparedness and identify resources for mitigation of these gaps</i> Capability 3: Emergency Operations Coordination <ul style="list-style-type: none"> ▪ <i>Function 3: Support healthcare response efforts through coordination of resources</i> 	HCC
#3: The HCC has a process to enhance its member’s situational awareness to support activation of immediate bed availability through continuous monitoring.	Response	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> Capability 3: Emergency Operations Coordination <ul style="list-style-type: none"> ▪ <i>Function 2: Assess and notify stakeholders of healthcare delivery status</i> Capability 6: Information Sharing <ul style="list-style-type: none"> ▪ <i>Function 1: Provide healthcare situational awareness that contributes to the incident common operating picture</i> Capability 10: Medical Surge <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations</i> ▪ <i>Function 3: Assist healthcare organizations with surge capacity and capability</i> 	HCC

¹³ See Table 2. Scaling System for the HPP Program Measure

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Indicator	Objective	Capability/Function	Unit of Measure
#4: The HCC has demonstrated the capability of a redundant means of communication for achieving and sustaining situational awareness.	Response	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> Function 2: Assess and notify stakeholders of healthcare delivery status <p>Capability 6: Information Sharing</p> <ul style="list-style-type: none"> Function 1: Provide healthcare situational awareness that contributes to the incident common operating picture Function 2: Develop, refine, and sustain redundant, interoperable communication systems 	HCC
#5: The HCC has tested its ability to address its members' healthcare workforce safety needs through training and resources.	Response	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations Function 3: Assist healthcare organizations with surge capacity and capability <p>Capability 14: Responder Safety and Health¹⁴</p> <ul style="list-style-type: none"> Function 1: Assist healthcare organizations with additional pharmaceutical protection for healthcare workers Function 2: Provide assistance to healthcare organizations with access to additional Personal Protective Equipment (PPE) for healthcare workers during response 	HCC

¹⁴ At times this may include addressing behavioral and mental health issues of the HCC member's workforce.

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Indicator	Objective	Capability/Function	Unit of Measure
<p>#6: The HCC has prioritized and integrated essential healthcare recovery needs in its Emergency Operation Plan.</p>	<p>Recovery</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> ▪ <i>Function 3: Identify and prioritize essential healthcare assets and services</i> <p>Capability 2: Healthcare System Recovery</p> <ul style="list-style-type: none"> ▪ <i>Function 1: Develop recovery processes for the healthcare delivery system</i> ▪ <i>Function 2: Assist healthcare organizations to implement Continuity of Operations (COOP)</i> <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ <i>Function 2: Assess and notify stakeholders of healthcare delivery status</i> ▪ <i>Function 3: Support healthcare response efforts through coordination of resources</i> <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ <i>Function 5: Provide assistance to healthcare organizations regarding evacuation and shelter in place operations</i> 	<p>HCC</p>
<p>#7: The HCC has achieved its exercise objectives during tests of state or regional healthcare disaster plans.</p>	<p>Mitigation</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ <i>Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster</i> ▪ <i>Function 3: Identify and prioritize essential healthcare assets and services</i> ▪ <i>Function 4: Determine gaps in the healthcare preparedness and identify resources for mitigation of these gaps</i> ▪ <i>Function 6: Improve healthcare response capabilities through coordinated exercise and evaluation</i> <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ <i>Function 4: Demobilize and evaluate healthcare operations</i> 	<p>HCC</p>

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Indicator #1: The HCC has access to a risk-based HVA which prioritizes the risks to its members.

Interpretation:

Hospitals and other health-care organizations have always had to prepare for and respond to a wide array of routine emergency and catastrophic disaster events. Since the terrorist attacks of 9/11, healthcare organizations have been urged to substantially expand their response plans and overall readiness for disasters. HCCs should have access to and help their members and/or communities annually review their Hazard Vulnerability Analysis (HVA). The HVA provides a systematic approach to recognizing hazards that may affect demand for the healthcare services or its ability to provide those services. The risks associated with each hazard are analyzed to prioritize planning, response, recovery and mitigation activities. The HVA serves as a needs assessment for the emergency management program. This process should involve community partners and be communicated to community emergency response agencies. Common steps associated with a HVA include:

- Research into vulnerability through public safety, emergency management agencies, and other sources of information
- Organizational meeting of individuals to be involved in the deliberative process that would clarify the decision-making process as well as its importance within and outside the institution
- Individual completion of the assessment instrument in private to encourage differing opinions
- Group discussion and consensus
- Documentation of discussion, including minority opinions and overall results
- Documentation of action planning to address identified gaps
- Wide distribution of the results both outside and within the institution, including to the most senior decision makers.

The Department of Homeland Security (DHS) Comprehensive Preparedness Guide provides a five-step process for conducting a threat and hazard identification and risk assessment.¹⁵

Expected Output (Resource): Joint Risk Assessment

Expected Output Activity: In order to rate a positive result for this indicator, there must be a risk assessment coordinated by the jurisdiction, the healthcare community and public health or a jurisdictional risk assessment that has been adopted by HCCs.

Description of Output: The risk assessment is the primary responsibility of emergency management. This should be coordinated with multiple sectors of the community to include healthcare. If this is the case, this would be the risk assessment of record and would be reviewed and revised based on the planning cycle of the jurisdiction. Planning priorities would be developed from this document. In the case that jurisdictional risk assessments have not been coordinated with the healthcare sector, the HCCs should use the available risk assessment of the jurisdiction and that of the healthcare sector to develop planning priorities that address the risks to the healthcare community. This would be reviewed and revised based on the planning cycle of the jurisdiction. This may initially be an issue in developing HCCs but as the HCC

¹⁵ DHS, *Threat and Hazard Identification and Risk Assessment Guide Comprehensive Preparedness Guide (CPG) 201*, First Edition, April 2012, <http://www.fema.gov/library/viewRecord.do?fromSearch=fromsearch&id=5823>.

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becomes more functional and includes emergency management as an essential partner, this issue should be resolved.

This assessment would correspond closely with the HCC Developmental Assessment factors 2, 7, 10, and 13.

Indicator #2: The HCC has conducted a gap analysis to identify resource shortfalls during an event and is implementing plans to close those resource gaps.

Interpretation:

The gap analysis should specifically provide insight in to two main areas: resource management and resource identification prior to an emergency.

Resource management:

Emergency management and incident response activities necessitate carefully managed resources (personnel, teams, facilities, equipment, and/or supplies) to meet incident needs. Utilization of the standardized resource management concepts such as typing, inventorying, organizing and tracking facilitates the dispatch, deployment and recovery of resources before, during and after an incident.¹⁶

Resource management should be flexible and scalable so as to support any incident and be malleable. Efficient and effective deployment of resources requires that resource management concepts and principles be used in all phases of emergency management and incident response.¹⁷

The literature separates the resource management process into two components:

1. Resource management as an element of preparedness

The preparedness activities (resource typing, credentialing and inventorying) are conducted on a continual basis to help ensure that resources are ready to be mobilized when called to an incident.

2. Resource management during an incident

Resource management during an incident is a finite process that includes the following steps:

- Identify requirements
- Order and acquire
- Mobilize
- Track and report
- Recover/demobilize
- Reimburse
- Inventory

¹⁶ <http://www.fema.gov/resource-management#item1>

¹⁷ <http://www.fema.gov/resource-management#item1>

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Identify resources during planning

Once courses of action are selected, the planning team identifies resources needed to accomplish tasks without regard to resource availability. The object is to identify the resources needed to make the operation work. Once the planning team identifies all the requirements, they begin matching available resources to requirements. By tracking obligations and assignments, the planning team determines resource shortfalls and develops a list of needs that private suppliers or other jurisdictions might fill. The resource base should also include a list of facilities vital to emergency operations, and the list should indicate how individual hazards might affect the facilities. Whenever possible, planners should match resources with other geographical/regional needs so that multiple demands for the same or similar resources can be identified and conflicts resolved. This step provides planners an opportunity to identify resource shortfalls to pass to higher levels of government and to prepare pre-scripted resource requests, as appropriate. The emergency operations plan (EOP) should account for unsolvable resource shortfalls so they are not just “assumed away.”¹⁸

Expected Output (Resource): Gap analysis and resource development process.

Expected Output Activity: In order to rate a positive result for this indicator, there must be a gap analysis that outlines resource assessment and a resource development process to address the gaps.

Description of Output: Gap analysis includes an assessment of resources needed to achieve capability based operational priorities, goals and objectives for the planned courses of action. This includes the assessment of available resources compared to needed resources. These resources may be:

- Organizational (e.g., staffing, team development, HCC development)
- Planning
- Equipment and Supply
- Training
- Space

The gap analysis logically leads into the resource development process and therefore gaps should be prioritized based on operational need. This prioritization becomes essential when the resources are developed. Resource development processes should be documented in the HCC Administrative Plan or Preparedness CONOPS and include the following:

Resource development process

1. Decision makers outline the goals of the planning session (Awardee level or HCC members)
2. Planners set capability-based objectives based on risk
3. Planners develop courses of action to meet the capability-based objectives and to identify the resource gaps based on results and analysis of:
 - a. Resource assessments
 - b. Plan deficiencies (lack of plans or inadequate plans/gaps)
 - c. Corrective actions from After Action Reports (AARs)
 - d. Other methods to ascertain resource gaps
4. Planners prioritize each of the capability-based objectives with all resource needs listed

¹⁸ http://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf

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5. Planners prioritize each of the resource needs under the previously prioritized objectives

An acceptable HCC organizational structure should dictate who is prioritizing resources (it is essential to have the right people so resource development is not skewed towards special interests). Prioritization also relates to the overall incident and the need for identifying required resources for the response as a whole (i.e., generator issues that occurred during the Hurricane Sandy response in fall 2012).

Also, the basis for analysis to prioritize resource development must follow the preparedness cycle and planning processes (See # 2 and 3 above).

This assessment would correspond closely with the HCC Developmental Assessment factors 1, 2, and 6-10.

Indicator #3: The HCC has a process to enhance its members' situational awareness to support activation of immediate bed availability through continuous monitoring.

Interpretation:

HCCs should develop an operational framework to help guide their healthcare member community decisions about actions that may warrant transitions across the continuum of care, from conventional standards of care to contingency and crisis standards, and back again. The framework should include a set of potential indicators to help HCC members anticipate when it may need to make such transitions, and a set of triggers that identify points at which a decision to transition should be considered. The process should include input from SMEs from healthcare coalitions, local public health departments, healthcare delivery, long-term care, emergency medical services (EMS), home healthcare, etc. The indicators should be based on information that is likely to be readily available during an incident, because in most cases in-depth data collection and analysis and the development of new systems will not be feasible. The situational awareness process should NOT focus on specific 'lines in the sand' but rather on the indicators that denote when discussions should occur and the key factors and elements that need to be discussed during those conversations.

Expected Output (Resource): Medical surge plan (Surge Assessment and Information / Communication Protocols)

Expected Output Activity: In order to rate a positive result for this indicator, there must be a medical surge plan that contains protocols for surge assessment and includes notification, activation and continual monitoring, and reporting of surge status.

Description of Output: The surge assessment includes estimates of surge and a definition of the regional (or HCC) surge response system. Information / communication protocols address notification, activation, and monitoring/reporting of status.

Surge Assessment: The medical surge plan should be based on a surge assessment. This assessment estimates surge and includes a gap analysis based on the estimate.

- The estimate of surge is based on risk and the goal should be to provide 20% immediate bed availability within the regional (HCC) surge system.
- This assessment should define the regional (HCC) surge response system. The surge assessment is a focused resource assessment that identifies resources available (e.g., beds, staffing, alternate surge sites, mobile medical assets, rapid response teams, HCO surge equipment and supply) that will be needed to provide resourced beds to address the estimated surge. It is important to note when completing the surge assessment that available resources may follow a pattern outside of a

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HCC boundary. An example of this is a trauma referral pattern. The trauma bed, equipment, supplies, and staff may be in another HCC but the disaster referral pattern uses those beds. This is all part of defining the surge system and great care needs to be taken when defining the system.

Information/Communication Protocols: The information and communication protocols for the surge plan include several components starting from the pre-hospital setting and lasting throughout the surge event. These protocols should address notification, activation, and monitoring/reporting of status.

- **Notification:** Based on the surge assessment, the HCC should identify triggers for activation of their surge plan. This most likely begins with the first-responder or pre-hospital notification. The notification process should use the information reporting system and/or interoperable communications to provide a mass or focused alert of a pending surge event to HCC members. A very important component of the notification protocol should be public notification of resource availability. Based on historical data, the majority of patients will self-transport to the hospital and early communication to the populace can provide a reprieve by redirecting the brunt of the surge.
- **Activation:** The activation should begin resource mobilization of tactical strategies to address surge (e.g., pre-hospital staging of triage sites, collection points, mobile assets, and response teams; rapid decompression strategies; expansion of in-hospital surge capacity).
- **Surge Monitoring/Reporting:** Protocols should be in place to provide real-time on-scene surge numbers and real-time at-hospital resource availability. The protocol should include patient distribution protocols based on predefined assessment protocols and real-time situational awareness. The on-scene transport unit will need to make rapid decisions so protocols should include a process for the healthcare system to communicate resource availability to the transport unit. This will require protocols for HCO reporting to an information system or through interoperable communications (e.g., automated resource reporting).

Note: Information / Communication protocols may be a separate plan from the surge plan and encompass more than just surge notification, activation and monitoring/reporting. However, this plan should be specific enough to address medical surge and continuity of operations.

This assessment would correspond closely with the HCC Developmental Assessment factors 2, 4-7, 10, and 11-14.

Indicator #4: The HCC has demonstrated the capability of a redundant means of communication for achieving and sustaining situational awareness.

Interpretation:

Over the past decades, a rapid adoption of information technologies (IT) in nearly every facet of patient care in healthcare settings has taken place. The recent U.S. Government emphasis on the utilization of IT in healthcare will only serve to increase the dependency of care providers on IT. As IT becomes central to clinical and business practice, healthcare organizations must become increasingly vigilant about preparations for continuity of operations when normal IT and communication functions are disrupted. The HCC should help its members develop plans and create checklists to ensure the ability to recover and restore IT and communication delivery systems, voice and data networks, and clinical and business

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applications and data before unacceptable impact of their loss occurs. This includes the implementation of viable risk mitigation and recovery strategies, and the development of technology recovery plans and the creation of redundant communication systems.

Expected Output (Resource): Information / Communication Plan and plan implementation

Expected Output Activity: In order to rate a positive result for this indicator, there must be an information/communication plan and a successful implementation (exercise or real event) of the information/communication protocols in the plan. This would include implementation of operational plans' information/communication protocols.

Description of Output: This indicator requires both plan development and plan implementation of information and communication protocols.

Information/communication protocols: There should be protocols that outline the process to provide the status of resources (situational awareness provided to HCOs) as well as the status of need (situational awareness received from HCOs). This should include the method (i.e., information management system, interoperable communications) by which this would occur.

Plan Implementation: Implementation of this plan would effectively test the HCC's ability to deliver an acceptable percentage of local partners that submit all requested Essential Elements of Information (EEI) to health and medical lead within the requested timeframe per the HPP-PHEP joint measure 6.2. This process would adhere to the established HPP exercise and reporting requirements. This would result in an AAR/IP that would provide details of the completion of the objective.

This assessment would correspond closely with the HCC Developmental Assessment factors 2, 4-6, 10-12, and 18.

Indicator #5: The HCC has tested its ability to address its members' healthcare workforce safety needs through strategic placement of resources.

Interpretation:

The ability of healthcare organizations to protect the safety and health of healthcare workers from a variety of hazards during emergencies and disasters should be a planning priority in Continuity of Healthcare Operations. This includes processes to equip, train, and provide other resources needed to ensure healthcare workers at the highest risk for adverse exposure, illness, and injury are adequately protected from all hazards during response and recovery operations.

Expected Output (Resource): Resource Management Plan (Responder Safety & Health specific) and implementation of the plan

Expected Output Activity: In order to rate a positive result for this indicator, there must be a resource plan to request and receive resources that will provide pharmaceutical prophylaxis and/or treatment and personal protective to the healthcare workforce and a test of this plan.

Description of Output: This indicator requires both plan development and plan implementation of resource management protocols (Responder Safety & Health specific).

Resource management planning: There should be risk-based estimates of potential need (risk assessment), an assessment of available resources to address the need (resource assessment), a description or matrix of possible conflicting priorities (resource de-confliction), and the process to get the

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resources (resource request process including contact information). It is not required that a pharmaceutical cache or personal protective equipment (PPE) cache be developed during the resource development process. However, there is a requirement that resource management include an assessment of potential need and that there is a resource request process to fill the need. This can include established or newly developed caches resources. If this is the case, there needs to be a plan to access the cache, distribute the cache, protect the cache (environmental and physical security), provide oversight of the cache (e.g., state pharmacy oversight), and maintain the cache (e.g., renew, rotate, dispose). Resource management planning may also include addressing behavioral and mental health issues of the HCC member's workforce.

Plan Implementation: Implementation of this plan would effectively test the HCC's ability to request resource support for healthcare workers' health and safety needs. This would be included in the Emergency Operations Coordination component of the HPP exercise requirement regarding management of resources. This should include access and distribution of available cached resources or implementation of the local, state, or federal request process. This should be based on the resource management planning (risk assessment, resource assessment, and resource de-confliction). This process would adhere to the established HPP exercise and reporting requirements. This would result in an AAR/IP that would provide details of the completion of the objective.

The Strategic National Stockpile (SNS) or CHEMPACK deployment during the required joint Cities Readiness Initiative (CRI) exercise may be used to satisfy the indicator requirement if it addresses the safety of healthcare workers of the HCC as outlined in the qualifying exercise component of the HPP exercise requirements.

This plan would correspond closely with the HCC Developmental Assessment factors 2, 4, 7, 10, 11, 14, and 18.

Indicator #6: The HCC has prioritized and integrated essential healthcare recovery needs in its Emergency Operation Plan.

Interpretation:

According to the *National Infrastructure Protection Plan (NIPP)*, 2006, critical infrastructure includes those assets, systems, networks, and functions—physical or virtual—so vital to the United States that their incapacitation or destruction would have a debilitating impact on security, national economic security, public health or safety, or any combination of those matters. Key resources are publicly or privately controlled resources essential to minimal operation of the economy and the government.

In relation to the public health and medical sector, critical infrastructure and key resources would encompass the healthcare systems essential facilities, resources and services to continue healthcare delivery post event. During recovery planning, priorities must be set to determine the best method to assist essential healthcare assets to restore operations.

Expected Output (Resource): Recovery Plan

Expected Output Activity: In order to rate a positive result for this indicator, the Awardee and HCCs must have developed a healthcare recovery plan.

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Description of Output: The recovery plan or associated response plan must address short- and long-term support of essential and prioritized healthcare assets in the community. This will include focused resource planning to address this need.

Resource planning: There should be risk-based estimates of potential mental and behavior health needs (risk assessment), an assessment of available resources to manage those needs (resource assessment), a description or matrix of possible conflicting priorities (resource de-confliction), and the process to get the resources (resource request process including contact information).

These assessment and resource management processes should identify and address the following critical services and key resources (not inclusive):

- Critical medical services (e.g., trauma, radiology, critical care, surgery, pediatrics, behavioral and mental health, EMS, decontamination, isolation)
- Critical medical support services (e.g., patient transport services, pharmacy, blood banks, laboratory, medical gas suppliers)
- Critical facility management services (e.g., power, water, sanitation, generators, heating, ventilation, and air conditioning (HVAC), elevators)
- Critical healthcare information systems for information management/communications (e.g., failover and back up, remote site hosting)
- Key healthcare resources (e.g., staffing, equipment, beds, medical supply, pharmaceuticals)

This plan would correspond closely with the HCC Developmental Assessment factors 2, 4-7, 10-14, 16, and 17.

Indicator #7: The HCC has achieved its exercise objectives during tests of state or regional healthcare disaster plans.

Interpretation:

Exercises assess and validate the speed, effectiveness and efficiency of capabilities, and test the adequacy of policies, plans, procedures, and protocols in a risk-free environment. Exercises should be conducted in conjunction with jurisdictional/regional, state or federal-based exercises when possible. This improves integration efforts and may be more efficient. Exercises should be based in Homeland Security Exercise and Evaluation Program (HSEEP) and monitored/evaluated by the Awardee. Exercise decisions are determined based on planning priorities, risk assessments, gap analysis, and the continuous improvement process to address the required corrective actions identified in improvement plans.

Evaluation and improvement of mission and task performance is the final step of the Preparedness Cycle and crucial to informing risk assessments, managing vulnerabilities, allocating resources, and informing the other elements of the Cycle. Organizations develop improvement plans and track corrective actions to address the capabilities identified in plans and tested in exercises or real events. In addition to corrective actions, assessment initiatives provide the means to evaluate regional public health and medical operational preparedness for key critical areas. Using these findings to reassess and revise plans

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and protocols contributes to a continuous improvement process and ensures that updated strategies and plans can be used to inform new preparedness-building activities.¹⁹

Expected Output (Resource): Exercise program and submission of acceptable AARs

Expected Output Activity: In order to rate a positive result for this indicator, the Awardee and HCCs must have developed or be integrated into an exercise program that meet the expectations of the HPP and HPP-PHEP joint exercise requirements. Each qualifying exercise would result in an AAR/IP that would provide details of the completion of the objective.

Description of Output: Primarily, the major output for this indicator is submission of acceptable AARs/IPs from exercises that fulfill the exercise requirements. These include:

- Each identified healthcare coalition must participate in at least one qualifying exercise. This may be at the sub-state regional level or the statewide level.
- All HPP participating hospitals (and if possible other healthcare organizations) must participate in a qualifying exercise. This should be in conjunction with their respective healthcare coalitions' participation.
- There must be participation in a joint full-scale exercise (FSE). This requirement is for the healthcare coalition(s) within the associated Cities Readiness Initiative metropolitan statistical area.

To be considered a qualifying exercise:

- Exercises must be a sub-state regional or statewide functional or full-scale exercise.
- Exercises must test the capabilities of the participants from a single HCC or multiple HCCs and demonstrate capability-based objectives from:
 - Resource and information management as outlined in Capability 3: Emergency Operations Coordination and Capability 6: Information Sharing.
 - Components of Capability 10: Medical Surge to include at a minimum implementation of pre-hospital coordination and surge capacity and capability operations as outlined in these measures.
 - Each exercise must demonstrate, in some capacity, the continuation of essential healthcare services as outlined in Continuity of Healthcare Operations indicator #6.

Note: Demonstrations for Capability 2: Healthcare System Recovery, Capability 5: Fatality Management, Capability 14: Responder Safety and Health, and Capability 15: Volunteer Management may be achieved through allowable drills or functional or full-scale exercises that incorporate these capabilities into resource and information management tests. However, Awardees must demonstrate that the capability has been tested within their jurisdictions.

Please refer to the HPP-PHEP exercise requirements outlined in the Funding Opportunity Announcement (FOA) Appendix for full detail of the exercise requirements.

The effectiveness of the exercise is dependent upon HCC development and plan development and therefore corresponds closely with the HCC Developmental Assessment factors 1-19.

¹⁹ <http://www.dhs.gov/xlibrary/assets/rma-risk-management-fundamentals.pdf>

Healthcare Coalition Developmental Assessment Factors

HEALTHCARE COALITION DEVELOPMENTAL ASSESSMENT FACTORS

Healthcare Coalition Developmental Assessment (HCCDA) Factors

While the program measure indicators assess the Awardees’ ability to meet specific goals and objectives; the HCCDA factors assess how well the Awardees’ HCCs are functioning within the HPP. Functioning in this context refers to fully implementing activities and plans (i.e., training, exercising, resource development, progressing towards achieving program measures, and developing processes for onsite verification). The HCCDA will help inform the ability and willingness of the Awardees’ HCCs in meeting the goals and objectives of the HPP.

HCC development is a relatively new concept, and the formulation of each HCC may progress at a different rate. The HCCDA was designed to:

- Assess Awardees’ processes of developing and forming a HCC.
- Assess how Awardees’ HCCs are functioning to meet the goals and objectives of the HPP (i.e., program measures/indicators, oversight and monitoring).
- Assess the reliability of the Awardees’ work plans and program indicators to monitor progress over time.

The goal and target for the HCCDA and the interpretation for the factors are described below:

Goals: Assess functionality and/or developmental progress of Awardee’s HCCs and their members for preparedness, response, recovery, and mitigation.

HCCDA Target: 100% achievement of each of the factors by the end of the current project period

Factor Scaling: Awardees are asked to rate their agreement with each statement on a scale from 1 to 9.²⁰

Table 10 contains the full list of HCCDA factors and their associated objective (preparedness, response, recovery, or mitigation).

Table 10. Healthcare Coalition Developmental Assessment Factors

Assessment Factors	Objective
#1: The HCC has established a formal self-governance structure, including leadership roles.	Preparedness
#2: The HCC has multi-disciplinary healthcare organization membership.	Preparedness
#3: The HCC has established its geographical boundaries.	Preparedness
#4: The HCC has a formalized process for resource and information management with its membership.	Preparedness
#5: The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).	Preparedness
#6: The HCC has established roles and responsibilities.	Preparedness
#7: The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities.	Preparedness
#8: The HCC has engaged its member’s healthcare delivery system executives.	Preparedness
#9: The HCC has engaged its member’s healthcare delivery system clinical leaders.	Preparedness
#10: The HCC has an organizational structure to develop operational plans.	Preparedness

²⁰ See Table 2. Scaling System for the HPP Program Measure

HEALTHCARE COALITION DEVELOPMENTAL ASSESSMENT FACTORS

Assessment Factors	Objective
#11: The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.	Response
#12: The HCC demonstrates an ability to enhance situational awareness for its members during an event.	Response
#13: The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.	Response
#14: The HCC demonstrates resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.	Response
#15: The HCC members demonstrate an evacuation capability with functional patient tracking mechanisms.	Response
#16: The HCC utilizes an operational framework and set of indicators to transition from crisis standards of care, to contingency, and ultimately back to conventional standards of care.	Recovery
#17: The HCC incorporates post-incident health services recovery into planning and response.	Recovery
#18: The HCC ensures quality improvement through exercises/events and corrective action plans.	Mitigation
#19: The HCC has an established a method (e.g., social network analysis) for incorporating feedback from its members to support group cohesion and improve processes.	Mitigation
<p>#20: Within the past year, what is your HCC’s MOST IMPORTANT accomplishment related to emergency preparedness, response recovery, and/or mitigation? (Choose one.)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Enhanced connectivity with Emergency Operations Center (EOC) and Emergency Operations Plan (EOP) <input type="checkbox"/> Improved leveraging of disparate funding streams <input type="checkbox"/> Increased ability to leverage resources and allocate scarce resources between HCC members <input type="checkbox"/> Increased availability of emergency response and recovery services for the jurisdiction; bridging response and recovery <input type="checkbox"/> Increased educational training opportunities for healthcare organizations <input type="checkbox"/> Increased emergency management skills among HCC organizations <input type="checkbox"/> Increased emergency preparedness of the jurisdiction targeted or served by the HCC, including at-risk populations <input type="checkbox"/> Increased exercising and readiness planning among HCC members (e.g., drills and exercises) <input type="checkbox"/> Increased formal agreements for resource and information exchange <input type="checkbox"/> Increased information sharing between HCC members through integrated communication <input type="checkbox"/> Increased or enhanced sources of data needed for emergency preparedness and response <input type="checkbox"/> Increased volunteerism (e.g., Emergency System for Advance Registration of Volunteer Health Professionals) <input type="checkbox"/> Other (Please describe) _____ 	NA

HEALTHCARE COALITION DEVELOPMENTAL ASSESSMENT FACTORS

Assessment Factor #1: The HCC has established a formal self-governance structure, including leadership roles.

Description of factor: The governance structure is outlined in the administrative plan. This would include the method by which the HCC is facilitated and administered.

Governance structure could be developed as a single individual representing the whole HCC or by a group of individuals that act in a multiagency coordinating structure representing multiple agencies. Regardless of the two methods, the HCC as a whole should decide on how the governance structure should be developed. The governance structure should then establish the guidelines for administration and facilitation with input from membership. This structure should incorporate mitigation processes into the administrative plan (factor 19) so that the structure could be improved or completely redone if found inadequate.

Administrative plan: This outlines the organization requirements including, participants, participation guidelines, funding, resource development processes, meetings, documentation of activity, and other administrative guidelines. This could resemble a charter, by-law, or other document that contains the key concepts of HCC development.

This is addressed in the Medical Surge Program Measure, indicators 3 and 7.

Assessment Factor #2: The HCC has multi-disciplinary healthcare organization membership.

Description of factor: Membership should consist of, at a minimum, participating hospitals, emergency medical service (EMS), emergency management, and public health. Incorporating long-term care (LTC) and mental and behavioral health (M/BH) members should be a priority. Other healthcare (i.e., pediatric substance abuse professionals) and non-healthcare entities (i.e., public works, faith-based organizations), are highly encouraged to be added based on planning priorities.²¹ These may include partners such as dialysis partners, Community Health Centers, Veterans Affairs and Department of Defense hospitals, and private agencies / associations.

Membership is initially captured in the administrative plan and documented through a monitoring tool (e.g., sign-in sheets). The administrative plan is revised as membership grows.

It is very important that the Awardee be a partner and supporter of the HCC. More importantly, the method of support may make a big difference. This should be outlined in the administration plan.

The membership must provide an operational link to Emergency Support Function #8 – Public Health and Medical Services (ESF-8). ESF-8 would be a very beneficial partner.

This factor is linked to the success of every indicator.

Assessment Factor #3: The HCC has established its geographical boundaries.

Description of factor: The development of a boundary is based on the unique need of the region and jurisdiction. Many factors affect boundary development. In some cases, using the emergency management or ESF-8 planning region might be easier to support and fund than a healthcare region. This could be due to easier access to available full-time employees (FTEs) to perform assigned duties. In other

²¹ A more comprehensive listing of potential HCC members can be found on page 2 of the *Healthcare Preparedness Capabilities* document.

HEALTHCARE COALITION DEVELOPMENTAL ASSESSMENT FACTORS

cases, using a model that leverages contract funding to provide services may be more beneficial. In either case, defining the regional resource situation is dependent on the healthcare patterns, regulations, and tactical planning.

- Healthcare service catchment area
- Trauma region
- Emergency Medical Service (EMS) region
- Regional Coordinating Hospital region
- Public Health region/district
- County jurisdiction
- Emergency Management Agency (EMA) region
- Other type of functional service region

The healthcare delivery system, percent population served, at-risk populations (including vulnerable populations), and the ability to execute or perform healthcare preparedness capabilities are critical considerations in the development of a HCCs geographic boundaries.

This factor is closely related to factors 5 and 7.

Assessment Factor #4 *The HCC has a formalized process for resource and information management with its membership.*

Description of factor: This process is documented in preparedness concept of operations (CONOPS) and tactical plans.

The strategy to prepare is captured in the preparedness CONOPS, but a component of resource management is done during this time. Resource development is part of the strategy and the process should be provided in this document (covered in the Continuity of Healthcare Operations Program Measure, indicator 2).

Resource management and information management are the vital components of any tactical plan. These should be clearly defined in the tactical plan.

Assessment Factor #5: *The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).*

Description of factor: The HCC needs to fully understand and embrace the normal operational pattern of the region as related to healthcare delivery. This includes referral patterns, regulations guiding transport and clinical treatment, normal relationships between member organizations, relationships through resource agreements, and other considerations that affect resource management. This is done during resource planning when the HCC defines their regional system.

The HCC can achieve this factor through diverse HCO membership participation and fully understanding the capacities and capabilities of each of its members.

This is closely related to factors 3 and 7.

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Assessment Factor #6: The HCC has established roles and responsibilities.

Description of factor: Both strategic (administrative plan and preparedness CONOPS) and tactical plans (medical surge, recovery, EOP, continuity of operations (COOP)) should delineate the members roles and responsibilities.

Administrative plan:

- Roles and responsibilities in the administrative plan outline how each member supports the administrative functions of the HCC. This includes assignments and deliverables that have been agreed upon, contracted, or assigned. As fiduciary support is a primary concern in any endeavor, the administrative plan should capture how this support is provided and expended. Not being forthright about funding sources or job duties may create distrust.
- Awardee role: The Awardee's role in HCCs is to form a partnership with and/or to provide support for the HCC members in the effort for multi-agency coordination for preparedness and response. The role of the Awardee is very important as a partner and supporter of the HCC and the method of support may make a big difference. This role should be outlined in the administration plan. It is important for HCC members to understand how they are being supported. For example, if the Awardee is a partner by providing an FTE, the FTE's role should be detailed by listing the assigned duties in the HCC. If the Awardee is a supporter by providing direct funding by contract, it is important to list deliverables in the roles and responsibilities.
- Role of a fiduciary agent: If the Awardee uses a fiduciary agent to provide funding either directly or by reimbursement, this process should be captured in the administrative plan. Some good examples of this are hospital associations under contract to assist with HCC and capability development. Members of the HCC should fully understand this role. If contracts are developed with single members to facilitate capability and HCC development, these roles and responsibilities should be provided (as allowable through jurisdictional contract law).

Preparedness CONOPS:

- Roles and responsibilities in preparedness CONOPs should outline who and how planning, training, and exercising is achieved. This section of the strategic plan provides the basis for establishing the HCC for purposes of preparedness.
- Another highly important role and responsibility is outlining the method for resource development completion and which members must be at the table during resource development (covered in the Continuity of Healthcare Operations Program Measure, indicator 2). This is not an arbitrary task and needs to be worked out by HCC members.

Tactical plans:

- Outlining roles and responsibilities in tactical plans is part of the planning process and developed based on the guiding operational priorities, goals and objectives during the development of the course of action. For example, dialysis may have a limited role in fatality management planning, but could have a very large role in medical surge planning.

This factor is linked to the success of many indicators.

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Assessment Factor #7: The HCC has conducted an assessment of each of its member's healthcare delivery capacities and capabilities.

Description of factor: This is done during tactical planning and largely in resource planning. Understanding the capacities and capabilities of each member helps with gap resolution during the planning of a course of action. Therefore, this should be well documented in the roles and responsibilities and resource management section of tactical plans.

This closely relates to factors 5 and 6.

Assessment Factor #8: The HCC has engaged its member's healthcare delivery system executives.

Description of factor: This is directly related to factor 2 and to tactical planning (regarding resource management). Every effort should be made to engage local healthcare executives to explain the purpose and benefits of the HCC. Healthcare executives (e.g., chief executive, operating, or financial officers) establish the priorities and decide how their HCO resources will be deployed during an actual incident and during conventional daily care. HCCs must actively engage and gain the support of its members' executives and explain the purpose and benefits of HCC participation. This factor measures the documented outreach efforts of the HCC to engage healthcare executives in its geographical vicinity to help them understand the goals and benefits of HCC participation. Examples include informational briefings and meetings, targeting recruiting efforts, and HCC members participating in local professional chapter meetings primarily attended by healthcare executives.

Assessment Factor #9: The HCC has engaged its member's healthcare delivery system clinical leaders.

Description of factor: This is directly related to factor 2 and to tactical planning (regarding clinical guidelines during response). Every effort should be made to engage local clinical healthcare leaders, include them as a member of the HCC, and outline their role. Clinical engagement is the active and positive contribution of clinicians' within their normal working roles to maintaining and enhancing the performance of the HCC which itself recognizes this commitment in supporting and encouraging high quality care. Examples of clinicians include physicians, nursing staff, therapists, and ancillary professional to name a few. Achievement of the clinical engagement factor is measured through different vehicles including sharing promising practices with medical and nursing staffs, attending local professional organization meetings, recruitment of a variety of healthcare professionals for roles within the HCC, and writing articles for local newspaper or healthcare institution magazines.

Assessment Factor #10: The HCC has an organizational structure to develop operational plans.

Description of factor: This is a combination of the governance structure (factor 1), the membership (factor 2), the roles and responsibilities (factor 6), and the preparedness strategy (preparedness CONOPS outlined in the Medical Surge Program Measure, indicator 3). Highly functional HCCs develop a process to link their strategic goals and objectives to their tactical (member) goals and objectives. To achieve this factor, HCCs must demonstrate an ability to develop operational plans using an organized, structured process that can be verified by the HPP Field Project Officer (FPO).

Assessment Factor #11: The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.

Description of factor: HCCs are not meant to supersede the authority provided to local and state emergency management representatives (e.g., incident command (IC), incident management team (IMT), and ESF-8) during response. The protocols for operational roles and responsibilities, information and

HEALTHCARE COALITION DEVELOPMENTAL ASSESSMENT FACTORS

communication protocols, and requesting and allocating resources should be outlined in the jurisdictional EOP.

Healthcare response coordination and the subsequent adjudication of resources is initiated by either multi-agency representation of the HCC to assist incident management with decisions regarding resource allocation or by prioritized plans and protocols that assist incident management with resource allocation. This mainly applies to instances in which resources are needed by healthcare organizations that are controlled by the jurisdiction.

In some HCCs, there may be a more direct role in response and function as an operational unit. In reality, each organization that has a role in patient care or support has an operational role. When a healthcare organization or HCC has an operational role, this should be clearly defined in tactical planning and tested in accordance with the plan.

When implementing resource agreements or allocating resources in which HCOs and HCCs have the authority to act without authorization from incident management, the roles and responsibilities should be clearly defined.

It is important to note that the inclusion of jurisdictional emergency management during planning will assist the response process. ESF-8 has the responsibility as the lead agency in many plans but planning is a jurisdictional responsibility. HCCs should integrate into this process when indicated. This is why it is important for emergency management, ESF-8 and other important decision makers to become part of the HCC.

Assessment Factor #12: The HCC demonstrates an ability to enhance situational awareness for its members during an event.

Description of factor: This planning component of this response objective is outlined in the Continuity of Healthcare Operations Program Measure, indicators 3 and 4; implementation is outlined in the Continuity of Healthcare Operations Program Measure, indicator 4. Situational awareness can be achieved by identifying a potential set of indicators to help the community and HCC anticipate transitions and the types of decision making that must occur.

Assessment Factor #13: The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.

Description of factor: The assessment of this objective is completed during the risk assessment as outlined in the Continuity of Healthcare Operations Program Measure, indicator 1. Tactical plans are developed and all should address the needs of at-risk individuals. Therefore, plan implementation that adequately addresses at-risk needs should be demonstrated during information and resource management processes in operations. Best practices from some Awardees include digital at-risk registries associated with geographic information system (GIS) mapping. It may not be the HCC responsibility to develop this resource but planning and implementation should include this component. This factor links strongly to the Affordable Care Act and the development of health needs assessments for its respective communities.

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Assessment Factor #14: *The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.*

Description of factor: This is a tactical planning component and is associated with many of the indicators under the heading information and communication planning and resource planning. When implementing tactical plans, roles and responsibilities should be clearly defined regarding information and resource management protocols.

Assessment Factor #15: *The HCC members have demonstrated evacuation capability with functional patient tracking mechanisms.*

Description of factor: This is outlined in Capability 10, Function 5 (evacuation) and Capability 6, Function 1 (patient tracking) of the *Healthcare Preparedness Capabilities* document. Patient transportation and evacuation entails many elements including: medical records and medications going with patients, patient supplies and durable medical equipment, identification tags, and development of functional patient evacuation tracking system.

Assessment Factor #16: *The HCC utilizes an operational framework and set of indicators to transition from crisis standards of care, to contingency, and ultimately back to conventional standards of care.*

Description of factor: The Crisis Standards of Care (CSC) plan requires a multifaceted approach. CSC may occur with or without a plan to address the resource needs. Early engagement in the planning process and then distributing the plan and providing support, training, and education to HCC members are essential.

By developing an operational framework HCCs can help guide community decisions about actions that may warrant transitions across the continuum of care, from conventional standards of care to contingency and crisis standards, and back again. The framework should include a set of potential indicators to help a community anticipate when it may need to make such transitions, and a set of triggers that identify points at which a decision to transition should be considered. The indicators should be based on information that is likely to be readily available during an incident, as in most cases in-depth data collection and analysis and the development of new systems will not be feasible. Triggers are likely to be context specific, but HCCs can contribute to decision-making processes by identifying triggers for when decisions about these transitions should be explicitly considered by its HCC members and communities.

Assessment Factor #17: *The HCC incorporates post-incident health services recovery into planning and response.*

Description of factor: This should be outlined in the recovery plan and the HCC should determine how the will operate during response and recovery phases. This would be outlined in the roles and responsibilities of the plan and be addressed during resource and information management. However, this resource management process would revolve around restoration of operations and normalization of the healthcare system or transition to a new norm.

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Assessment Factor #18: The HCC ensures quality improvement through exercises/events and corrective action plans.

Description of factor: As part of the strategic planning, the preparedness CONOPs should outline the exercise and evaluation process and the role the HCC members will take. This is associated with the Continuity of Healthcare Operations Program Measure, indicator 7.

Assessment Factor #19: The HCC has an established method (e.g., social network analysis) for incorporating feedback from its members to support group cohesion and improve processes.

Description of factor: This completes the loop from response to preparedness and links directly back to the developmental process outlined beginning with factor 1. This is an important concept for HCCs to incorporate into their overall administrative and operational strategies. Members must be able to provide feedback and entire HCC structures should be flexible enough to incorporate and improve based on feedback or restructure altogether.

Assessment Factor #20: Within the past year, what is your HCC’s MOST IMPORTANT accomplishment related to emergency preparedness, response, recovery, and/or mitigation? (Choose one.)

- Enhanced connectivity with Emergency Operations Center (EOC) and Emergency Operations Plan (EOP)
- Improved leveraging of disparate funding streams
- Increased ability to leverage resources and allocate scarce resources between HCC members
- Increased availability of emergency response and recovery services for the jurisdiction; bridging response and recovery
- Increased educational training opportunities for healthcare organizations
- Increased emergency management skills among HCC organizations
- Increased emergency preparedness of the jurisdiction targeted or served by the HCC, including at-risk populations
- Increased exercising and readiness planning among HCC members (e.g., drills and exercises)
- Increased formal agreements for resource and information exchange
- Increased information sharing between HCC members through integrated communication
- Increased or enhanced sources of data needed for emergency preparedness and response
- Increased volunteerism (e.g., Emergency System for Advance Registration of Volunteer Health Professionals)
- Other (Please describe) _____

APPENDIX A: GLOSSARY

Appendix A: Glossary

Business continuity: The ability of an organization to provide service and support for its customers and to maintain its viability before, during, and after a business continuity event.

Chain of command: The orderly line of authority within the ranks of the incident management organization.

Charter: A written instrument that creates or defines an organization and describes the organization's functions.

Common Operating Picture (COP): A common operating picture offers a standard overview of an incident, thereby providing incident information that enables the Incident Commander or Unified Command and any supporting agencies and organizations to make effective, consistent, and timely decisions. Compiling data from multiple sources and disseminating the collaborative information COP ensures that all responding entities have the same understanding and awareness of incident status and information when conducting operations. (*FEMA Communications and Information Management: <http://www.fema.gov/emergency/nims/CommunicationsInfoMngmnt.shtm>*)

Community Resilience: the sustained ability of communities to withstand and recover—in both the short and long term—from adversity. Community resilience is one of the main goals of the National Health Security Strategy. There are six key components that influence community resiliency:

- **Infrastructure:** Refers to the physical resilience of the built environment and infrastructure that aims to ensure the functionality of community buildings and systems after an event. This type of resilience is affected by building codes, engineering standards, land use planning, and environmental and human threats.
- **Connectedness:** The strong social networks, shared cultural identity and heritage, and connection to place that form a sense of community. The social connectedness that bonds individuals and groups are the ties that bind communities together and help people withstand disaster, recover, and rebuild. The environmental effects of the disaster can have deep impacts on community cohesion.
- **Health:** Resilient individuals are physically and psychologically healthy, socially connected to each other and to community systems, and have access to health and behavioral health care. Good health prior to a disaster has been shown to support greater resilience in the post-disaster setting.
- **Organizational:** An essential attribute of a resilient community's governance structure, and of the public and private sector entities within it. Resilient organizations retain or quickly regain their function following a shock, improvise, avoid single points of failure, and invest in their workforce.
- **Psychological:** The ability to maintain positive adaptation and mental health despite stressors in the immediate and broader environment. A disaster can impair psychological resilience due to stress, traumatic exposure, adverse psychological reactions, and disrupted social networks.
- **Economic:** The ability of a community to quickly regain its productive capacity after a disaster. Community members have access to good jobs and good wages, the local economy is diversified, and it produces or accesses enough goods to meet the needs of community members.

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Confirmatory Factor Analysis: Explanatory procedure which analyzes a priori measurement models in which both the number of factors and their correspondence with indicators is explicitly specified.

Continuity of Operations (COOP): An effort to ensure that primary mission-essential functions (PMEFs) continue to be performed during a wide range of emergencies, including localized acts of nature, accidents, and technological or attack-related emergencies. A continuity of operations plan is a document that identifies the PMEFs and describes the tasks, processes, and systems requirements to maintain PMEFs.

Correlation: Any statistical relationship between two random variables or two sets of data.

Crisis Standards of Care: The level of care possible during a crisis or disaster due to limitations in supplies, staff, environment, or other factors. These standards will usually incorporate the following principles: (1) prioritize population health rather than individual outcomes; (2) respect ethical principles of beneficence, stewardship, equity, and trust; (3) modify regulatory requirements to provide liability protection for healthcare providers making resource allocation decisions; and/or (4) designate a crisis triage officer and include provisions for palliative care in triage models for scarce resource allocation (e.g., ventilators) (Chang et al., 2008). Crisis standards of care will usually follow a formal declaration or recognition by state government during a pervasive (pandemic influenza) or catastrophic (earthquake, hurricane) disaster which recognizes that contingency surge response strategies (resource-sparing strategies) have been exhausted, and crisis medical care must be provided for a sustained period of time. Formal recognition of these austere operating conditions enables specific legal or regulatory powers and protections for healthcare provider allocation of scarce medical resources and for alternate care facility operations. Under these conditions, the goal is still to supply the best care possible to each patient. (*Healthcare Preparedness Capabilities*)

Critical Infrastructure (CI) and Key Resources (KR): The assets, systems, networks, and functions, whether physical or organizational, whose destruction or incapacity would have a debilitating impact on the Nation's security, public health and safety, and/or economic vitality. (*Healthcare Preparedness Capabilities*)

Cronbach's Alpha: A measure of internal consistency, that is, how closely related a set of items are as a group.

Data Usage and Access Policies: Rules and guidelines specifying appropriate and inappropriate uses for different types of information, including: legal, statutory, privacy, and intellectual property considerations; the types of information that can be shared and with whom; recommended data sharing frequency; and suggested or required data protections and information system security.

Emergency operations coordination: Direction and support of an incident with public health or medical implications by establishing a standardized, scalable system of oversight, organization, and supervision consistent with jurisdictional standards and practices and with the National Incident Management System (NIMS).

Emergency Operations Plan (EOP): An ongoing plan for responding to a wide variety of potential hazards.

Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP): The Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) is a federal program created to support state and territorial governments in establishing standardized volunteer registration programs for disasters and public health and medical emergencies. The program, administered on the state level, verifies health professionals' identification and credentials so that they can respond more quickly when disaster strikes. By registering through ESAR-VHP, volunteers' identities, licenses,

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credentials, and hospital privileges are all verified in advance, saving valuable time in emergency situations.

Emergency Support Function (ESF) #8: Emergency Support Function (ESF) #8 — Public Health and Medical Services, provides the mechanism for coordinated federal assistance to supplement state, tribal, and local resources in response to a public health and medical disaster, potential or actual incidents requiring a coordinated federal response, and/or during a developing potential health and medical emergency. The phrase “medical needs” is used throughout this annex. Public Health and Medical Services include responding to medical needs associated with mental health, behavioral health, and substance abuse considerations of incident victims and response workers. Services also cover the medical needs of members of the “at risk” or “special needs” population described in the Pandemic and All-Hazards Preparedness Act and in the National Response Framework (NRF) Glossary, respectively. It includes a population whose members may have medical and other functional needs before, during, and after an incident. (*Healthcare Preparedness Capabilities*)

Exercise: The process of conducting activities involved with 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 inter-agency 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. (Note: An exercise is also an excellent way to demonstrate community resolve to prepare for disastrous events). (*Homeland Security Exercise and Evaluation Program Volume I: HSEEP Overview and Exercise Program Management*)

Family Assistance Center: A secure facility established to serve as a centralized location to provide information and assistance about missing or *unaccounted for* persons and the deceased and to support the reunification of the missing or deceased with their loved ones.

Fatality Management: The ability to coordinate with organizations (e.g., law enforcement, healthcare, emergency management, and medical examiner or coroner) to ensure the proper recovery, handling, identification, transportation, tracking, storage, and disposal of human remains and personal effects; certify cause of death; and facilitate access to mental or behavioral health services for family members, responders, and survivors of an incident. Coordination also includes the proper and culturally sensitive storage of human remains during periods of increased deaths.

Hazard Vulnerability Assessment (HVA): A systematic approach to recognizing hazards that may affect demand for services or the ability to provide those services. The risks associated with each hazard are analyzed to prioritize planning, mitigation, response, and recovery activities. An HVA serves as a needs assessment and a strategy to identify those hazards that are most likely to have an impact on a facility and the surrounding community. The HVA process should involve community partners and be communicated to community emergency response agencies. (*DHHS, 2009*).

Healthcare Coalition (HCC): The HCC is a collaborative network of healthcare organizations and their respective public and private sector response partners that serve as a multiagency coordinating group to assist with preparedness, response, recovery, and mitigation activities related to healthcare organization disaster operations. The primary function of the HCC includes sub-state regional, healthcare system emergency preparedness activities involving the member organizations. This includes planning, organizing and equipping, training, exercises and evaluation. During response, HCCs should represent healthcare organizations by providing multi-agency coordination in order to provide advice on decisions made by incident management regarding information and resource coordination for healthcare organizations. This includes either a response role as part of a multi-agency coordination group to assist

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incident management (area command or unified command) with decisions, or through coordinated plans to guide decisions regarding healthcare organization support. (*Healthcare Preparedness Capabilities*)

Healthcare Organization(s) (HCOs): The component(s) of a community's healthcare service delivery system to primarily include hospitals, Emergency Medical Services (EMS), primary care, long term care, mental or behavioral health systems, specialty services (dialysis, pediatrics, woman's health, standalone surgery, urgent care, etc.), support services (laboratories, pharmacies, blood banks, poison control, etc.), private entities associated with healthcare delivery (Hospital associations, regulatory boards, etc.). HCOs may or may not include components of public health, tribal healthcare, federal (VA, DOD, IHS facilities, etc.), community health centers, volunteer medical organizations (e.g. ARC), healthcare services provided in city, county, or state jails, prisons, penitentiaries, and others not noted. (*Healthcare Preparedness Capabilities*)

Healthcare Constituencies: The people involved in or served by the HCC.

Healthcare Recovery: Locally-led recovery efforts in the restoration of the public health, health care and social services networks to promote the resilience, health and well-being of affected individuals and communities (adapted from the *National Disaster Recovery Framework*²²).

Healthcare System or Healthcare Service Delivery System: A collection of a community's healthcare organizations. (*Healthcare Preparedness Capabilities*)

Healthcare Workers' Families: Family members of healthcare workers who may benefit from prophylaxis or treatment theoretically allowing the worker to remain on duty rather than having to care for ill family members.

Incident Command Structure (ICS): The Incident Command System (ICS) is a standardized, on-scene, all-hazards incident management approach that allows for the integration of facilities, equipment, personnel, procedures and communications operating within a common organizational structure, Enables a coordinated response among various jurisdictions and functional agencies, both public and private, and establishes common processes for planning and managing resources (<http://www.fema.gov/incident-command-system#item1>).

Immediate Bed Availability (IBA): The ability to provide no less than 20% availability of staffed members' beds within four hours of a disaster to create medical surge capacity for both "no notice" and slower evolving disasters. Medical surge, in concept and in practice, requires more than the immediate availability of beds alone – it requires staffed beds.

Information Sharing: The ability to conduct multijurisdictional and multidisciplinary exchange of public health and medical-related information and situational awareness data among federal, state, local, territorial, and tribal levels of government and the private sector. This capability includes the routine sharing of information as well as issuing of public health alerts to federal, state, local, territorial, and tribal levels of government and the private sector in preparation for, and in response to, events or incidents of public health significance. An effective information sharing system will provide durable, reliable, and effective information exchanges (both horizontally and vertically) between those responsible for gathering information and the analysts and consumers of threat or hazard-related information. It will also allow for feedback and other necessary communications in addition to the regular flow of information and intelligence.

²² National Disaster Recovery Framework, http://www.fema.gov/pdf/recoveryframework/health_social_services_rsf.pdf

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Interagency Agreement (IAA): A written agreement between federal agencies or components of federal agencies to acquire supplies or services as authorized by statute.

Key Partners: Within the context of Fatality Management, private organizations that have agreed to play a role in performing Fatality Management functions, such as funeral directors, coroners, medical examiners, or mental health professionals.

Latent Construct: Explanatory variables presumed to reflect a continuum that is not directly observable.

Medical Surge: The ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. It encompasses the ability of the healthcare service delivery system to survive a hazard impact and maintain or rapidly recover operations that were compromised.

Memoranda of Understanding (MOUs) or Memoranda of Agreement (MOAs): Documents that describe a bilateral or multilateral agreement between two or more parties. These documents express an intended common line of action, establish a scope of association, and define mutual responsibilities. They are often used in cases where parties do not wish to or cannot create an otherwise legally enforceable agreement.

Mental or Behavioral Health Professional: Someone who offers services that have the effect of improving an individual's mental state, such as psychologists, social workers, therapists, counselors, spiritual care providers, hospice providers, and translators, or embassy and Consulate representatives when international victims are involved.

Mutual Aid Agreements (MAAs): A document that formalizes and defines the reciprocal assistance that two or more communities or organizations can and will provide to another in the event of a disaster.

Path Analysis: Structural model illustrating the directed dependencies among a set of variables.

Personal Protective Equipment (PPE): Specialized clothing or equipment worn by an employee for protection against infectious materials. PPE such as masks and gloves can protect healthcare workers from illness and injury allowing them to continue delivering important healthcare services. Ensuring a sufficient supply of PPE requires a number of steps be taken during emergency preparedness including: determining the PPE need, assessing in-facility stocks of PPE, comparing need and stock to identify any PPE gaps, and then developing procedures for obtaining the gap amount should you need it (e.g., a resource request via the ICS resource management system).

Pharmaceutical Cache: A collection of pharmaceuticals, antidotes, and medical supplies designed to provide rapid delivery of a broad spectrum of assets for an ill-defined threat in the early hours of an event. Prophylactic pharmaceutical caches can protect healthcare workers from illness, allowing them to continue delivering important healthcare services. In addition, providing prophylaxis to healthcare workers' families enhances response by theoretically allowing the worker to remain on duty rather than having to care for an ill family member.

Principal Components Analysis: Exploratory procedure which reduces a set of potentially correlated variables into a set of linearly uncorrelated indices.

Prophylaxis: A medical or public health procedure undertaken to prevent, rather than treat or cure, a disease.

Recovery Processes: The development, coordination, and execution of service- and site-restoration plans; the reconstitution of government operations and services; individual, private-sector, nongovernmental, and public assistance programs to provide housing and promote restoration; long-term care and treatment of affected persons; additional measures for social, political, environmental,

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and economic restoration; evaluation of the incident to identify “lessons learned”; post incident reporting; and development of initiatives to mitigate the effects of future incidents.

Resilience: The ability of an asset, system, network or function, to maintain its capabilities and function during and in the aftermath of an all-hazards incident. (*Healthcare Preparedness Capabilities*)

Situational Awareness: The ability to identify, process, and comprehend the essential information about an incident to inform the decision making process in a continuous and timely cycle and includes the ability to interpret and act upon this information.

Supply Chain: A system of organizations, people, technology, activities, information, and resources involved in moving a product or service from supplier to customer.

Surge Capacity: The ability to evaluate and care for a markedly increased volume of patients—one that challenges or exceeds normal operating capacity. Requirements may extend beyond direct patient care to include other medical tasks, such as extensive laboratory studies or epidemiologic investigations.

Threat and Hazard Identification and Risk Assessment (THIRA): DHS document that provides a comprehensive approach for identifying and assessing risks and associated impacts

Trigger: An event which initiates certain actions.

APPENDIX B: TABLES OF INDICATORS, CAPABILITIES, AND FACTORS

Appendix B: Tables of Indicators, Capabilities, and Factors

Table 11 and Table 12 contain the results of an analysis of the HPP Program Measure indicators, *Healthcare Preparedness Capabilities* capabilities and functions, and HCCDA factors. These tables demonstrate that no capabilities or functions were lost during the reduction and refinement of the BP2 Program Measures. They also demonstrate that the indicators and factors are integrated and influence each other.

Table 11. Comparison of the Continuity of Healthcare Operations indicators to their associated capabilities and functions and HCC Developmental Assessment factors.

Continuity of Healthcare Operations		
Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
The HCC has access to a risk-based HVA which prioritizes the risks to its members.	Capability 1: Healthcare System Preparedness ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster	2 - The HCC has multi-disciplinary healthcare organization membership. 7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities. 20 - The HCC utilizes an operational framework and set of indicators to transition from crisis standards of care, to contingency, and ultimately back to conventional standards of care. 10 - The HCC has an organizational structure to develop operational plans. 13 - The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.
The HCC has conducted a gap analysis to identify resource shortfalls during an event and is implementing plans to close those resource gaps.	Capability 1: Healthcare System Preparedness ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster ▪ Function 4: Determine gaps in the healthcare preparedness and identify resources for mitigation of these gaps Capability 3: Emergency Operations Coordination ▪ Function 3: Support healthcare response efforts through coordination of resources	1 - The HCC has established a formal self-governance structure, including leadership roles. 2 - The HCC has multi-disciplinary healthcare organization membership. 6 - The HCC has established roles and responsibilities. 7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities. 8 - The HCC has engaged its member’s healthcare delivery system executives. 9 - The HCC has engaged its member’s healthcare delivery system clinical leaders. 10 - The HCC has an organizational structure to develop operational plans.

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Continuity of Healthcare Operations		
Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has a process to enhance its member’s situational awareness to support activation of immediate bed availability through continuous monitoring.</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ Function 2: Assess and notify stakeholders of healthcare delivery status <p>Capability 6: Information Sharing</p> <ul style="list-style-type: none"> ▪ Function 1: Provide healthcare situational awareness that contributes to the incident common operating picture <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations ▪ Function 3: Assist healthcare organizations with surge capacity and capability 	<p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>4 - The HCC has a formalized process for resource and information management with its membership.</p> <p>5 - The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).</p> <p>6 - The HCC has established roles and responsibilities.</p> <p>7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities.</p> <p>10 - The HCC has an organizational structure to develop operational plans.</p> <p>11- The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.</p> <p>12 - The HCC demonstrates an ability to enhance situational awareness for its members during an event.</p> <p>13 - The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.</p> <p>14 - The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.</p>

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Continuity of Healthcare Operations		
Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has demonstrated the capability of a redundant means of communication for achieving and sustaining situational awareness.</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ Function 2: Assess and notify stakeholders of healthcare delivery status <p>Capability 6: Information Sharing</p> <ul style="list-style-type: none"> ▪ Function 1: Provide healthcare situational awareness that contributes to the incident common operating picture ▪ Function 2: Develop, refine, and sustain redundant, interoperable communication systems 	<p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>4 - The HCC has a formalized process for resource and information management with its membership.</p> <p>5 - The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).</p> <p>6 - The HCC has established roles and responsibilities.</p> <p>10 - The HCC has an organizational structure to develop operational plans.</p> <p>11 - The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.</p> <p>12 - The HCC demonstrates an ability to enhance situational awareness for its members during an event.</p> <p>18 - The HCC ensures quality improvement through exercises/events and corrective action plans.</p>

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Continuity of Healthcare Operations		
Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has tested its ability to address its member’s healthcare workforce safety needs through strategic placement of resources.</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations ▪ Function 3: Assist healthcare organizations with surge capacity and capability <p>Capability 14: Responder Safety and Health</p> <ul style="list-style-type: none"> ▪ Function 1: Assist healthcare organizations with additional pharmaceutical protection for healthcare workers ▪ Function 2: Provide assistance to healthcare organizations with access to additional Personal Protective Equipment (PPE) for healthcare workers during response 	<p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>4 - The HCC has a formalized process for resource and information management with its membership.</p> <p>7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities.</p> <p>10 - The HCC has an organizational structure to develop operational plans.</p> <p>11 - The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.</p> <p>14 - The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.</p> <p>18 - The HCC ensures quality improvement through exercises/events and corrective action plans.</p>

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Continuity of Healthcare Operations		
Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has prioritized and integrated essential healthcare recovery needs in its Emergency Operation Plan.</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster ▪ Function 3: Identify and prioritize essential healthcare assets and services <p>Capability 2: Healthcare System Recovery</p> <ul style="list-style-type: none"> ▪ Function 1: Develop recovery processes for the healthcare delivery system ▪ Function 2: Assist healthcare organizations to implement Continuity of Operations (COOP) <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ Function 2: Assess and notify stakeholders of healthcare delivery status ▪ Function 3: Support healthcare response efforts through coordination of resources <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ Function 5: Provide assistance to healthcare organizations regarding evacuation and shelter in place operations 	<p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>4 - The HCC has a formalized process for resource and information management with its membership.</p> <p>5 - The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).</p> <p>6 - The HCC has established roles and responsibilities.</p> <p>7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities.</p> <p>10 - The HCC has an organizational structure to develop operational plans.</p> <p>11 - The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.</p> <p>12 - The HCC demonstrates an ability to enhance situational awareness for its members during an event.</p> <p>13 - The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.</p> <p>14 - The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.</p> <p>16 - The HCC utilizes an operational framework and set of indicators to transition from crisis standards of care, to contingency, and ultimately back to conventional standards of care.</p> <p>17 - The HCC incorporates post-incident health services recovery into planning and response.</p>

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Continuity of Healthcare Operations		
Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
The HCC has achieved its exercise objectives during tests of state or regional healthcare disaster plans.	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster ▪ Function 3: Identify and prioritize essential healthcare assets and services ▪ Function 4: Determine gaps in the healthcare preparedness and identify resources for mitigation of these gaps ▪ Function 6: Improve healthcare response capabilities through coordinated exercise and evaluation <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ Function 4: Demobilize and evaluate healthcare operations 	All factors

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Table 12. Comparison of the Medical Surge indicators to their associated capabilities and functions and HCC Developmental Assessment factors.

Medical Surge		
Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
The Awardee has posted its approved Crisis Standards of Care plan on the ASPR Communities of Interest SharePoint Site.	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster Capability 10: Medical Surge <ul style="list-style-type: none"> ▪ Function 4: Develop Crisis Standards of Care guidance 	2 - The HCC has multi-disciplinary healthcare organization membership. 16 - The HCC utilizes an operational framework and set of indicators to transition from crisis standards of care, to contingency, and ultimately back to conventional standards of care.
The Awardee has completed mass fatality management plans that have been adopted by HCCs members.	Capability 1: Healthcare System Preparedness <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster Capability 5: Fatality Management <ul style="list-style-type: none"> ▪ (all functions) Capability 10: Medical Surge, <ul style="list-style-type: none"> ▪ Function 3: Assist healthcare organizations with surge capacity and capability 	2 - The HCC has multi-disciplinary healthcare organization membership. 7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities. 11 - The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response. 12 - The HCC demonstrates an ability to enhance situational awareness for its members during an event. 13- The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response. 14 - The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.

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Medical Surge

Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has developed a strategic plan with participation from its membership</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 1: Healthcare Coalition Development 	<p>1 - The HCC has established a formal self-governance structure, including leadership roles.</p> <p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>3 - The HCC has established its geographical boundaries.</p> <p>4 - The HCC has a formalized process for resource and information management with its membership.</p> <p>5 - The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).</p> <p>6 - The HCC has established roles and responsibilities.</p> <p>8 - The HCC has engaged its member’s healthcare delivery system executives.</p> <p>9 - The HCC has engaged its member’s healthcare delivery system clinical leaders.</p> <p>10 - The HCC has an organizational structure to develop operational plans.</p> <p>17 - The HCC incorporates post-incident health services recovery into planning and response.</p> <p>18 - The HCC ensures quality improvement through exercises/events and corrective action plans.</p> <p>19 - The HCC has an established method (e.g., social analysis) for incorporating feedback from its members to support group cohesion and improve processes.</p>

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Medical Surge

Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has demonstrated, through exercise or real incident, its ability to both deliver appropriate levels of care to all patients, as well as to provide no less than 20% immediate availability of staffed members' beds, within 4 hours of a disaster.</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ Function 3: Assist healthcare organizations with surge capacity and capability 	<p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>7 - The HCC has conducted an assessment of each of its member's healthcare delivery capacities and capabilities.</p> <p>11 - The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.</p> <p>12- The HCC demonstrates an ability to enhance situational awareness for its members during an event.</p> <p>13 - The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.</p> <p>14 - The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.</p> <p>15 - The HCC members have demonstrated evacuation capability with functional patient tracking mechanisms.</p>

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Medical Surge

Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has demonstrated the ability to do the following during an incident, exercise or event: 1) Monitor patient acuity and staffed bed availability in real-time, 2) Off-Load Patients, 3) On-Load Patients, 4) Track and document patient movement</p>	<p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ Function 1: Healthcare organization multi-agency representation and coordination with emergency operations ▪ Function 2: Assess and notify stakeholders of healthcare delivery status ▪ Function 3: Support healthcare response efforts through coordination of resources <p>Capability 6: Information Sharing</p> <ul style="list-style-type: none"> ▪ All functions <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate integrated healthcare surge operations with pre-hospital Emergency Medical Services (EMS) operations ▪ Function 3: Assist healthcare organizations with surge capacity and capability 	<p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities.</p> <p>11 - The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.</p> <p>12- The HCC demonstrates an ability to enhance situational awareness for its members during an event.</p> <p>13 - The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.</p> <p>14 - The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.</p> <p>15 - The HCC members have demonstrated evacuation capability with functional patient tracking mechanisms.</p>

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Medical Surge

Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The Awardee’s Recovery Plan addresses how it will meet post-disaster behavioral and mental healthcare needs of communities (i.e., HCC member staff).</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 2: Coordinate healthcare planning to prepare the healthcare system for a disaster <p>Capability 2: Healthcare System Recovery</p> <ul style="list-style-type: none"> ▪ Function 1: Develop recovery processes for the healthcare delivery system <p>Capability 5: Fatality Management</p> <ul style="list-style-type: none"> ▪ Function 3: Mental/behavioral support at the healthcare organization level <p>Capability 10: Medical Surge</p> <ul style="list-style-type: none"> ▪ Function 3: Assist healthcare organizations with surge capacity and capability 	<p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>7 - The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities.</p> <p>11 - The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.</p> <p>12- The HCC demonstrates an ability to enhance situational awareness for its members during an event.</p> <p>13 - The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.</p> <p>14 - The HCC has demonstrated resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.</p> <p>16 - The HCC utilizes an operational framework and set of indicators to transition from crisis standards of care, to contingency, and ultimately back to conventional standards of care.</p> <p>17 - The HCC incorporates post-incident health services recovery into planning and response.</p>

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Medical Surge

Indicator	Healthcare Preparedness Capability/Function	HCC Developmental Assessment Factor
<p>The HCC has a mechanism to obtain feedback to help resolve member conflicts that have the potential to affect the overall performance of the HCC.</p>	<p>Capability 1: Healthcare System Preparedness</p> <ul style="list-style-type: none"> ▪ Function 1: Develop, refine or sustain Healthcare Coalitions ▪ Function 6: Improve healthcare response capabilities through coordinated exercise and evaluation <p>Capability 3: Emergency Operations Coordination</p> <ul style="list-style-type: none"> ▪ Function 4: Demobilize and evaluate healthcare operations 	<p>1 - The HCC has established a formal self-governance structure, including leadership roles.</p> <p>2 - The HCC has multi-disciplinary healthcare organization membership.</p> <p>3 - The HCC has established its geographical boundaries.</p> <p>4 - The HCC has a formalized process for resource and information management with its membership.</p> <p>5 - The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).</p> <p>6 - The HCC has established roles and responsibilities.</p> <p>8 - The HCC has engaged its member’s healthcare delivery system executives.</p> <p>9 - The HCC has engaged its member’s healthcare delivery system clinical leaders.</p> <p>10 - The HCC has an organizational structure to develop operational plans.</p> <p>17 - The HCC incorporates post-incident health services recovery into planning and response.</p> <p>18 - The HCC ensures quality improvement through exercises/events and corrective action plans.</p> <p>19 - The HCC has an established method (e.g., social network analysis) for incorporating feedback from its members to support group cohesion and improve processes.</p>

APPENDIX C: BP2 HPP-PHEP Joint Measures

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Appendix C: BP2 HPP-PHEP Joint Measures

In line with HPP and PHEP grant alignment priorities, HPP and PHEP worked collaboratively to develop and refine the HPP-PHEP Joint Measures for information sharing and volunteer management. For BP2 specifically, information sharing and volunteer management were removed from the HPP specific measures to further reduce Awardees’ reporting burden.

HPP-PHEP 6.1: Information Sharing

Percentage of local partners that reported requested Essential Elements of Information (EEI) to the public health/medical lead within the requested timeframe

Measure Applies To :	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
<input checked="" type="checkbox"/> States	<input checked="" type="checkbox"/> Annual Reporting	<input checked="" type="checkbox"/> Incident	<input type="checkbox"/> Optional
<input checked="" type="checkbox"/> Directly Funded Localities	<input type="checkbox"/> If PHEP Funds Allocated to the Capability or Contracts Plan	<input checked="" type="checkbox"/> Exercise	<input type="checkbox"/> Accountability
<input checked="" type="checkbox"/> Territories or Freely Associated States	<input type="checkbox"/> If Emergency Response Required Use of this Capability, Regardless of Funding	<input checked="" type="checkbox"/> Planned Event	<input checked="" type="checkbox"/> Data Collected By: HPP and/or PHEP



How is the measure calculated?

Numerator: Number of local partners that reported requested EEI to the public health/medical lead within the requested timeframe.

Denominator: Number of local partners that received a request for EEI.



Why is this measure important?

This measure assesses the extent to which local response entities communicate requested information to the public health/medical lead in order to facilitate situational awareness and the effective management of resources in a timely manner.



What other requirements are there for reporting measure data?

This measure requires submission of self-reported data. Data should be collected and reported by incident (or planned event or exercise).

New – Awardees are required to report at least two data points for this measure. One data point must reflect the awardee’s best performance (highest percentage); the other must reflect performance which, based on a determination from the awardee, calls for focused quality improvement and – if applicable – technical assistance. Awardees are encouraged to submit data on additional incidents, planned events and exercises as well. There are no specific reporting requirements or parameters for these additional data points.

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What data must be reported?

1. Number of local partners that received a request for EEI (denominator)
2. Number of local partners that reported requested EEI to the health/medical lead within the requested timeframe (numerator)
3. The request for EEI occurred during a: [Select one]
 - Incident
 - Full scale exercise
 - Functional exercise
 - Drill
 - Planned event
4. Please identify the type of incident/exercise/planned event upon which the request for EEI was based: [Select all that apply]
 - Extreme weather (e.g., heat wave, ice storm)
 - Flooding
 - Earthquake
 - Hurricane/tropical storm
 - Hazardous material
 - Fire
 - Tornado
 - Biological hazard or disease, please specify
 - Radiation
 - Other, please specify
5. Name and date of the incident/planned event/exercise.
6. How many of each type(s) of local partners responded to the request?
 - Hospitals
 - Long-Term Care Facilities
 - Community Health Centers
 - Healthcare coalitions
 - Local public health entities (LHDs, district or regional offices, etc.)
 - Other, please specify
7. Please identify the requesting entity (e.g., public health/medical lead at the state, sub-state regional, or local level). [Select one]
 - State public health/medical lead (or designee)
 - Sub-state regional public health/medical lead (or designee)
 - Local public health/medical lead (or designee)
 - Other, please specify
8. Please identify the types of EEI requested. [Select all that apply]
 - Facility operating status
 - Facility structural integrity
 - Status of evacuations/shelter in-place operations

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- Status of critical medical services (e.g., trauma, critical care)
 - Critical service/infrastructure status (e.g., electric, water, sanitation, heating, ventilation, and air conditioning)
 - Bed or patient status
 - Equipment/supplies/medications/vaccine status or needs
 - Staffing status
 - Emergency Medical Services (EMS) status
 - Epidemiological, surveillance or lab data (e.g., test results, case counts, deaths)
 - School-related data (closure, absenteeism, etc.)
 - POD/mass vaccination sites data (e.g., throughput, open/set-up status, etc.)
 - Other, please specify
9. Please identify the type of IT or other communication system used by local partners to report requested EEI. [Select all that apply]
- Telecommunication (e.g., cell phone, satellite phone, land line)
 - E-mail
 - Online/web interface (electronic bed or patient tracking, survey tools, WebEOC or similar, etc.)
 - Health Alert Network
 - Other, please specify
10. Please indicate any barriers to submitting requested EEI within the requested timeframe. [Select all that apply]
- Communication
 - Equipment
 - Funding
 - Participation
 - Policies/procedures
 - Resource limitations
 - Staffing
 - Time constraints
 - Training
 - Other, please specify
 - None
11. **New** - Continuous Quality Improvement:
- a. Were relevant corrective actions/improvement plan items from *prior responses* (including exercises, drills, etc.) related to information sharing incorporated into planning and/or response procedures before this incident/drill took place? [Yes/Some/No]
 - b. Have corrective actions / improvement plan items related to information sharing been identified as a result of this incident/drill? [Yes/No]
 - i. Have they been implemented? [Yes/Some/No]
12. **New** - [Optional] Please provide any additional clarifying, contextual or other information.



How is this measure operationalized?

This measure can also be found in the Public Health Emergency Preparedness Cooperative Agreement Budget Period 2 Performance Measure Specifications and Implementation Guidance.

This measure intends to capture information on the communication of incident-specific public health/medical EEIs. Determination of which EEIs are to be requested or collected during a response, as well as which local entities should report the information and the timeframe in which the information should be reported, should be based on established plans, protocols and procedures, but are ultimately at the discretion of the incident commander or designee.

If large volumes of EEI are collected in an incident, it is the responsibility of the Awardee to determine which of this information was “essential” – and therefore able to count towards the numerator and denominator – for this performance measure.

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HPP-PHEP 15.1: Volunteer Management

Percentage of volunteers **deployed** to support a public health/medical incident within the requested timeframe

Measure Applies To:	Circumstances for Reporting:	Data May Be Taken From:	Other Considerations:
<input checked="" type="checkbox"/> States	<input type="checkbox"/> Annual Reporting	<input checked="" type="checkbox"/> Incident	<input type="checkbox"/> Optional
<input checked="" type="checkbox"/> Directly Funded Localities	<input type="checkbox"/> If PHEP Funds Allocated to the Capability or Contracts Plan	<input checked="" type="checkbox"/> Exercise	<input type="checkbox"/> Accountability
<input checked="" type="checkbox"/> Territories or Freely Associated States	<input checked="" type="checkbox"/> If Emergency Response Required Use of this Capability, Regardless of Funding	<input type="checkbox"/> Planned Event	<input checked="" type="checkbox"/> Data Collected By: HPP and/or PHEP



How is the measure calculated?

Numerator: Number of volunteers, determined to be needed for the response by the public health/medical lead or other authorized official, that arrived on scene (including staging area or other designated area) within the requested timeframe.

Denominator: Number of volunteers determined to be needed for the response by the public health/medical lead or other authorized official.



Why is this measure important?

The immediate intent of this measure is to assess the timeliness of implementing key stages of volunteer management – from receipt of request, to activation of volunteers, to deployment – in order to determine key bottlenecks and chokepoints which inhibit timely deployment of volunteers.

The broader programmatic intent of this measure is to ensure that the awardee meets requests for volunteers in a timely manner.

This measure is NOT intended to assess routine or day-to-day volunteer activities in volunteer or healthcare organizations.



What other requirements are there for reporting measure data?

- Awardees may report the numerator and denominator of this measure *by incident or exercise* at the state, sub-state regional or local level.
- *Awardees that experience two or more incidents or exercises* involving deployment of volunteers must report on at least two of those.
 - One data point must reflect the awardee’s best performance (highest percentage);
 - The other data point must reflect performance that, based on a determination from the Awardee, calls for focused quality improvement and – if applicable – technical assistance.
 - Awardees are encouraged to submit data on additional incidents and exercises as well. There are no specific reporting requirements or parameters for additional data points.
- *Awardees that experience only one incident or exercise* involving deployment of volunteers must report on it.
- *Awardees that experience no incidents or exercises* involving deployment of volunteers in BP2 do not need to report on this measure; however, they must conduct a call down and acknowledgement drill. The call down and acknowledgement drill contains the following data elements:

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- Number of volunteers contacted (registered in the Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) system)
- Number of volunteer contacted (registered in other systems)
- Number of volunteers in the ESAR-VHP system that acknowledged contact within the requested timeframe
- Number of volunteers registered in other systems that acknowledged contact within the requested timeframe
- The requested timeframe for acknowledgment (e.g., 4 hours, 8 hours, 12 hours, etc.)
- Date of call down drill
- The call down and acknowledgement drill, above, may *not* be reported in lieu of performance measure HPP-PHEP 15.1, if there occurred incidents or exercises involving actual deployment of volunteers in the budget period.
- In future budget periods, Awardees may be required to exercise actual volunteer deployment if there are no volunteer deployments during a public health/medical incident in two consecutive budget periods.



What data must be reported?

For each incident/planned event/exercise reported on, please provide the following information.

1. The number of volunteers determined to be needed for the response by the public health/medical lead or other authorized official (denominator).
2. The number of volunteers, determined to be needed for the response by the public health/medical lead or other authorized official, that arrived on scene (including staging area or other designated area) within the requested timeframe (numerator).
 - Of these:
 - Number of deployed volunteers registered in the ESAR-VHP system
 - Number of deployed volunteers registered in other systems
3. Requested timeframe for on-scene (including staging area or other designated area) arrival of volunteers
4. The request for volunteers occurred during a: [Select one]
 - Incident
 - Full Scale Exercise
 - Functional Exercise
 - Drill
5. This incident or exercise utilized or demonstrated one or more function(s) within the: [Select one]
 - HPP Volunteer Management Capability
 - PHEP Volunteer Management Capability
 - Both HPP and PHEP Volunteer Management Capabilities
6. The name and date of the incident or exercise.
7. The type of incident or exercise upon which the request for volunteers was based: [Select all that apply]
 - Extreme weather (e.g., heat wave, ice storm)
 - Flooding
 - Earthquake
 - Hurricane / Tropical Storm
 - Hazardous Material
 - Fire
 - Tornado

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- Biological hazard or disease, please specify
 - Radiation
 - Other, please specify
8. The entity that made the original request for volunteers: [Select one]
- Local health department
 - State health department
 - Healthcare organization
 - Healthcare coalition
 - Other, please specify
9. The requested location for the deployment: [Select all that apply]
- Staging/assembly area(s) (not actual incident site)
 - Hospital(s)
 - Shelter(s)
 - Points of Dispensing (POD(s))
 - Alternate care site(s)
 - Other, please specify
10. The number of volunteers that were contacted for potential deployment.
11. Please indicate any barriers to deploying volunteers to support a public health/medical incident within requested timeframe. [Select One]
- Communication
 - Equipment
 - Funding
 - Participation
 - Policies/procedures
 - Resource limitations
 - Staffing
 - Time constraints
 - Training
 - Other, please specify
 - None
11. **New** - Continuous Quality Improvement:
- a. Were relevant corrective actions / improvement plan items from *prior responses* (including exercises, drills, etc.) related to volunteer management incorporated into planning and/or response procedures before this incident/drill took place? [Yes/Some/No]
 - b. Have corrective actions / improvement plan items related to volunteer management been identified as a result of this incident/drill? [Yes/No]
 - i. Have they been implemented? [Yes/Some/No]
12. **New** - [Optional] Please provide any additional clarifying, contextual or other information



How is this measure operationalized?

This measure can also be found in the Public Health Emergency Preparedness Cooperative Agreement Budget Period 2 Performance Measure Specifications and Implementation Guidance.

The numerator and denominator for this measure should refer to aggregate numbers of volunteers across a given incident. For example, the public health/medical lead determines in Week 1 of an incident that 100 volunteers are needed. In Week 2 it is determined that an additional 100 volunteers are needed. The denominator for this incident is 200.

Awardees should ensure that the number of volunteers included in the denominator does not refer to the total number of potential volunteers that have been contacted to determine deployment availability or “requested” to deploy. It should only refer to the number of volunteers that the public health/medical lead has determined are needed for the response and has requested for the incident. This number may or may not coincide with how many have been “requested” to deploy via a call down or activation, and should be independent of how many are known to be available. For example, the public health/medical lead determines that 75 volunteers are needed on-scene within 3 days. She makes this request to the state volunteer coordinator, who contacts 900 individuals currently in the ESAR-VHP database. After contacting the entire database of potential volunteers, the volunteer coordinator informs the public health/medical lead that only 20 are available for deployment. The public health/medical lead agrees to take however many are available. Twenty volunteers arrive at the staging area within the 3 day timeframe. The numerator for this incident is 20. The denominator is 75. The denominator is not 20 even though the public health/medical lead “agrees” that 20 is acceptable, since this number did not reflect true need, but rather was a function of how many volunteers were available for deployment. Similarly, the denominator is not 900 since this number simply reflects how many individuals were contacted for potential deployment.

APPENDIX D: BP2 HPP REPORTING TEMPLATE

Appendix D: BP2 HPP Reporting Template

The BP2 template includes two sections: Awardee Based Program Measures and Healthcare Coalition Based Program Measures. For the Awardee Based Program Measures section, the Awardee should fill out the form once and answer the questions in the viewpoint of the Awardee. For the Healthcare Coalition Based Program Measures section, the Awardee must fill out information for all HCCs in form 4.1.1. Using a link from form 4.1.1, the Awardee should fill out forms 4.2.1, 4.3.1, 4.4.1, and 4.5.1 for each HCC.

The numbering schema is related to parts of the BP2 template. The first number related to the section. Sections 3 and 4 in the BP2 template have been designated to program measures. The second number is unique for each form within the section. The third number relates to HPP only measures (“1”) or HPP-PHEP Joint Measures (“2”) - which are not included in this document. The last numbers are unique for each question and sub-question.

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Introduction

The BP2 template below includes all of the data indicators within the two program measures of implementation guide and the healthcare developmental assessment factors. It does not include any additional data related to exercises, budget, training, ESAR-VHP, or facilities. Even though the template was created to reflect the implementation guide, the sections do not directly reflect the organization of the implementation guide. The sections are broken down based on content and level of data aggregation and include all of the program indicators and factors within each section. Section 3 includes all of the Awardee Program Indicators. Section 4 includes all of the HCC information. This includes HCC name, point of contact information, and member information. This data will be populated from the BP1 EOY template and will be available for you to modify. Section 5 includes all of the HCC program indicators and HCC developmental assessment factors. Awardees will be required to fill in Section 5 individually for each HCC identified in Section 4.

Section 3: Awardee Program Indicators

3.1.1 Medical Surge

**HHS HPP Cooperative Agreement BP2 Progress Report
Section 3: Awardee Program Indicators**

Form 3.1.1: Medical Surge (Includes the following capabilities: Health Care System Preparedness, Health Care System Recovery, Fatality Management, Medical Surge)

Performance Target: 100% by the end of the project period (BP2 data will be used to establish baselines)

Response Scale Definitions:

- “1”--Strongly Disagree--Does not meet indicator/factor to a very large extent
- “2”--Disagree--Does not meet indicator/factor to a large extent
- “3”--Moderately Disagree--Does not meet indicator/factor but making minimal progress
- “4”--Slightly Disagree--Does not meet indicator/factor but making some progress
- “5”--Neither Agree nor Disagree--Undecided
- “6”--Slightly Agree--Meets achievement of the indicator/factor with minimal progress
- “7”--Moderately Agree--Meets achievement of the indicator/factor with some progress
- “8”--Agree--Meets achievement of the indicator/factor to a large extent
- “9”--Strongly Agree --Meets achievement of the indicator/factor to a very large extent

Awardee Indicators	Response
3.1.1.1 The Awardee has posted its approved Crisis Standards of Care plan on the ASPR Communities of Interest SharePoint Site.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
3.1.1.2 The Awardee has completed mass fatality management plans that have been adopted by HCCs members.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
3.1.1.3 The Awardee’s Recovery Plan addresses how it will meet post-disaster behavioral and mental healthcare needs of communities (i.e., HCC member staff).	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}

Section 4: Healthcare Coalition Information (Populated Data)

4.1.1 Healthcare Coalition

HHS HPP Cooperative Agreement BP2 Progress Report
Section 4: Healthcare Coalition Information

Form 4.1.1: Healthcare Coalition

4.1.1.1 Name of HCC	4.1.1.2 Counties within the jurisdiction of the HCC.	4.1.1.3 Zip Codes within the jurisdiction of the HCC (separate zip codes with a ‘;’)	4.1.1.4 Name of the HCC’s POC	4.1.1.5 Street Address for the HCC’s POC	4.1.1.6 City for the HCC’s POC	4.1.1.7 State for the HCC’s POC	4.1.1.8 Zip Code for the HCC’s POC	4.1.1.9 Phone Number for the HCC’s POC	4.1.1.10 Email for the HCC’s POC	4.1.1.11 Coalition Stage of Development
250 character	Drop down of all counties in Awardee’s jurisdiction	Drop down of all zip codes in Awardee’s jurisdiction	100 character length	100 character length	100 character length	100 character length	5 character length	xxx-xxx-xxxx format	Email address—must be valid email with name@domain.com . --50 character length	Drop down {1; 2; 3; 4}

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4.2.1 Healthcare Coalition Members (linked to HCCs identified in 4.1.1)

HHS HPP Cooperative Agreement BP2 Progress Report Section 4: Healthcare Coalition Information <u>Form 4.1.1: Healthcare Coalition Members</u>				
4.2.1.1 Name of HCC			250 character length	
4.2.1.2 HCC Member Name	4.2.1.3 HCC Member Organization “Type” See below	4.2.1.4 HCC Participant NPI, if the member is an HCO	4.2.1.5 Is this a NIMS facility, if the member is an HCO? Drop down {Yes; No}	4.2.1.6 Did this member participate in an HPP-funded exercise?
250 character length	See drop down list below*	Drop down {Yes; No}	Drop down {Yes; No}	Drop down {Yes; No}
250 character length	See drop down list below*	Drop down {Yes; No}	Drop down {Yes; No}	Drop down {Yes; No}
250 character length	See drop down list below*	Drop down {Yes; No}	Drop down {Yes; No}	Drop down {Yes; No}

*Drop down list for HCC Member Type (4.2.1.3) Includes: Inpatient Hospitals; Trauma Centers; Long Term Care; Community Health Centers; OTHER Outpatient or In-Home Providers; Individual Physicians—Primary Care; Individual Physicians—Specialists; OTHER Non-Physician Specialists; Behavioral Health; Healthcare Support Suppliers; Federal Hospitals; OTHER Federal Healthcare; OTHER Federal entities; Emergency Medical Services (EMS); Public Health; Public Safety; Emergency Management; Medical Reserve Corps; Academia; Airport / Transportation; Communication Groups; “Grass root”/ Volunteer/ non-profit advocacy or Service Organizations; Trade Organizations; Other State and Local; Private Business

Section 5: Healthcare Coalition Program Indicators and Factors (Information must be entered for each HCC listed in 4.1.1)

5.1.1 Medical Surge

HHS HPP Cooperative Agreement BP2 Progress Report

Section 5: Healthcare Coalition Program Indicators and Factors

Form 5.1.1: Medical Surge (Includes the following capabilities: Health Care System Preparedness, Health Care System Recovery, Fatality Management, Medical Surge)

Performance Target: 100% achievement of each of the indicators by the end of the current project period (BP2 data will be used to establish baselines).

Response Scale Definitions:

- “1”--Strongly Disagree--Does not meet indicator/factor to a very large extent
- “2”--Disagree--Does not meet indicator/factor to a large extent
- “3”--Moderately Disagree--Does not meet indicator/factor but making minimal progress
- “4”--Slightly Disagree--Does not meet indicator/factor but making some progress
- “5”--Neither Agree nor Disagree--Undecided
- “6”--Slightly Agree--Meets achievement of the indicator/factor with minimal progress
- “7”--Moderately Agree--Meets achievement of the indicator/factor with some progress
- “8”--Agree--Meets achievement of the indicator/factor to a large extent
- “9”--Strongly Agree --Meets achievement of the indicator/factor to a very large extent

HCC Indicators	Response for Each HCC
5.1.1.1 The HCC has developed a strategic plan with participation from its membership.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.1.1.2 The HCC has demonstrated, through exercise or real incident, its ability to both deliver appropriate levels of care to all patients, as well as to provide no less than 20% immediate availability of staffed members' beds, within 4 hours of a disaster.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.1.1.3 The HCC has demonstrated the ability to do the following during an incident, exercise or event:	
5.1.1.3.1 Monitor patient acuity and staffed bed availability in real-time	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.1.1.3.2 Off-Load Patients	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.1.1.3.3 On-Load Patients	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.1.1.3.4 Track and document patient movement	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.1.1.4 The HCC has a mechanism to obtain feedback to help resolve member conflicts that have the potential to affect the overall performance of the HCC.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}

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5.2.1 Continuity of Healthcare Operations

**HHS HPP Cooperative Agreement BP2 Progress Report
Section 5: Healthcare Coalition Program Indicators and Factors**

Form 5.2.1: Continuity of Healthcare Operations (Includes the following capabilities: Health Care System Preparedness, Health Care System Recovery, Emergency Operations Coordination, Information Sharing, Responder Safety and Health)

Performance Target: 100% achievement of each of the indicators by the end of the current project period (BP2 data will be used to establish baselines).

Response Scale Definitions:

- “1”--Strongly Disagree--Does not meet indicator/factor to a very large extent
- “2”--Disagree--Does not meet indicator/factor to a large extent
- “3”--Moderately Disagree--Does not meet indicator/factor but making minimal progress
- “4”--Slightly Disagree--Does not meet indicator/factor but making some progress
- “5”--Neither Agree nor Disagree--Undecided
- “6”--Slightly Agree--Meets achievement of the indicator/factor with minimal progress
- “7”--Moderately Agree--Meets achievement of the indicator/factor with some progress
- “8”--Agree--Meets achievement of the indicator/factor to a large extent
- “9”--Strongly Agree --Meets achievement of the indicator/factor to a very large extent

HCC Indicators	Response for Each HCC
5.2.1.1 The HCC has access to a risk-based HVA which prioritizes the risks to its members.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.2.1.2 The HCC has conducted a gap analysis to identify resource shortfalls during an event and is implementing plans to close those resource gaps.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.2.1.3 The HCC has a process to enhance its member’s situational awareness to support activation of immediate bed availability through continuous monitoring.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.2.1.4 The HCC has demonstrated the capability of a redundant means of communication for achieving and sustaining situational awareness.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.2.1.5 The HCC has tested its ability to address its member’s healthcare workforce safety needs through training and resources.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.2.1.6 The HCC has prioritized and integrated essential healthcare recovery needs in its Emergency Operation Plan.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.2.1.7 The HCC has achieved its exercise objectives during tests of state or regional healthcare disaster plans.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}

5.3.1 Healthcare Coalition Developmental Assessment

HHS HPP Cooperative Agreement BP2 Progress Report
Section 5: Healthcare Coalition Program Indicators and Factors
Form 4.5.1: Healthcare Coalition Developmental Assessment

Performance Target: 100% achievement of each of the factors by the end of the current project period (BP2 data will be used to establish baselines).

Response Scale Definitions:

- **“1”--Strongly Disagree--Does not meet indicator/factor to a very large extent**
- **“2”--Disagree--Does not meet indicator/factor to a large extent**
- **“3”--Moderately Disagree--Does not meet indicator/factor but making minimal progress**
- **“4”--Slightly Disagree--Does not meet indicator/factor but making some progress**
- **“5”--Neither Agree nor Disagree--Undecided**
- **“6”--Slightly Agree--Meets achievement of the indicator/factor with minimal progress**
- **“7”--Moderately Agree--Meets achievement of the indicator/factor with some progress**
- **“8”--Agree--Meets achievement of the indicator/factor to a large extent**
- **“9”--Strongly Agree --Meets achievement of the indicator/factor to a very large extent**

HCC Factors	Response for Each HCC
5.3.1.1 The HCC has established a formal self-governance structure, including leadership roles.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.2 The HCC has multi-disciplinary healthcare organization membership.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.3 The HCC has established its geographical boundaries.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.4 The HCC has a formalized process for resource and information management with its membership.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.5 The HCC is integrated into the healthcare delivery system processes for their jurisdiction (e.g., EMS, referral patterns, etc).	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.6 The HCC has established roles and responsibilities.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.7 The HCC has conducted an assessment of each of its member’s healthcare delivery capacities and capabilities.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.8 The HCC has engaged its member’s healthcare delivery system executives.	Drop down {1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}

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	Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.10 The HCC has an organizational structure to develop operational plans.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.11 The HCC has an incident management structure (e.g., MACC, ICS) to coordinate actions to achieve incident objectives during response.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.12 The HCC demonstrates an ability to enhance situational awareness for its members during an event	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.13 The HCC demonstrates an ability to identify the needs of at-risk individuals (e.g., electrically dependent home-bound patients, chronically ill) during response.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.14 The HCC demonstrates resource support and coordination among its member organizations under the time urgency, uncertainty, and logistical constraints of emergency response.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.15 The HCC members demonstrate an evacuation capability with functional patient tracking mechanisms.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.16 The HCC utilizes an operational framework and set of indicators to transition from crisis standards of care, to contingency, and ultimately back to conventional standards of care.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.17 The HCC incorporates post-incident health services recovery into planning and response	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.18 The HCC ensures quality improvement through exercises/events and corrective action plans.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.19 The HCC has an established a method (e.g., social network analysis) for incorporating feedback from its members to support group cohesion and improve processes.	Drop down{1-Strongly Disagree; 2-Disagree; 3-Moderately Disagree; 4-Slightly Disagree; 5-Neither Agree, nor Disagree; 6-Slightly Agree; 7-Moderately Agree; 8-Agree; 9-Strongly Agree}
5.3.1.20 Within the past year, what is your HCC’s MOST IMPORTANT accomplishment related to emergency preparedness, response, recovery, and/or mitigation? (Choose one.)	See drop down list below*
5.3.1.20.1 Other Specified	100 characters

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*Drop down for the question 4.2.1.20 (Within the past year, what is your HCC's MOST IMPORTANT accomplishment related to emergency preparedness, response recovery, and or mitigation?) includes: Enhanced connectivity with Emergency Operations Center (EOC) and Emergency Operations Plan (EOP); Improved leveraging of disparate funding streams; Increased ability to leverage resources and allocate scarce resources between HCC members; Increased availability of emergency response and recovery services for the jurisdiction; bridging response and recovery; Increased educational training opportunities for healthcare organizations; Increased emergency management skills among HCC organizations; Increased emergency preparedness of the jurisdiction targeted or served by the HCC, including at-risk populations; Increased exercising and readiness planning among HCC members (e.g., drills and exercises); Increased formal agreements for resource and information exchange; Increased information sharing between HCC members through integrated communication; Increased or enhanced sources of data needed for emergency preparedness and response; Increased volunteerism (e.g., Emergency System for Advance Registration of Volunteer Health Professionals); Other (Please describe).