

2017 Health Care Preparedness and Response Capabilities

The U.S. Department of Health and Human Services (HHS), Office of the Assistant Secretary for Preparedness and Response (ASPR) is seeking comments and feedback on the Draft 2017 Health Care Preparedness and Response Capabilities.

Provide your comments and feedback by **August 12, 2016** using [this Excel spreadsheet](#) and email it to Missy Hyatt at Melissa.Hyatt@hhs.gov.

Note: HPP is also hosting conference calls for HPP partners and their members to gather stakeholder feedback.

Call Option #1

Date and Time: Tuesday August 9 | 11:00 AM – 12:00 PM ET
Call-in information: 800-857-9811 | Conference ID: 2463818

Call Option #2

Date and Time: Tuesday August 9 | 1:00 PM – 2:00 PM ET
Call-in information: 888-989-8174 | Conference ID: 8505466



2017 Health Care Preparedness and Response Capabilities

Pre-Decisional Draft
July 21, 2016



1	Table of Contents	
2	Introduction	5
3	Purpose of the 2017 Health Care Preparedness and Response Capabilities.....	6
4	The Four Capabilities.....	6
5	The Value of Health Care Coalitions in Developing Capabilities.....	7
6	Using the Capabilities Document.....	7
7	Capability 1. Foundation for Health Care and Medical Readiness	8
8	Objective 1: Establish a Health Care Coalition.....	8
9	Activity 1. Define Regional Boundaries.....	8
10	Activity 2. Identify Health Care Coalition Members	9
11	Activity 3. Establish Health Care Coalition Governance and Structure	10
12	Objective 2: Identify Risk and Needs	10
13	Activity 1. Assess Hazard Vulnerabilities and Risks.....	11
14	Activity 2. Assess Regional Health Care Resources.....	11
15	Activity 3. Identify and Prioritize Resource Gaps.....	12
16	Activity 4. Assess Community Planning for Children, Pregnant Women, Seniors, and Individuals with 17 Access and Functional Needs, Including People with Disabilities and Others with Unique Needs....	12
18	Activity 5. Assess and Identify Regulatory Compliance Requirements.....	13
19	Objective 3: Develop an HCC Preparedness Workplan.....	14
20	Objective 4: Train and Prepare the Health Care and Medical Workforce	15
21	Activity 1. Ensure Role-Appropriate National Incident Management System Training.....	15
22	Activity 2. Educate and Train on Identified Preparedness and Response Gaps	16
23	Activity 3. Develop a Coordinated Exercise Plan with HCC Members and Other Response Entities .	16
24	Activity 4. Align Exercises with Federal Standards and Facility Regulatory Requirements	17
25	Activity 5. Evaluate Exercises and Responses to Emergencies	17
26	Activity 6. Share Leading Practices and Lessons Learned	17
27	Objective 5: Ensure Preparedness is Sustainable	18
28	Activity 1. Promote the Value of Health Care and Medical Readiness.....	18
29	Activity 2. Engage Health Care Executives	18
30	Activity 3. Engage Clinicians.....	19
31	Activity 4. Engage Community Leaders.....	19
32	Activity 5. Ensure Sustainability of Health Care Coalitions	19
33	Capability 2. Health Care and Medical Response and Recovery Coordination	21

34 Objective 1: Develop Coordinated Response Plans..... 21

35 Activity 1. Develop Health Care Organization Emergency Operations Plan 21

36 Activity 2. Develop a Health Care Coalition Response Plan 22

37 Objective 2: Develop Information Sharing Processes and Platforms 23

38 Activity 1. Develop Information Sharing Procedures..... 23

39 Activity 2. Identify Information Access and Data Protection Procedures..... 24

40 Activity 3. Develop and Maintain Communications Systems and Platforms..... 24

41 Objective 3: Coordinate Response Strategy, Resources, and Communications..... 24

42 Activity 1. Identify and Coordinate Resource Needs during an Emergency 25

43 Activity 2. Coordinate Incident Action Planning During an Emergency..... 25

44 Activity 3. Communicate with Health Care Providers and Health Care Organizations during an

45 Emergency..... 25

46 Activity 4. Communicate with the Public during an Emergency..... 26

47 Objective 4: Ensure Health Care System Recovery..... 26

48 Capability 3. Continuity of Health Care Service Delivery 28

49 Objective 1: Identify Essential Functions for Health Care Delivery 28

50 Objective 2: Plan for Continuity of Operations..... 28

51 Activity 1. Identify Risks and Prioritize Mitigation Strategies 29

52 Activity 2. Develop Health Care Organization COOP Plans..... 29

53 Activity 3. Develop Health Care Coalition COOP Plans 29

54 Activity 4. Continue Administrative and Finance Functions 30

55 Activity 5. Plan for Health Care Organization Sheltering-in-Place 30

56 Objective 3: Maintain Access to Non-Personnel Resources during an Event..... 30

57 Activity 1. Assess Supply Chain Integrity..... 30

58 Activity 2. Assess and Address Pharmaceutical Requirements..... 31

59 Objective 4: Develop Strategies to Protect Health Care Cyber Networks..... 32

60 Objective 5: Protect Responders’ Safety and Health..... 33

61 Activity 1. Distribute, Train, and Exercise on Personal Protective Equipment 33

62 Activity 2. Develop Health Care Worker Resilience 34

63 Objective 6: Plan for Health Care Evacuation and Relocation..... 34

64 Activity 1: Develop Health Care Organization Evacuation and Relocation Plans 34

65 Activity 2. Develop Plans for Evacuation Transportation 35

66 Capability 4. Medical Surge..... 36

67	Objective 1: Plan for a Medical Surge	37
68	Activity 1. Incorporate Medical Surge Planning into a Health Care Organization’s Emergency	
69	Operations Plan (EOP).....	37
70	Activity 2. Incorporate Medical Surge into an Emergency Medical Services EOP	37
71	Activity 3. Incorporate Medical Surge into the HCC Response Plan	38
72	Objective 2: Respond to a Medical Surge	39
73	Activity 1. Implement Emergency Department and Inpatient Medical Surge Response	39
74	Activity 2. Implement Out of Hospital Medical Surge Response	40
75	Activity 3. Develop Alternate Care Systems.....	40
76	Activity 4. Implement Specialty Care during a Medical Surge Response.....	41
77	Activity 5. Provide Behavioral Health Care during a Medical Surge Response.....	43
78	Activity 6. Manage Mass Fatalities.....	43
79	Activity 7. Distribute Medical Countermeasures during Medical Surge Response	44
80	Objective 3: Exercise Medical Surge Response.....	44
81	Glossary.....	45
82	Appendix 1: The <i>2017 Health Care Preparedness and Response Capabilities</i> Revision Process	56
83	Appendix 2: Health Care Preparedness and Response Capabilities and Public Health Preparedness	
84	Capabilities Areas for Alignment	57
85		
86		

87 Introduction

88 The U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for
89 Preparedness and Response (ASPR) leads the country in preparing for, responding to, and recovering
90 from the adverse health effects of emergencies and disasters by supporting our communities' ability to
91 withstand adversity, strengthening our health and response systems, and enhancing national health
92 security. ASPR's Hospital Preparedness Program (HPP) enables the health care system to save lives
93 during emergencies that exceed the day-to-day capacity of the health and emergency response systems.
94 HPP is the only source of federal funding that promotes a sustained national focus to improve patient
95 outcomes, minimize the need for supplemental state and federal resources during emergencies, and
96 enable rapid recovery. HPP prepares the health care delivery system to save lives through the
97 development of [health care coalitions \(HCCs\)](#) that incentivize diverse, and often competitive, health care
98 organizations with differing priorities and objectives to work together.

99 ASPR developed the *2017 Health Care Preparedness and Response Capabilities* to describe what the
100 health care delivery system, including HCCs, hospitals, and emergency medical services, have to do to
101 effectively prepare for and respond to emergencies that impact the public's health. The jurisdiction,
102 including public health and emergency management, provide key support to the health care delivery
103 system.

104 Individual health care organizations, HCCs, and jurisdictions that develop the *2017 Health Care*
105 *Preparedness and Response Capabilities* will

- 106 • Help patients receive the care they need at the right place and at the right time,
- 107 • Decrease deaths, injuries, and illnesses resulting from emergencies, and
- 108 • Promote health care system resilience in the aftermath of an emergency.

109 The intended audience for this document is any health care delivery system entity that is or could be a
110 member of an HCC, including the following entities

- 111 • Hospitals
- 112 • Emergency medical services
- 113 • Emergency management
- 114 • Public health
- 115 • Behavioral health services and entities
- 116 • Community and tribal health centers
- 117 • Dialysis centers
- 118 • Federal facilities (e.g., Veterans Health Administration hospitals, Indian Health Services facilities,
119 Department of Defense health facilities)
- 120 • Home health agencies
- 121 • Local public safety agencies (e.g., law enforcement and fire services)
- 122 • Non-governmental organizations (e.g., American Red Cross, voluntary organizations active in
123 disaster, amateur radio operators, etc.)
- 124 • Primary care providers, including pediatric providers
- 125 • Private entities associated with health care (e.g., hospital associations)
- 126 • Schools and universities

- 127 • Skilled nursing, nursing, and long-term care facilities
- 128 • Specialty service providers (e.g., woman’s health, stand-alone surgery centers)
- 129 • Support service providers (e.g., laboratories, pharmacies, radiology, blood banks, poison control
- 130 centers)
- 131 • Urgent care centers and free standing emergency room

132 Purpose of the 2017 Health Care Preparedness and Response

133 Capabilities

134 The purpose of the *2017 Health Care Preparedness and Response Capabilities* is to outline the high-level
135 objectives the nation’s health care delivery system, including HCCs and individual health care entities,
136 should undertake to prepare for, respond to, and recover from emergencies. These capabilities illustrate
137 the range of preparedness and response activities that, if conducted, represent the ideal state of
138 readiness in the United States. These capabilities may not be achieved solely with the funding provided
139 through the HPP cooperative agreement. ASPR will present clear expectations, priorities, and measures
140 for HPP awardees as well as HPP-funded HCCs and health care organizations in the HPP funding
141 opportunity announcement for the five-year project period that begins in 2017.

142 The Four Capabilities

143 The four Health Care Preparedness and Response Capabilities include the following:

144 **Capability 1: Foundation for Health Care and Medical Readiness**

145 Goal of Capability 1: The community has a sustainable HCC—comprised of members with strong
146 relationships—that can identify hazards and risks and prioritize and address gaps through
147 planning, training, exercising, and acquiring resources.

148 **Capability 2: Health Care and Medical Response and Recovery Coordination**

149 Goal for Capability 2: Health care organizations, HCCs, and their jurisdictions collaborate to
150 share and analyze information, manage resources, and coordinate strategies to deliver [acute](#)
151 [medical care](#) to all populations during emergencies and planned events. Simultaneous response
152 and recovery operations result in a return to normal or improved operations.

153 **Capability 3: Continuity of Health Care Service Delivery**

154 Goal for Capability 3: Health care organizations, with support from HCCs, provide uninterrupted
155 medical care to all populations in the face of damaged or disabled health care infrastructure.
156 Health care workers are well-trained, well-educated, and well-equipped to care for patients
157 during emergencies.

158 **Capability 4: Medical Surge**

159 Goal for Capability 4: Health care organizations—including hospitals, EMS, and out of hospital
160 providers—deliver timely and efficient care to their patients even when the demand for health
161 care services exceeds available supply. The HCC coordinates information and all available
162 resources for its members to maintain conventional surge response. When an emergency
163 overwhelms the HCC’s collective resources, the HCC facilitates the health care system’s

164 transition to contingency and crisis surge response and its return to conventional standards of
165 care.

166 These four capabilities were developed based on the 2012 *Healthcare Preparedness Capabilities:
167 National Guidance for Healthcare System Preparedness*. See [appendix 1](#) for more details on the process
168 ASPR followed to revise the capabilities.

169 The Value of Health Care Coalitions in Developing Capabilities

170 HCCs play a critical role in developing health care delivery system preparedness and response
171 capabilities. HCCs serve as multi-agency coordinating groups that support and integrate with [Emergency
172 Support Function-8 \(ESF-8\)](#) activities. HCCs coordinate activities among health care organizations—such
173 as hospitals and emergency medical services (EMS)—emergency management, public health, and other
174 health care members and stakeholders. [HCC members](#) actively contribute to HCC strategic planning,
175 operational planning and response, information sharing, and resource coordination and management.
176 As a result, HCCs collaborate to ensure that each member has the necessary medical equipment and
177 supplies, real-time information, communication systems, and trained health care personnel to respond
178 to emergencies and planned events.

179 The values of participating in an HCC are not limited to emergencies—day-to-day benefits may include

- 180 • meeting regulatory and accreditation requirements,
- 181 • enhancing purchasing power,
- 182 • accessing clinical and non-clinical expertise, and
- 183 • improving risk profile.

184 Using the Capabilities Document

185 The *2017 Health Care Preparedness and Response Capabilities* are organized into four sections—one for
186 each of the capabilities. Each capability has a goal and a set of objectives with associated activities.

- 187 • Goal: The outcome of developing the capability
- 188 • Objectives: Overarching components of the capabilities that, when completed, help achieve the
189 goal
- 190 • Activities: Tasks critical for achieving an objective

191 The capabilities are a high-level overview of the objectives and activities the nation’s health care
192 delivery system, including HCCs and individual health care entities, should undertake to prepare for,
193 respond to, and recover from emergencies. ASPR encourages jurisdictions, HCCs, and health care
194 entities to use ASPR’s Technical Resources, Assistance Center, and Information Exchange (TRACIE)¹ to
195 receive assistance and resources for developing the capabilities.

¹ Technical Resources, Assistance Center, and Information Exchange (TRACIE). HHS ASPR. Web. 20 July 2016.
<<https://asprtracie.hhs.gov/>>.

196 Capability 1. Foundation for Health Care and Medical 197 Readiness

198 The foundation for health care and medical readiness enables the health care delivery system and other
199 organizations that contribute to responses to coordinate efforts before, during, and after emergencies;
200 continue operations; and appropriately surge as necessary. This is accomplished through the
201 development of health care coalitions (HCCs) that incentivize diverse and often competitive health care
202 organizations with differing priorities and objectives to work together. HCCs collaborate to ensure that
203 each member has the necessary medical equipment and supplies, real-time information, communication
204 systems, and trained health care personnel to respond to an emergency. These efforts help each patient
205 receive the right care at the right place at the right time. To accomplish this, HCCs must coordinate
206 among *core* members, including health care entities—such as hospitals and emergency medical services
207 (EMS)—emergency management, and public health. Engaging health care members and other
208 stakeholders is also critical to health care delivery system readiness and successful delivery of care.

209 **Goal for Capability 1: Foundation for Health Care and Medical Readiness**

210 The community has a sustainable HCC—comprised of members with strong relationships—that can
211 identify hazards and risks, and prioritize and address gaps through planning, training, exercising, and
212 acquiring resources.

213 **Objective 1: Establish a Health Care Coalition**

214 Key HCC priorities include coordinating with members for

- 215 • Strategic planning,
- 216 • Operational planning and response,
- 217 • Information sharing, and
- 218 • Resource requests and management.

219 HCCs serve as multi-agency coordination groups that support and integrate with Emergency Support
220 Function Public Health and Medical Services-8 (ESF-8)² activities. This integration with ESF-8 may vary
221 depending on the community. Please note that details on ESF-8 and situational awareness are included
222 in Capability 2 – Health Care and Medical Response and Recovery Coordination.

223 **Activity 1. Define Regional Boundaries**

224 HCC boundaries should be defined based on daily health care delivery patterns—including [fully](#)
225 [integrated corporate health systems](#)—and entities within a defined geographic region, such as
226 independent organizations and federal health care entities. Defined boundaries should encompass more
227 than one of each [member type](#) (e.g., hospitals and EMS) to enable coordination and enhance the HCC's
228 ability to share the load during an emergency. HCC boundaries may span several jurisdictional or

²*Emergency Support Function #8 – Public Health and Medical Services Annex*. FEMA. Jan. 2008. Web. 18 July 2016.
<<https://www.fema.gov/media-library-data/20130726-1825-25045-8027/emergency-support-function-8-public-health-medical-services-annex-2008.pdf>>.

229 political boundaries as emergencies do not respect borders. HCCs should coordinate with all ESF-8 lead
230 agencies within their boundaries.

231 Outlined below are general principles when defining HCC boundaries:

- 232 • HCCs should include enough members to ensure adequate resources while maintaining span of
233 control. At the same time, having members that are geographically too far apart would make
234 patient distribution and resource coordination impractical.
- 235 • Existing regional service areas (e.g., EMS, trauma, or emergency management regions) may be
236 valuable to consider when establishing HCC boundaries as they define common and known
237 health care delivery and emergency response activities.
- 238 • As an HCC is established, it may form around existing “hub and spoke” referral patterns in the
239 area, including a fully integrated corporate health system, while taking care not to exclude
240 independent facilities in the area.

241 Activity 2. Identify Health Care Coalition Members

242 An HCC member is defined as an entity within the defined boundaries of the HCC that actively
243 contributes to HCC strategic planning, operational planning and response, information sharing, and
244 resource coordination and management. In cases where there are multiple entities of each HCC member
245 type, there may be a subcommittee structure that establishes a lead entity that communicates common
246 interests to the HCC. HCC membership does not begin or end with attending meetings.

247 HCCs should include a diverse membership to ensure a successful [whole community](#)³ response. If
248 segments of the community are unprepared or not engaged, there is greater risk that the acute health
249 care delivery system will be further burdened. As such, HCCs should liaise with the broader response
250 community on a regular basis.

- 251 • Core HCC members include the following:
 - 252 ○ Hospitals (all acute care hospitals within an HCC’s boundaries)
 - 253 ○ EMS
 - 254 ○ Emergency management
 - 255 ○ Public health
- 256 • Examples of additional HCC members include the following:
 - 257 ○ Behavioral health services and entities
 - 258 ○ Community and tribal health centers
 - 259 ○ Dialysis centers
 - 260 ○ Federal facilities (e.g., Veterans Health Administration hospitals, Indian Health Services
261 facilities, Department of Defense health facilities)
 - 262 ○ Home health agencies
 - 263 ○ Local public safety agencies (e.g., law enforcement and fire services)
 - 264 ○ Skilled nursing, nursing, and long-term care facilities
 - 265 ○ Non-governmental organizations (e.g., American Red Cross, voluntary organizations
266 active in emergency responses, amateur radio operators, etc.)
 - 267 ○ Primary care providers, including pediatric providers

³Whole Community. FEMA. 10 June 2016. Web. 19 July 2016. <<https://www.fema.gov/whole-community>>.

- 268 ○ Private entities associated with health care (e.g., hospital associations)
- 269 ○ Schools and universities, including academic medical centers
- 270 ○ Specialty service providers (e.g., women’s health, stand-alone surgery centers)
- 271 ○ Support service providers (e.g., laboratories, pharmacies, radiology, blood banks, poison
- 272 control centers)
- 273 ○ Urgent care centers and free standing emergency rooms

274 Specialty patient referral centers (e.g., pediatric, burn, and trauma centers) should be formal members
275 of an HCC within whose boundaries they are located. They also serve as referral centers to other HCCs
276 where that specialty care does not exist. Therefore, they should support other HCC’s planning and
277 exercise activities.

278 Urban and rural HCCs may have different membership compositions based on population characteristics
279 and hazards. For example, in urban areas, dialysis centers and skilled nursing, nursing, and long-term
280 care facilities’ continuity of operations have been significant during recent emergencies; whereas in
281 rural areas, tribal or support services may play a more prominent role in the HCC.

282 Activity 3. Establish Health Care Coalition Governance and Structure

283 The primary purpose of establishing an HCC governance body and structure is to identify how HCCs
284 conduct activities related to health care delivery system readiness coordination. The HCC should
285 establish a governance body that is adopted by its members, reviewed regularly, and includes a process
286 for making changes. The governance body should

- 287 • Represent HCC membership,
- 288 • Establish an organizational structure that includes executive and general committees, election
289 or appointment processes, and any necessary administrative rules and operational functions
290 (e.g., bylaws) to support HCC activities,
- 291 • Define member guidelines for participation and engagement that consider each member and
292 region’s geography, resources, and other factors, and
- 293 • Develop a governance document that defines HCC integration within existing local, state, and
294 member-specific [incident management structures](#) and specifies roles—such as a primary point
295 of contact (POC)—that serve as the liaison to ESF-8 and [Emergency Operations Centers \(EOCs\)](#)
296 during an emergency.

297 Objective 2: Identify Risk and Needs

298 HCCs should plan based on the risks and needs for their defined regions. By conducting assessments—or
299 using and modifying data from existing assessments for health care readiness purposes—HCCs can
300 collect information on the resources and gaps of the larger surrounding area, individuals that may
301 require additional assistance before, during, and after an emergency, and applicable regulatory and
302 compliance issues. Upon identification of risks and needs, the HCC and its members may use the
303 information collected to inform activities and prioritize ways to close or mitigate preparedness and
304 response gaps in the region.

305 Activity 1. Assess Hazard Vulnerabilities and Risks

306 A [hazard vulnerability analysis \(HVA\)](#) is a systematic approach to identifying hazards or risks that are
307 most likely to have an impact on the demand for health care services or the health care delivery
308 system’s ability to provide these services. This assessment may also include estimates of potential
309 casualties and fatalities based on the identified risks. HCCs and their members may use a variety of HVA
310 tools⁴ that are most useful to their unique facility and jurisdictional needs.

311 Outlined below are general principles when assessing hazard vulnerabilities and risks:

- 312 • The HVA process should be coordinated with the state and local emergency management [Threat](#)
313 [and Hazard Identification and Risk Assessment \(THIRA\)](#)⁵ and any public health hazard
314 assessments.
- 315 • Health care facilities and entities should provide input into the development of the regional HVA
316 based on their facilities’ or organizations’ HVAs.
- 317 • The assessment components should include regional characteristics, such as risks for natural
318 disasters or terrorist attacks, demographics, geography, and critical infrastructure.
- 319 • The HCC should regularly review and share the HVA with all members (e.g., annually).

320 Activity 2. Assess Regional Health Care Resources

321 HCC members should perform an assessment to identify health care resources and services that are vital
322 for continuity of health care delivery during an emergency. HCCs should then collect information to
323 identify resources within their areas that could be coordinated and shared. This information is critical to
324 uncovering resource vulnerabilities relative to the HVA that could impede the delivery of acute medical
325 care and health care services during emergencies.

326 The resource assessment will be different for various HCC member types. These resources will include,
327 but not be limited to, the following:

- 328 • Critical infrastructure supporting health care (e.g., utilities, hospital infrastructure, roadways,
329 etc.)
- 330 • Hospital services – inpatient, outpatient, emergency department, and support services (see
331 Capability 4 – Medical Surge for further details)
- 332 • Ambulatory health care service delivery
- 333 • Health care workforce
- 334 • Health care supply chain
- 335 • Medical and non-medical transportation system
- 336 • Health care information systems and communications (facility or health system)
- 337 • Electronic platforms for HCC information sharing and coordination activities and appropriate
338 redundancies
- 339 • Caches and community emergency assets

⁴ ASPR TRACIE *Evaluation of Hazard Vulnerability Assessment Tools*. 2016. Web. 19 July 2016.
<<https://asprtracie.hhs.gov/documents/tracie-evaluation-of-HVA-tools.pdf>>

⁵ *Threat and Hazard Identification and Risk Assessment*. FEMA. March 2015. Web. 19 July 2016.
<<https://www.fema.gov/threat-and-hazard-identification-and-risk-assessment>>

- 340 • Private sector assets that can support emergency operations

341 Activity 3. Identify and Prioritize Resource Gaps

342 A comparison between available resources and current HVA(s) will identify gaps and help prioritize HCC
343 and HCC member activities. Gaps may include lack of or inadequate plans or protocols, staff, equipment
344 and supplies, skills and expertise, services, or any other resources required to respond. Just as the
345 resource assessment will be different for the different member types, so will the efforts to prioritize
346 identified gaps. Gaps may be addressed through coordination, planning, training, or acquisition of
347 resources. HCC members should prioritize gaps based on consensus agreement and then establish
348 strategies and tactics to close the gaps. During the prioritization process, it is understood that certain
349 response activities may require external support or intervention as emergencies may exceed the
350 preparedness thresholds the HCC, its members, and the community have deemed reasonable. Planning
351 to access and integrate external partners and resources is a key part of gap closure.

352 Activity 4. Assess Community Planning for Children, Pregnant Women, 353 Seniors, and Individuals with Access and Functional Needs, Including 354 People with Disabilities and Others with Unique Needs

355 Certain individuals may require additional assistance before, during, and after an emergency. HCCs and
356 their members should conduct inclusive planning for the whole community, including children, pregnant
357 women, seniors, and individuals with [access and functional needs](#), including people with disabilities and
358 others with unique needs.

359 HCCs should conducting the following:

- 360 • Support public health with situational awareness and information technology tools—such as the
361 Department of Health and Human Services emPOWER map⁶—that can help to identify children,
362 seniors, pregnant women, people with disabilities, and others with unique needs
- 363 • Support public health in developing or augmenting existing response plans for these populations
- 364 • Identify potential health care system support to these populations (pre- and post-event) that
365 can prevent stress on hospitals during an emergency
- 366 • Assess needs and contribute to medical planning that may enable individuals to remain in their
367 residences. When that is not possible, support the designated ESF-6 lead agency for [Mass Care](#)
368 with planning for medical care at shelter sites and the designation of medical care sites per ESF-
369 8.⁷)
- 370 • Assess transport needs in compliance with the [ESF-1 – Transportation annex](#)⁸)
- 371 • Assess specific treatment and access to care needs (e.g., partnering with regional dialysis
372 networks to ensure integration with their HCC response plans)

⁶ *HHS emPOWER Map*. U.S. Department of Health & Human Services Office of the Assistant Secretary for Preparedness and Response. 2016. Web. 19 July 2016. <<http://www.phe.gov/empowermap/Pages/default.aspx>>.

⁷ *Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex*. FEMA. Jan. 2008. Web. 18 July 2016. <<https://www.fema.gov/pdf/emergency/nrf/nrf-esf-06.pdf>>.

⁸ *Emergency Support Function #1 – Transportation Annex*. FEMA. May 2013. Web. 18 July 2016. https://www.fema.gov/media-library-data/20130726-1913-25045-2201/final_esf_1_transportation_20130501.pdf

373 Activity 5. Assess and Identify Regulatory Compliance Requirements

374 Participation in HCCs should help members meet regulations and preparedness requirements, such as
375 exercise and evacuation planning. Additionally, HCCs should identify regulations that may need to be
376 adjusted or suspended during an emergency response. Regulations may have an unintended negative
377 impact on health care delivery during a response, particularly in crisis situations, or offer legal
378 protections to providers or provide a different reimbursement mechanism for facilities during
379 emergencies. The state or jurisdiction should identify how federal or state emergency declarations or
380 other state, local, or federal level actions can support emergency operations.

381 HCCs should conducting the following:

- 382 • Identify and document regulatory and accreditation requirements that impact emergency
383 medical care, including
 - 384 ○ Centers for Medicare and Medicaid Services (CMS) conditions of participation,⁹
 - 385 ○ [Health Insurance Portability and Accountability Act \(HIPAA\)](#) requirements,¹⁰
 - 386 ○ Emergency Medical Treatment & Labor Act (EMTALA) requirements,¹¹
 - 387 ○ [Joint Commission](#)¹², DNV GL – Healthcare¹³, or other accrediting organizations
388 requirements,
 - 389 ○ Federal disaster declaration processes^{14,15} and protections for federal responders,
 - 390 ○ Environmental Protection Agency (EPA) requirements,¹⁶ and
 - 391 ○ Occupational Safety and Health Administration (OSHA) requirements¹⁷ (e.g., general
392 duty clause, blood-borne pathogen standard).
- 393 • Identify and document state or local regulations that impact emergency medical care, including
394 any that may require modification, such as
 - 395 ○ State or local staffing requirements,
 - 396 ○ State-specific health care practitioner licensure, practice standards, reciprocity, and
397 scope of practice limitations,

⁹*Medicare Program; Clarifying Policies Related to the Responsibilities of Medicare-Participating Hospitals in Treating Individuals with Emergency Medical Conditions*. Department of Health and Human Services Centers for Medicare & Medicaid Services. 42 CFR Parts 413, 482, and 389. Web. 19 July 2016.

<https://www.cms.gov/Regulations-and-Guidance/Legislation/EMTALA/Downloads/CMS-1063-F.pdf>.

¹⁰*Emergency Situations: Preparedness, Planning, and Response*. U.S. Department of Health & Human Services. 2016. Web. 19 July 2016. <http://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/index.html>.

¹¹*Emergency Medical Treatment & Labor Act (EMTALA)*. Centers for Medicare & Medicaid Services. 2012. Web. 19 July 2016. <https://www.cms.gov/Regulations-and-Guidance/Legislation/EMTALA/>.

¹²*Emergency Management Resources*. The Joint Commission. 2016. Web. 19 July 2016. https://www.jointcommission.org/emergency_management.aspx.

¹³DNV.GL 2016. Web. 19 July 2016. <http://dnvglhealthcare.com/>.

¹⁴*The Disaster Declaration Process*. FEMA. 3 June 2016. Web. 19 July 2016. <https://www.fema.gov/disaster-declaration-process>.

¹⁵*Legal Authority of the Secretary*. U.S. Department of Health & Human Services Office of the Assistant Secretary for Preparedness and Response. 2016. Web. 19 July 2016. <http://www.phe.gov/preparedness/support/secauthority/Pages/default.aspx>.

¹⁶EPA laws and regulations. EPA. June 2016. Web. 19 July 2016. <https://www.epa.gov/laws-regulations>.

¹⁷OSHA laws and regulations. OSHA. Web. 19 July 2016. <https://www.osha.gov/law-regs.html>.

- 398 ○ Legal authorization to allocate personnel, resources, equipment, and supplies between
- 399 health care entities,
- 400 ○ State-specific regulations and statutes, and local ordinances guiding health care delivery
- 401 and response,
- 402 ○ Legal issues related to isolation and quarantine, and
- 403 ○ Available liability protections for responders.
- 404 ● Identify and document the process and information required to request necessary waivers and
- 405 suspension of regulations, including
 - 406 ○ Processes for emergency resource acquisition (this may require coordination with the
 - 407 local, state, or federal government),
 - 408 ○ Scope and breadth of emergency declarations and ensuing powers to respond,
 - 409 ○ Special waiver processes (e.g., [section 1135 of the Social Security Act waivers](#)¹⁸) of key
 - 410 regulatory requirements pursuant to emergency declarations,
 - 411 ○ Process for Food and Drug Administration (FDA) issuance of [emergency use](#)
 - 412 [authorizations](#)¹⁹ for use of non-approved drugs or devices,
 - 413 ○ Legal resources²⁰ related to hospital legal preparedness, such as the deployment and
 - 414 use of volunteer health practitioners,
 - 415 ○ Legal and regulatory support for [alternate care sites](#) and practices, and
 - 416 ○ Legal issues regarding population-based interventions, such as mass prophylaxis and
 - 417 vaccination.

418 Objective 3: Develop an HCC Preparedness Workplan

419 Information collected on hazard vulnerabilities and risks, resources, gaps, the needs of children,
420 pregnant women, and individuals with access and functional needs, and the legal and regulatory
421 considerations should collectively inform an HCC preparedness workplan and a separate HCC response
422 plan (addressed in Capability 2 – Health Care and Medical Response and Recovery Coordination). The
423 HCC preparedness workplan enhances preparedness through cooperative activities based on common
424 priorities and objectives. Both the HCC preparedness workplan and the HCC response plan have
425 common elements of information sharing and communication, activity and strategy coordination, and
426 planning with members and other stakeholders. During a response, HCCs will have additional
427 responsibilities, including, situational reporting, resource tracking, and allocation support. The HCC
428 should coordinate the development of the HCC preparedness workplan by involving its core members
429 and other HCC members so that the hospital, EMS, public health, and emergency management equities
430 are represented, at a minimum.

¹⁸*Additional Emergency and Disaster-Related Policies and Procedures That May Be Implemented Only With a § 1135 Waiver*. Medicare Fee-For-Service. 31 Jan. 2013. Web. 19 July 2016. <<https://www.cms.gov/About-CMS/Agency-Information/Emergency/Downloads/MedicareFFS-EmergencyQsAs1135Waiver.pdf>>.

¹⁹*Emergency Use Authorization of Medical Products and Related Authorities Guidance for Industry and Public Health Stakeholders Draft Guidance*. FDA. Apr. 2016. Web. 19 July 2016. <<http://www.fda.gov/downloads/EmergencyPreparedness/Counterterrorism/MedicalCountermeasures/MCMLegalRegulatoryandPolicyFramework/UCM493627.pdf>>.

²⁰*Hospital Legal Preparedness: Relevant Resources*. CDC. 20 Apr. 2015. Web. 19 July 2016. <<http://www.cdc.gov/phlp/publications/topic/hospital.html>>.

431 Outlined below are general principles for the HCC preparedness workplan:

- 432 • The workplan should include member type (e.g., skilled nursing, nursing, and long-term care
433 facilities) and HCC-wide priorities for planning and coordination based on regional needs and
434 mitigation of gaps. Priorities will depend on multiple factors including perceived risk,
435 emergencies occurring in the region, available funds, personnel, member facilities and
436 organizations involved, and time constraints.
- 437 • The workplan should outline strategic and tactical objectives for the HCC as a whole and for
438 each HCC member type. The workplan will drive the planning, training, exercising, and resource
439 and supply acquisition activities during the year.
- 440 • HCC leadership should guide the initial development of the workplan with broad input from HCC
441 members and other stakeholders. HCCs should consider maximizing the investments of time and
442 resources focused on improving care of the acutely ill and injured patients.
- 443 • A recurring objective in the preparedness workplan should include developing and reviewing the
444 HCC response plan, which details the responsibilities and roles of the HCC and its members,
445 including how they share information and coordinate activities during an emergency. (See
446 Capability 2 – Health Care and Medical Response and Recovery Coordination).
- 447 • The workplan should include a timeline of each HCC member’s proposed activities, methods to
448 report progress to the HCC, and processes to ensure accountability and completion.
- 449 • The workplan may include short-term (e.g., within the year) and longer-term (e.g., three- to five-
450 year) objectives.
- 451

452 Objective 4: Train and Prepare the Health Care and Medical 453 Workforce

454 Training and exercises develop the knowledge, skills, and abilities of an HCC members’ workforce to
455 effectively respond to emergencies. This may include clinical training, incident management training,
456 safety and protective equipment training, or planning workshops. Exercises and drills help identify and
457 assess how well a health care delivery system or region is prepared to respond to an emergency. An HCC
458 should help conduct trainings and exercises with its members to promote consistency, engagement, and
459 testing of regional coordination.

460 Activity 1. Ensure Role-Appropriate National Incident Management 461 System Training

462 An HCC should assist health care facilities and other HCC members with [National Incident Management
463 System \(NIMS\)](#) compliance. HCCs should develop processes and strategies to

- 464 • Promote NIMS-compliant systems training and exercising within health care entities,
- 465 • Ensure HCC personnel receive NIMS training and exercise opportunities that will interface with
466 public safety and emergency management during an emergency,
- 467 • Assist health care entities with incorporating NIMS components into their Emergency
468 Operations Plans, and
- 469 • Coordinate with state authorities to monitor and track NIMS compliance of HCC members as
470 required.

471 Since NIMS training is generic, individual entities must implement specific incident management
472 systems, such as the [Hospital Incident Command System](#)²¹, and train personnel on their own plans. HCCs
473 should consider training for individual member entities and HCC leadership on response planning
474 techniques (i.e., [Incident Command System](#) (ICS)-300²², ICS-400²³, and other courses) and other incident
475 management practices that will prepare them for their roles during a response.

476 Activity 2. Educate and Train on Identified Preparedness and Response 477 Gaps

478 HCC members should support education and training to address health care preparedness and readiness
479 gaps identified through strategic planning, the HCC preparedness workplan, or other assessments.
480 Whenever possible, trainings should be standardized at the HCC level to ensure efficiency and
481 consistency. Education and training should be based on the specific needs (i.e., knowledge, skills, and
482 abilities) and depth (i.e., awareness, knowledge, proficiency) identified by HCC members, including the
483 following:

- 484 • Ensuring health care providers and ancillary workforce are trained in
 - 485 ○ clinical management
 - 486 ○ responder safety and health requirements (see Capability 2 – Health Care and Medical
487 Response and Recovery Coordination), and
 - 488 ○ their specific roles in the health care delivery system’s initial all-hazard emergency
489 response.
- 490 • Developing and implementing training plans to ensure inclusion of appropriate health care
491 providers and first responders—training plans may include, but are not limited to, initial
492 education, continuing education, appropriate certifications, and just in time training
- 493 • Employing a variety of modalities (e.g., online, classroom, etc.)
- 494 • Monitoring the numbers of trained personnel and assessing training effectiveness through drills
495 and evaluation to identify where gaps remain

496 Activity 3. Develop a Coordinated Exercise Plan with HCC Members and 497 Other Response Entities

498 The HCC should support the development of a coordinated exercise plan to test the health care delivery
499 system. In developing the coordinated exercise plan, the HCC should

- 500 • Identify common exercise objectives that may be tested through HCC-level exercises and other
501 planned member type-specific (e.g., skilled nursing, nursing, and long-term care facilities)
502 exercises,
- 503 • Coordinate health care delivery system-wide exercise objectives with those of hospitals, EMS,
504 emergency management, and public health and additional HCC members to the degree possible,

²¹ *Hospital Incident Command System (HICS)*. 2014. Web. 19 July 2016.

<http://www.emsa.ca.gov/disaster_medical_services_division_hospital_incident_command_system>

²²*Fact Sheet NIMS ICS-300 Training: Who Must Take It, What It Covers*. FEMA. March 2007. Web. 19 July 2016.

<http://www.fema.gov/pdf/emergency/nims/ics_300_fs.pdf>.

²³*Fact Sheet NIMS ICS-400 Training in FY 2007: Who Must Take It, What It Covers*. FEMA. March 2007. Web. 19 July 2016. <http://www.fema.gov/pdf/emergency/nims/ics_400_fs.pdf>.

- 505 • Develop an exercise schedule, and update the schedule annually or in accordance with
- 506 jurisdictional needs,
- 507 • Include opportunities for individual facility and organization participation,
- 508 • Ensure the plan includes an approach for testing health care delivery system readiness, including
- 509 annual assessment of medical surge,
- 510 • Ensure the plan includes participating health care entities' roles and responsibilities, and
- 511 • Include an after-action review, improvement plan, and follow-up process.

512 Activity 4. Align Exercises with Federal Standards and Facility Regulatory

513 Requirements

514 HCC exercise development and execution should consider the following:

- 515 • Application of [Homeland Security Exercise and Evaluation Program \(HSEEP\) Fundamentals](#)²⁴ to
- 516 both the exercise program and the execution of individual exercises
- 517 • Integration of current health care regulatory requirements such as the Joint Commission
- 518 Emergency Preparedness Standards and CMS Conditions of Participation
- 519 • Use of stepwise progression of exercise complexity for a variety of emergency response
- 520 scenarios (e.g., workshop to tabletop to functional to full-scale exercises)
- 521 • When appropriate, exercises should include federal, state and local response teams (e.g.,
- 522 [National Disaster Medical System \(NDMS\)](#) teams, state medical teams, [Emergency System for](#)
- 523 [Advance Registration of Volunteer Health Professionals \(ESAR-VHP\)](#)²⁵, [Medical Reserve Corps](#)
- 524 [\(MRC\)](#)²⁶, and other local, state, and federal assets).

525 Activity 5. Evaluate Exercises and Responses to Emergencies

526 The exercise and response evaluation processes should determine gaps in HCC organization, planning,

527 resources, or skills, and these should be documented in an after-action report (AAR). An improvement

528 plan (IP) should detail a plan for addressing the identified gaps, including responsible entities and

529 required time and other resources. An IP should also suggest processes to retest the revised plans and

530 capabilities. Facility and organization evaluations should follow a similar process.

531 The AAR/IP processes should be coordinated with HCC members and other response entities. The same

532 exercise or response may generate facility, member type-specific, HCC, and potentially community

533 AAR/IPs – each with a somewhat different focus and level of detail. Successful HCC maturation depends

534 on integrating AAR/IP findings into the next planning, training, exercise, and resource allocation cycle.

535 Activity 6. Share Leading Practices and Lessons Learned

536 HCCs coordinate with their members, as well as with states, jurisdictions, and other HCCs to share

537 leading practices and lessons learned. Sharing information between HCCs will improve cross-HCC

538 coordination during an emergency and will help further improve coordination efforts. HCCs should

²⁴*Homeland Security Exercise and Evaluation Program (HSEEP) Fundamentals*. Pg. 1-1. FEMA. April 2013. Web. 19 July 2016. <https://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf>.

²⁵ *ESAR-VHP*. ASPR. July 2016. Web. 19 July 2016 <<http://www.phe.gov/esarvhp/pages/default.aspx>>.

²⁶ *Division of the Civilian Volunteer – Medical Reserve Corps*. April 2016. Web. 19 July 2016. <<http://www.medicalreservecorps.gov/volunteerfldr/AboutVolunteering>>.

- 539
- Ensure information is shared between HCCs in the region after real-world events and exercises to identify gaps, lessons learned, and leading practices,
- 540
- Incorporate lessons learned from national and international events into HCC plans and trainings, and
- 541
- Develop and test mechanisms for rapid acquisition and sharing of new clinical knowledge during exercise scenarios and real world events for a wide range of hazards and threats (e.g., a regional
- 542
- poison center electronically sharing hazardous material information to area emergency
- 543
- departments; coordination of clinical treatment information on a conference call; virtual
- 544
- telemedicine platforms such as Project ECHO (Extension for Community Healthcare
- 545
- Outcomes)²⁷, and ASPR’s Technical Resources, Assistance Center, and Information Exchange
- 546
- (TRACIE)²⁸.
- 547
- 548
- 549

550 Objective 5: Ensure Preparedness is Sustainable

551 A sustainable structure and strategy are essential to continue HCC activities in the future and to

552 promote regional engagement. Sustainability planning is critical component to HCC development.

553 Sustainability should emphasize the HCC processes that support member needs and regulatory

554 requirements (e.g., exercising and evacuation planning). This includes both financial and engagement

555 activities.

556 Activity 1. Promote the Value of Health Care and Medical Readiness

557 The HCC, with support from its health care delivery system members, must be able to articulate its role

558 in and benefit (both direct and indirect) to the community and region. HCCs have a duty to plan for a full

559 range of planned events and emergencies that could affect their communities. It is essential that the

560 HCC has members that can serve as a primary points of contact within their respective discipline to

561 promote preparedness and response needs to community leaders. Additionally, members have a shared

562 responsibility to ensure the HCC has visibility into their activities in the region.

563 HCCs should

- Develop materials that identify and articulate the benefits of HCC activities to regional stakeholders and
- Leverage champions among members and other response entities to promote HCC preparedness efforts to health care executives and other key audiences.

568 Activity 2. Engage Health Care Executives

569 The HCC should communicate the direct and indirect benefits of HCC membership to health care

570 executives to advance a “[whole of hospital](#)” approach to preparedness and response. Executives can

571 ensure buy-in across all clinical departments and non-clinical support services. The benefits of

572 participating in an HCC are not limited to emergencies. Day-to-day benefits may include

- Meeting regulatory and accreditation requirements,
- Enhancing purchasing power,

²⁷Project ECHO. 2016. Web. 19 July 2016. <<http://echo.unm.edu/>>.

²⁸TRACIE. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response. 2016. Web. 19 July 2016. <<https://asprtracie.hhs.gov/>>.

- 575 • Accessing clinical and non-clinical expertise, and
576 • Improving risk profile.

577 Health care executives should sign an HCC’s memorandum of understanding (MOU) and HCC
578 agreements and should provide input, acknowledgement, and approval regarding HCC strategic
579 operational planning. They should also be engaged in their facilities’ plans. HCCs should regularly inform
580 health care executives of HCC activities in their communities through HCC activity reports, member
581 type-specific reports to their leaders, and regular invitation and participation at meetings and exercises.

582 Activity 3. Engage Clinicians

583 HCCs should engage health care delivery system clinical leaders to provide input, acknowledgement, and
584 approval regarding operational planning to ensure a whole of hospital response to an emergency.
585 Clinicians should be included in HCC activities on a regular basis to validate medical surge plans and to
586 provide subject matter expertise to ensure realistic training and exercising. Clinicians should lead the
587 health care provider training for assessing and treating illnesses and injuries specific to various types of
588 emergencies. Clinicians should be engaged in operational planning and contribute to committees and
589 advisory boards, and training and education sessions. Additional engagement can include active
590 participation in planning, exercise, and response activities.

591 Activity 4. Engage Community Leaders

592 Consistent with a “whole community” approach to preparedness, the HCC should actively work with and
593 engage community leaders outside of its members. HCCs should identify and engage community
594 members, business and charitable entities, and the media to be active stakeholders in health care
595 preparedness planning and exercises. Community engagement creates greater awareness of the HCC’s
596 role and emergency preparedness activities.

597 Activity 5. Ensure Sustainability of Health Care Coalitions

598 Sustainability is an essential component of HCC development. Documentation of in-kind donation of
599 time, resources, and support is critical to understand the full investment in readiness. Financial
600 strategies, including cost-sharing techniques and other funding options, enhance stability and
601 sustainment.

602 HCCs should

- 603 • Analyze critical functions to be preserved and financial opportunities, beyond federal funding, to
604 support or expand HCC functions,
605 • Develop a financing structure, and document the funding models that support HCC activities
606 • Determine ways to cost share (e.g., required exercises may be coordinated with emergency
607 management and other entities with similar requirements),
608 • Explore ways to meet individual members’ requirements for tax exemption through community
609 benefit,²⁹
610 • Identify additional funding sources such as federal, foundation, and private funding, HCC dues,
611 and training fees, and

²⁹*Instructions for Schedule H (Form 990)*. IRS. 2015. Web. 18 July 2016. < <https://www.irs.gov/pub/irs-pdf/i990sh.pdf>>.

- 612 • Determine how the HCC will continue key coordination activities should funding decrease in the
613 future.
- 614 HCC members should have awareness of the HCC’s sustainability activities, including any requirements
615 established by the HCC lead agency, so they can plan their future investments accordingly.

616 Capability 2. Health Care and Medical Response and 617 Recovery Coordination

618 Health care and medical response and recovery coordination enables the health care delivery system
619 and other organizations to share information, manage resources, and integrate their activities with their
620 jurisdictions' health care and medical response and recovery (Emergency Support Function-8³⁰ and
621 Emergency Support Function-6³¹). Planning for response and recovery together will enable the rapid
622 restoration of health care services. Health care coalitions (HCCs) and their members have a shared and
623 individual responsibilities during and after emergencies.

624 Goal for Capability 2: Health Care and Medical Response and Recovery Coordination

625 Health care organizations, HCCs, and their jurisdictions collaborate to share and analyze
626 information, manage resources, and coordinate strategies to deliver acute medical care to all
627 populations during emergencies and planned events. Simultaneous response and recovery
628 operations result in a return to normal or improved operations.

629 Objective 1: Develop Coordinated Response Plans

630 All individual HCC members have response roles. These roles should be coordinated and integrated to
631 reflect the broader response of the HCC recognizing, however, that HCCs have variable degrees of
632 responsibilities during an emergency. Every health care organization must have an [Emergency](#)
633 [Operations Plan \(EOP\)](#), and HCCs should have a collective response plan that is informed by their
634 members' individual plans. During emergencies, HCCs support their members' and their community's
635 response by sharing information and resources, facilitating communications between and among HCC
636 members, and ensuring HCCs have visibility of their members' needs. Coordination ensures that the
637 health care delivery system is integrated into the broader community's incident planning objectives and
638 strategy development, and that resource needs that cannot be managed within the HCC are rapidly
639 passed along to the [ESF-8 lead agency](#). HCC coordination may occur at the local Emergency Operations
640 Center (EOC), by virtual means, or at a separate physical site—such as a [Health and Medical](#)
641 [Coordination Center \(HMCC\)](#) or [Regional Healthcare Coordination Center \(RHCC\)](#)—that interfaces with
642 the ESF-8 lead agency. Some HCCs already serve as the ESF-8 lead for their jurisdictions. Others integrate
643 with their ESF-8 lead agency by ensuring that the [Medical Unit Leader](#) at the jurisdiction's EOC is
644 connected to the HCC and is aware of the HCC's and their members' needs. Regardless, the HCC is the
645 glue that sticks the elements of medical response together and provides the coordination mechanism
646 among health care organizations—such as hospitals and emergency medical services (EMS)—
647 emergency management, and public health, which has been lacking in many prior responses.

648 Activity 1. Develop Health Care Organization Emergency Operations Plan

649 Each health care organization should have an Emergency Operations Plan (EOP) to address [all-hazards](#)
650 emergencies. The EOP should detail the use of incident management—including specific thresholds for

³⁰*Emergency Support Function #8 – Public Health and Medical Services Annex*. FEMA. Jan. 2008. Web. 18 July 2016. <https://www.fema.gov/media-library-data/20130726-1825-25045-8027/emergency_support_function_8_public_health_medical_services_annex_2008.pdf> .

³¹*Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex*. FEMA. Jan. 2008. Web. 18 Jul. 2016. <<https://www.fema.gov/pdf/emergency/nrf/nrf-esf-06.pdf>>.

651 plan activation, alert, and notification processes, response protocols, resource acquisition and sharing—
652 and a process that delineates the proper time to demobilize and begin the transition to recovery and the
653 restoration of normal operations. The plan should define the internal and external sources of
654 information that will be necessary to assess the impact of the emergency on the health care
655 organization. It must also address how the individual HCC member communicates this information to
656 the HCC and to key leadership within the health care organization. The development and utilization of
657 an EOP ensures that fundamental emergency management principles will be applied to the planning for,
658 response to, and recovery from emergencies that stress the health care delivery system, particularly
659 those in which a medical surge (see Capability 4 – Medical Surge) response will be required. Critical
660 elements to include within the health care organization’s EOP are those which ensure it is capable of
661 becoming a response organization³²,

- 662 • Communications (internal and external),
- 663 • Information management,
- 664 • Access to resources and supplies,
- 665 • Assurance of safety and security,
- 666 • Delineation of staff roles and responsibilities within ICS,
- 667 • Utility readiness (e.g., back-up generator, water supplies),
- 668 • Provision of clinical care, and
- 669 • Support activities.

670 The EOP should summarize the actions taken to initiate and sustain a response to an emergency. Health
671 care organizations’ departmental plans should provide specific information for each unit or area.
672 Employees should have a clear understanding of their actions and how to communicate with the facility
673 or organization’s EOC during a response.

674 During an emergency, the health care organization plan should help to inform the HCC’s expectations
675 related to sharing information, attaining situational awareness, and managing resources, at a minimum.
676 The health care organization should also assist the HCC with patient and resource distribution or re-
677 distribution during a surge emergency (see Capability 4 – Medical Surge).

678 The EOP should contain specialty annexes that document specific planning actions for various types of
679 emergencies (e.g., [HAZMAT](#) annex, burn mass casualty plan, pediatric mass casualty plan).

680 Health care organizations should review and update the response plan at least annually but also when
681 necessary after exercises and real world events.

682 Activity 2. Develop a Health Care Coalition Response Plan

683 The HCC should develop a response plan that clearly defines

- 684 • Individual member and HCC contact information,
- 685 • Locations that may be used for multi-agency coordination,
- 686 • Brief summary of individual member’s resources and responsibilities,
- 687 • Integration with local ESF-8 structures,
- 688 • Emergency activation thresholds and processes,

³² *Medical Surge Capacity and Capability: A Management System for Integrating Medical and Health Resources During Large-Scale Emergencies*. Second Edition. U.S. Department of Health and Human Services. Sept. 2007. <http://www.phe.gov/preparedness/planning/mscc/handbook/documents/mscc080626.pdf>

- 689 • Alert and notification procedures,
- 690 • Elements of information agreed to be shared,
- 691 • Information technology (IT) platforms and redundancies for information sharing,
- 692 • Patient distribution and tracking procedures and related IT systems,
- 693 • Resource requests and allocation protocols,
- 694 • Agreements for support and mutual aid, and
- 695 • Additional HCC roles and responsibilities as determined by local plans and agreements (e.g.,
- 696 staff sharing, alternate care sites, shelter support).

697 The HCC should coordinate the development of the response plan by involving its core members and
698 other HCC members so that the hospital, EMS, emergency management, and public health equities are
699 represented, at a minimum. HCC should coordinate the development of the response plan. While the
700 interests of all members and stakeholders should be considered in the plan, the equities of hospitals and
701 EMS are paramount given their roles in patient distribution across the HCC’s geographic area during an
702 emergency. The HCCs should review and update the response plan at least annually but also when
703 necessary after exercises and real world events.

704 The response plan should refer to HCC members’ and other stakeholders’ individual response plans.
705 Each health care entity has an individual role in patient care or patient support. These are the roles and
706 responsibilities that should be clearly defined in the HCC’s and individual organization’s operational and
707 response planning. However, the HCC is only responsible for those activities that its members agree to
708 delegate to it. In some cases, these activities may be substantial including patient and resource tracking,
709 whereas in others, information sharing and strategy coordination is sufficient to deconflict protocols,
710 share resource requests, and maintain situational awareness while informing incident objectives.

711 Objective 2: Develop Information Sharing Processes and 712 Platforms

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

718 Activity 1. Develop Information Sharing Procedures

719 Individual HCC members must be able to easily access and collect timely, relevant, and actionable
720 information about their own organizations and share it with the HCC and its members and other
721 stakeholders according to protocols, based on predefined triggers. The HCC’s information sharing
722 procedures should

- 723 • Define the methods and frequency of communication and information sharing, as well as the
- 724 equipment and systems across health care organizations during response and steady state,
- 725 • Identify triggers that activate the alert and notification process,

- 726
- Define the [Essential Elements of Information \(EEI\)](#)³³ that should be reported during an incident and coordinated between HCC members and with local, state, and federal response partners, such as number of patients, severity and types of illnesses or injuries, operating status, resource needs and requests, and bed availability,

727

728

729

730

 - Identify the platform and format for sharing each EEI, and

731

 - Develop a process to validate health care organization status and requests during an emergency, including reports received outside of the HCC’s reporting platforms (e.g., media reports, no report when expected, rumors of distress, etc.).

732

733

734 Activity 2. Identify Information Access and Data Protection Procedures

735 HCCs should coordinate with state and local authorities to define information sharing procedures,
736 including

- Access to public or private systems,
 - Authorization to receive and share data,
 - Types of information that can and will be shared (e.g., EEI),
 - Data use and re-release parameters for sensitive information,
 - Data protections, and
 - Legal, statutory, privacy, and intellectual property issues, as appropriate.
- 737
- 738
- 739
- 740
- 741
- 742

743 Activity 3. Develop and Maintain Communications Systems and 744 Platforms

745 HCCs and their members should send and receive EEIs to maintain situational awareness using primary
746 and redundant systems.

747 HCCs should

- Identify redundant information and communication systems (e.g., incident management software, bed and patient tracking systems, EMS information systems, radios, satellite telephones, etc.); provide access to HCC members and other stakeholders,
 - Maintain ability to communicate between health care entities (e.g., between hospitals, EMS, skilled nursing, nursing, and long-term care facilities),
 - Restore emergency communications quickly during disruptions through alternate communications methods, and
 - Use these systems to effectively coordinate information during emergencies and planned events, as well as on a regular basis, to ensure familiarity with these tools.
- 748
- 749
- 750
- 751
- 752
- 753
- 754
- 755
- 756

757 Objective 3: Coordinate Response Strategy, Resources, and 758 Communications

759 The HCC should coordinate its response strategy, its members’ resource availability and needs, and
760 clearly communicate this information to all HCC members, other stakeholders, and the ESF-8 lead

³³*Essential Elements of Information*. U.S. Department of Health & Human Services Office of the Assistant Secretary for Preparedness and Response. 13 Aug. 2012. Web. 19 July 2016
<<http://www.phe.gov/Preparedness/planning/playbooks/rdd/Pages/essentialelements.aspx>>.

761 agency. In addition, the HCC’s provision of accurate and timely information to health care providers and
762 the public is critical to the community’s successful response to an emergency.

763 Activity 1. Identify and Coordinate Resource Needs during an Emergency

764 The HCC and all of its members—particularly emergency management and public health—must have
765 visibility of its members’ resources and resource needs (e.g., personnel, teams, facilities, equipment, and
766 supplies) to appropriately meet the community’s clinical care needs during an emergency. Therefore,
767 the HCC should clearly define the resource request processes for its members.

768 Outlined below are the general principles when coordinating resource needs during emergencies:

- 769 • HCC members should inform the HCC of their operational status, actions taken, and resource
770 needs, and the HCC will relay this information to the jurisdiction’s EOC.
- 771 • Resource management should include logging, tracking, and vetting resource requests across
772 the HCC and in coordination with ESF-8.
- 773 • Ideally, systems should track beds available by bed type, resource requests, and include
774 inventory management processes to update and track resources shared between HCC members
775 or from HCC-controlled resource caches.
- 776 • HCCs should work with distributors to understand and communicate which health care
777 organizations and facilities should have prioritized deliveries of supplies and equipment (e.g.,
778 [personal protective equipment \(PPE\)](#)³⁴) depending on the emergency. In some cases, the
779 prioritization of limited resources provided by distributors will have to be determined by HCC
780 leadership, based on input from member organizations, reflecting needs at the time of the
781 emergency. Please note that more information around supply chain integrity for individual HCC
782 members and the HCC can be found in Capability 3 – Continuity of Health Care Service Delivery.

783 Activity 2. Coordinate Incident Action Planning During an Emergency

784 During an emergency or planned event, each health care organization should develop an [Incident Action](#)
785 [Plan \(IAP\)](#)³⁵ and utilize [incident action planning cycles](#) to identify and modify objectives and strategies.
786 Similar to the development of health care organizations’ EOPs, the individual member plans should
787 contribute to the development of the HCC’s IAP with its own focus on planning cycles, objectives, and
788 strategies. Ultimately, the HCC’s IAP should be integrated into the jurisdiction’s IAP so the approach to
789 establishing strategies and tactics that will govern the response to an emergency or planned event are
790 both transparent and scalable. Keeping response strategies consistent across HCC members requires
791 coordinated discussion and joint decision-making (e.g., implementing alternate care sites, allocating
792 resources, and developing policy on visitors during epidemic events).

793 Activity 3. Communicate with Health Care Providers and Health Care 794 Organizations during an Emergency

795 Accurate and timely information is critical for health care providers during an emergency. Health care
796 organizations should have the ability to rapidly alert and notify their employees to update them on the
797 situation and protect their health and safety (see Capability 3 – Continuity of Health Care Service

³⁴*Emergency Response Resources*. The National Institute for Occupational Safety and Health (NIOSH). Web. 12 August 2013. <<http://www.cdc.gov/niosh/topics/emres/ppe.html>>.

³⁵*Incident Action Planning Guide*. FEMA Jan. 2012. Web. 18 July 2016. <http://www.fema.gov/media-library-data/20130726-1822-25045-1815/incident_action_planning_guide_1_26_2012.pdf>

798 Delivery, Objective 5 – Protect Responders’ Safety and Health) and to facilitate provider-to-provider
799 communication. HCCs should develop processes and protocols to rapidly acquire and share clinical
800 knowledge between health care providers and between health care organizations during responses to
801 CBRNE, trauma, burn, pediatrics, or highly infectious disease emergencies to improve patient
802 management, particularly at facilities that may not care for these patients regularly.

803 Activity 4. Communicate with the Public during an Emergency

804 HCC members coordinate relevant health care information with the [Joint Information System \(JIS\)](#) to
805 ensure information is accurate and disseminated to the community using one voice. Coordinated health
806 care information that could be shared with the JIS may include

- 807 • Current [health care facility](#) operating status,
- 808 • When and where to seek care,
- 809 • Alternate care site locations,
- 810 • Screening or intervention sites,
- 811 • Expected health and behavioral health effects related to the emergency,
- 812 • Information to facilitate reunification of families,
- 813 • Other relevant health care guidance.

814 The HCC and its members will agree upon the type of information that the HCC will disseminate and the
815 type of information that individual members will disseminate.

816 To prepare the HCC for its public communications role, the HCC should

- 817 • Provide [Public Information Officer \(PIO\)](#) training to those designated to act in that capacity
818 during an emergency, and
- 819 • Exercise public communications on an annual basis.

820 Objective 4: Ensure Health Care System Recovery

821 Planning for recovery should be initiated at the beginning of a response in order to facilitate an effective
822 and efficient return to normal or, ideally, improved operations for the provision of health care delivery
823 to the community.

824 Activity 1. Plan for Health Care System Recovery

825 Health care organizations and HCCs should not approach recovery planning by trying to build stand-
826 alone recovery plans. Instead, health care organizations and HCCs should integrate recovery functions
827 into established ICS by writing recovery functions into their EOPs and HCC response plans from the
828 beginning.³⁶

³⁶*Essential Functions and Considerations for Hospital Recovery*. Harvard School of Public Health and Commonwealth of Massachusetts Department of Public Health Sept. 2013. Web. 18 July 2016. <http://www.nasemso.org/Projects/DomesticPreparedness/documents/Essential-Functions-and-Considerations-of-Hospital-Recovery.pdf>.

829 HCC members and the HCC should participate in state and local pre-emergency recovery planning
830 activities as described in the [National Disaster Recovery Framework](#)³⁷ in order to leverage recovery
831 resources, programs, projects, and activities. The HCC and its members should identify the health care
832 services required by the community and strategies for the continued delivery of essential health care
833 services after an emergency.

834 Activity 2. Assess Health Care Delivery System Recovery Needs after an 835 Emergency

836 HCCs should assist their members with an assessment of emergency-related structural, functional, and
837 operational impacts to health care organizations by

- 838 • Identifying immediate needs for the delivery of essential health care services,
- 839 • Identifying long-term health care recovery priorities, and
- 840 • Communicating short- and long-term priorities to the jurisdiction’s ESF-6 and ESF-8 structures.

841 Activity 3. Ensure Health Care Delivery System Recovery Assistance and 842 Participation

843 Individual health care members should ensure that the planning and finance administration sections of
844 the ICS structure are initiating the recovery process by

- 845 • Arranging clean-up services,
- 846 • Restoring infrastructure to functional status,
- 847 • Restoring impacted patient care services,
- 848 • Supporting the physical and behavioral health needs of affected patients, staff, and families,
- 849 • Connecting patients, staff, and families in need with case management, financial, and insurance
850 services,
- 851 • Tracking expenditures,
- 852 • Beginning documentation necessary for state and federal assistance, and
- 853 • Beginning the after-action learning and improvement process.

854 HCCs support their members in the post-emergency recovery process by assisting the health care
855 delivery system to restore operations and repatriate patients. Additionally, the HCC, along with its
856 government partners (local, state, and federal), should assist its members with the state and/or federal
857 process for reimbursement, reconstitution, and resupply.

858 HCCs and their member organizations provide critical voices to their jurisdictions in determining how
859 their communities will build back better by ensuring the needs of all populations, including children,
860 pregnant women, seniors, and individuals with access and functional needs are addressed.

861

³⁷*National Disaster Recovery Framework*. FEMA. June 2016. Web. 19 July 2016. <http://www.fema.gov/media-library-data/1466014998123-4bec8550930f774269e0c5968b120ba2/National_Disaster_Recovery_Framework2nd.pdf>.

862 Capability 3. Continuity of Health Care Service Delivery

863 Optimal emergency medical care relies on intact infrastructure, functioning information systems, and
864 support services. The ability to deliver health care services is likely to be interrupted when internal or
865 external systems such as utilities, electronic health records, and supply chains are compromised.
866 Disruptions may occur during a sudden or slow-onset emergency or in the context of daily operations.
867 Historically, continuity of operations planning has focused on business continuity and ensuring
868 information technology redundancies. However, health care organizations and health care coalitions
869 (HCCs) must take a broader view and address all risks that could compromise continuity of health care
870 service delivery. Continuity disruptions may range from an isolated cyberattack on a single hospital's
871 information technology system to a long-term widespread infrastructure disruption impacting the entire
872 community and all of its health care organizations.

873 Goal for Capability 3: Continuity of Health Care Service Delivery

874 Health care organizations, with support from health care coalitions, provide uninterrupted
875 medical care to all populations in the face of damaged or disabled health care infrastructure.
876 Health care workers are well-trained, well-educated, and well-equipped to care for patients
877 during emergencies.

878 Objective 1: Identify Essential Functions for Health Care Delivery

879 There are key health care functions (e.g., [Mission Essential Functions \(MEFs\)](#)) that must be continued
880 after a disruption of normal activities and are a priority for restoration should any be compromised.
881 Determining a health care organization's key functions are the first steps in its health care continuity
882 planning. HCCs may play an important supporting role in ensuring these functions are being maintained.
883 These key functions include infrastructure and services that are critical to supporting inpatient,
884 outpatient, long-term, and home care activities, including but not limited to

- 885 • Facility infrastructure,
- 886 • Utilities (water, electricity, gas, and sewer),
- 887 • Telecommunications and internet services,
- 888 • Transportation services,
- 889 • Nutrition and dietary services,
- 890 • Supply chain management (leasing, purchasing, and delivery of critical equipment and supplies
891 such as pharmaceuticals), and
- 892 • Information technology (software and hardware for electronic health records, billing, and
893 clinical services such as lab and radiology).

894 Health care and administrative personnel are a critical component of continuity, which are included in
895 Objective 5, Responders' Safety and Health.

896 Objective 2: Plan for Continuity of Operations

897 The foundations for safe medical care delivery include critical infrastructure and key support systems
898 such as the facilities, resources, and services. Health care organizations should determine their priorities
899 for ensuring key functions are maintained during an emergency, including the provision of care to
900 existing and new patients. Facilities should determine those systems that must be supported and those
901 that can be allowed to fail. In addition, the HCC should have a plan to maintain its own operations.
902 During continuity preparedness activities, the health care organizations and HCCs should consider what

903 disaster risk reduction strategies should be implemented in order to lessen the likelihood of complete
904 and total failure. HCCs should facilitate each individual member’s approach to risk reduction to ensure a
905 regional approach to addressing critical infrastructure (e.g., utilities, telecommunications, and supply
906 chain).

907 Activity 1. Identify Risks and Prioritize Mitigation Strategies

908 Health care organizations should determine mitigation and prioritization strategies after identifying risks
909 in essential systems that support the provision of medical care. This should involve conducting a [risk](#)
910 [benefit analysis](#) that considers the time, materials, and resources necessary to close the gaps.

911 HCC members should share their risk analysis and mitigation priorities with the HCC so that members
912 can address common risks through education and training, workshops, and by engaging suppliers or
913 other stakeholders to develop joint strategies and agreements.

914 Activity 2. Develop Health Care Organization COOP Plans

915 Continuity of Operations (COOP) planning ensures health care operations and business continuity. The
916 health care organization’s COOP plans should be an annex to the organization’s Emergency Operations
917 Plan (EOP) and, during a response, should be addressed under the ICS. The COOP annex should include
918 the following:

- 919 • Activation and response functions
- 920 • Supervisor and managerial points of contact for each department
- 921 • Orders of succession and delegations of authority
- 922 • Immediate actions or assessments to be performed in case of disruptions
- 923 • Safety assessment and resource inventory to determine whether or not the health care
924 organization can continue to operate
- 925 • Redundant, replacement, or supplemental resources
- 926 • External organizations to contact (e.g., utilities, HCC members, or other stakeholders)
- 927 • Strategies and priorities for addressing disruptions.

928 Multiple employees from each HCC member organization should understand and have access to the
929 HCC’s information sharing platforms to ensure the continuity of information flow and coordination
930 activities.

931 HCCs and governmental partners should be engaged when one or more health care organizations are
932 affected or when a disruption to a health care organization requires evacuation or sustained changes in
933 patient flow.

934 Activity 3. Develop Health Care Coalition COOP Plans

935 HCC COOP plans should be an annex to the HCC’s response plan. In addition to the topics covered in
936 Activity 2 – Develop Health Care Organization COOP Plans, the HCC COOP annex should include
937 strategies for communications and leadership continuity.

938 HCCs should ensure that communication and coordination systems that are used for incident
939 management are adequately secured, backed up, and have redundant power and server protections. In
940 addition, redundant or backup systems should be specified in case the usual means of coordination
941 (e.g., internet software platform) are unavailable. Backup plans for communications should be
942 understood prior to an event and documented in the HCC response plan.

943 HCC leadership may not be available to assist with coordination during an emergency due to illness,
944 injury, or other commitments. Orders of succession and delegations of authority should be detailed in
945 the HCC COOP annex, and a suitable number of personnel (ideally not from the same organization)
946 should be trained to carry out the coordination activities of the HCC.

947 Activity 4. Continue Administrative and Finance Functions

948 Health care organizations should maintain administrative and financial functions during and after an
949 emergency even if these functions need to continue at an off-site location. This includes essential
950 business processes used to maintain financial security (e.g., registration, billing, access to health records,
951 payroll, and human resource systems).

952 Activity 5. Plan for Health Care Organization Sheltering-in-Place

953 The decision to shelter-in-place is based on the nature and timing of the emergency (e.g., tornados,
954 flooding, and improvised nuclear device (IND) detonation), the potential effects on patient care delivery,
955 and the status of critical infrastructure in the surrounding community.³⁸ Shelter-in-place planning
956 considerations include, but are not limited to

- 957 • Decision making criteria and authorities,
- 958 • Identification of patient and non-patient care locations to provide protection from external
959 environment,
- 960 • Operational procedures for shutting down HVAC, lock-down, and access control,
- 961 • Assessment of internal capabilities and needs,
- 962 • Acquisition of supplies, equipment, pharmaceuticals, and other necessary resources for
963 sustainment (e.g., water and food),
- 964 • Internal and external communications plans, and
- 965 • Identify triggers for lifting shelter-in-place orders.

966 Objective 3: Maintain Access to Non-Personnel Resources during 967 an Emergency

968 Critical equipment and supplies must be available to ensure the ongoing delivery of patient care
969 services. HCC members should assess equipment and supply needs that will likely be in demand during
970 an emergency and develop strategies to address potential shortfalls.

971 Activity 1. Assess Supply Chain Integrity

972 Each individual member and the HCC should examine their supply chain vulnerabilities by collaborating
973 with vendors to determine access to critical supplies, amounts available in regional systems, and
974 potential alternate delivery options in the case that access or infrastructure is compromised.

975 Collaborations with and assessments of supply chain integrity should include the following

- 976 • Blood banks
- 977 • Medical gas suppliers
- 978 • Fuel suppliers
- 979 • Nutritional suppliers and food vendors

³⁸*Hospital Evacuation Decision Guide*. Abt Associates Inc. May 2010. Web. 19 July 2016.
<<http://archive.ahrq.gov/prep/hospevacguide/hospevac.pdf>>.

- 980 • Pharmaceutical vendors
- 981 • Leasing entities for biomedical (monitors, ventilators, etc.) and other durable medical
- 982 equipment and beds
- 983 • Major vendors for disposable supplies
- 984 • Major vendors for PPE
- 985 • Hazardous waste removal services

986 HCCs should collaborate with vendors and other stakeholders to develop joint understanding and
987 strategies to address vulnerabilities in the supply chain. These vulnerabilities may be addressed by
988 decisions and mitigation strategies at a health care organization and/or an HCC level related to

- 989 • Stockpile (or maintain and rotate higher stock levels),
- 990 • Establishing secondary vendors,
- 991 • Developing ‘push’ or pre-event disaster supply procedures and triggers for activation, or
- 992 • Identifying alternate modes of delivery.

993 Health care organizations will need to determine whether additional new contracts or other agreements
994 are needed prior to an emergency. In many cases, there is little redundancy in available vendors and
995 little available inventory, which may contribute to rapid exhaustion of supplies in a major emergency.
996 HCC agreements to share supplies may provide a critical resource during emergencies; these
997 agreements should be developed and documented prior to an emergency.

998 When these strategies fail, health care organizations and HCCs should consider the implementation of
999 contingency plans that include conservation, substitution, adaptation, reuse, or reallocation.³⁹

1000 Activity 2. Assess and Address Pharmaceutical Requirements

1001 Medications are needed for both emergency treatment and to maintain the health of patients. Health
1002 care organizations should maintain awareness of critical medications they have on hand and how to
1003 obtain additional supplies through their HCC and established procurement processes.

1004 Categories of pharmaceuticals, blood products, and intravenous fluids required for emergency
1005 treatment include the following

- 1006 • Analgesia and sedation medications (including oral and injectable)
- 1007 • Anesthesia medications (e.g., paralytics)
- 1008 • Antibiotics (oral and injectable)
- 1009 • Antivirals (e.g., oseltamivir)
- 1010 • Tetanus vaccination
- 1011 • Pressor medications
- 1012 • Antiemetics
- 1013 • Respiratory medications (e.g., albuterol)
- 1014 • Antidotes (e.g., atropine, hydroxycobalamin) – based on community risks and resources
- 1015 • Psychotropic medications
- 1016 • Blood products

³⁹*Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations*. Institute of Medicine of the National Academies. 2009. Web. 19 July 2016. <<http://www.nap.edu/read/12749/chapter/1>>.

- 1017 • Intravenous fluids

1018 Health care organizations should consider ensuring access to formulations appropriate for pediatric
1019 dosing.

1020 For most health care organizations, small increases above baseline levels of common, inexpensive
1021 medications will provide a buffer, particularly when organizations can share resources with HCC
1022 members during an emergency. Decisions to stockpile medications are complex and rely on a risk
1023 assessment and resource commitments by the health care organizations, HCCs, and other stakeholders.
1024 Acquisition, storage, rotation, activation, use, and disposal decisions must all be considered and
1025 documented.

1026 All health care organizations and HCCs should understand the [Strategic National Stockpile \(SNS\)](#)
1027 distribution plan for their jurisdiction. Health care organizations and HCCs in communities participating
1028 in CHEMPACK⁴⁰, the [Cities Readiness Initiative \(CRI\)](#)⁴¹, and local and state-based plans that maintain
1029 treatment or prophylaxis caches should ensure they are engaged in the development, training, and
1030 exercising of those distribution plans.

1031 Objective 4: Develop Strategies to Protect Health Care Cyber 1032 Networks

1033 Recent cyberattacks on health care organizations have had significant effects on every aspect of patient
1034 care and organizational continuity. With increasing reliance on cyber systems, including electronic
1035 health records, billing, portable patient records, and communication and information sharing systems,
1036 there is a great risk to the integrity and safety of these cyber systems. This highlights the need for health
1037 care organizations of all sizes and types to implement cybersecurity best practices and conduct robust
1038 planning and exercising for cyber incident response and consequence management. As the number of
1039 cyberattacks on this sector increases, health care practitioners, executives, information technology
1040 professionals, and emergency managers must remain current on the ever-changing nature and type of
1041 threats to their organizations, systems, patients, and staff.⁴²

1042 Health care organizations, assisted by HCCs, should explore the steps necessary to protect these systems
1043 and have a plan in place for recovery should they be compromised. Some industry recognized best
1044 practices include

- 1045 • Conducting a computer network assessment to obtain the information necessary to develop a
1046 cyber security plan to reduce cyberattacks and reduce breaches,
- 1047 • Encrypting all computers and mobile devices,
- 1048 • Preapproving the use of any devices not issued by the organization,
- 1049 • Implementing role-based access to any systems to ensure employees only have access to
1050 programs and applications necessary to perform functions of their jobs,

⁴⁰CHEMPACK. U.S. Department of Health and Human Services. 2016. Web. 19 July 2016.
<<https://chemm.nlm.nih.gov/index.html>>.

⁴¹*Cities Readiness Initiative*. Centers for Disease Control and Prevention. Office of Public Health Preparedness and Response. 2016. Web. 19 July 2016. <<http://www.cdc.gov/phpr/stockpile/cri/>>.

⁴²*Cybersecurity Topic Collection*. TRACIE Healthcare Emergency Preparedness Information Gateway. 16 June 2016. Web. 19 July 2016. <<https://asprtracie.hhs.gov/documents/cybersecurity.pdf>>.

- 1051 • Configuring any electronic health records systems or database to require specific access
1052 permissions to each user; inquiring with the EHR vendor to determine how they provide updates
1053 and technical support, and
- 1054 • Developing security policies for the use of virtual private network (VPN) or private
1055 connections⁴³.

1056 Objective 5: Protect Responders' Safety and Health

1057 The safety and health of workers and staff are high priorities for preparedness and continuity as
1058 effective care cannot be delivered without available staff. Processes should be developed and
1059 implemented to equip, train, and provide resources necessary to protect staff from hazards during
1060 response and recovery operations. PPE, [medical countermeasures](#), workplace violence training, and
1061 other interventions specific to an emergency are all necessary to protect health care workers from
1062 illness or injury. This section addresses selected aspects of workforce safety and protection relevant to
1063 emergencies, but does not consider the much broader spectrum of health care worker safety during
1064 routine operations.

1065 Activity 1. Distribute, Train, and Exercise on Personal Protective 1066 Equipment

1067 PPE utilization in the health care setting is necessary for a wide range of threats, such as infectious
1068 diseases, radiation, and chemical exposure. PPE should be available to response personnel across
1069 varying job functions. EMS and health care facilities should determine the PPE required by their
1070 expected response roles. Regional procurement of PPE and conducting regional training coordinated by
1071 HCCs may offer significant advantages in pricing and consistency for staff, especially when PPE are
1072 shared across health care organizations in an emergency.

1073 Health care organizations should

- 1074 • Create HAZMAT plans that include appropriate staff training requirements and PPE to perform
1075 decontamination per [OSHA First Receiver Guidance](#)⁴⁴ (for further information on HAZMAT
1076 response please see Capability 4 – Medical Surge),
- 1077 • Plan for pre-hospital decontamination and ensure coordination among fire, EMS, and other
1078 health care organizations,
- 1079 • Provide PPE and training for health care providers for droplet, airborne, and highly pathogenic
1080 and transmissible infectious diseases,
- 1081 • Integrate PPE procurement and training with existing occupational health programs, including
1082 respiratory protection, and
- 1083 • Work with health care union and human resources departments to develop policies and
1084 procedures to ensure health care worker readiness and safety associated with caring for
1085 patients.

⁴³*Protecting the Healthcare Digital Infrastructure: Cybersecurity Checklist*. Healthcare & Public Health Sector Coordinating Councils Public Private Partnership. 2016. Web. 19 July 2016.
<<http://www.phe.gov/Preparedness/planning/cip/Documents/cybersecurity-checklist.pdf>>.

⁴⁴*OSHA Best Practices for Hospital-based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances*. United States Department of Labor. Jan. 2005. Web. 19 July 2016.
<https://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html>.

1086 In certain situations, staff exposures may warrant pharmaceutical prophylaxis, which should be
1087 managed according to the health care organization’s infection control policies. Exposures may be the
1088 result of PPE failure or exposures prior to patient diagnosis and could involve emerging infectious
1089 disease outbreaks or industrial, natural, or terrorism-related exposures.

1090 Activity 2. Develop Health Care Worker Resilience

1091 A resilient workforce is critical to a successful response to and recovery from emergencies. HCCs and
1092 their members should consider the following:

- 1093 • Pre-emergency resilience building, such as encouraging healthy lifestyles, developing family
1094 emergency plans, conducting staff training for active shooter events, and instituting workplace
1095 violence reduction strategies
- 1096 • Emergency resilience support, such as rotating staff to limit fatigue, providing support to staff
1097 and families, providing accurate and timely updates on an evolving situation, providing
1098 opportunities for interacting with health care organization leadership, and providing just in time
1099 training relative to the emergency
- 1100 • Post-emergency support, such as providing [psychological first aid](#), distributing information on
1101 expected stress responses, conducting self- and peer-assessment and monitoring activities,
1102 providing access to employee assistance programs, including professional behavioral health
1103 services and modifying duty assignments. Post-incident activities may continue for months and
1104 even years beyond the emergency.

1105 Objective 6: Plan for Health Care Evacuation and Relocation

1106 Health care organizations must evacuate or relocate when continuity planning cannot sustain a safe
1107 working environment or when a government entity orders a health care organization to evacuate. HCCs
1108 should ensure all members are included in evacuation and relocation planning, including skilled nursing,
1109 nursing, and long-term care facilities.

1110 Activity 1: Develop Health Care Organization Evacuation and Relocation 1111 Plans

1112 Health care organizations need to be prepared for evacuation or relocation when little to no warning is
1113 received. Evacuation and relocation plans assist health care organizations with the safe and effective
1114 care of patients, use of equipment, and utilization of staff when relocating to another part of the facility
1115 or when evacuating patients to another facility. Evacuation and relocation planning should

- 1116 • Establish authority and decision processes, such as factors to be considered, decision makers,
1117 and triggers for decision making
- 1118 • Ensure internal and external communications
- 1119 • Identify appropriate relocation and evacuation staging areas within the facility
- 1120 • Notify HCC and jurisdiction stakeholders
- 1121 • Identify available destination facilities and their ability to expand existing services to receive
1122 patients from evacuating facilities
- 1123 • Prioritize the order and category of patients chosen for evacuation and relocation
- 1124 • Match patient needs with available transport resources (including non-EMS transportation
1125 assets)

- 1126 • Move and track patients and ensure vital patient medications and equipment (e.g., mechanical
- 1127 ventilators) are brought with the patient during patient transport
- 1128 • Move and track staff, supplies, patient belongings, and medical records when necessary
- 1129 • Notify families and initiate reunification processes
- 1130 • Establish procedures for facility closure.

1131 Planning, training, and exercising these activities are critical to the success of relocation and evacuation.
1132 Special consideration should be given to patients that are at highest risk during evacuation. These
1133 patients include [critical care](#), current operative cases, pediatric, psychiatric (including memory/dementia
1134 care), and other patients that may need specialized care during evacuation.

1135 Activity 2. Develop Plans for Evacuation Transportation

1136 HCCs and their members should develop transportation plans for evacuating patients from one health
1137 care facility to another. The plans should

- 1138 • Include a process to appoint a transport manager or similar position under the ICS operations
- 1139 section
- 1140 • Identify a coordinating entity for local EMS agencies
- 1141 • Understand the HCC's role in coordinating EMS assistance
- 1142 • Identify transportation assets including non-medical transportation partners, such as
- 1143 commercial bus company
- 1144 • Identify processes to access specialized transportation assets through emergency management
- 1145 (e.g., National Guard, tractors, boats).

1146 Capability 4. Medical Surge

1147 Medical surge is the ability to evaluate and care for a markedly increased volume of patients that
1148 exceeds normal operating capacity.⁴⁵ Providing an effective medical surge response is dependent on the
1149 planning and response capabilities developed in Capability 1 – Foundation for Health Care and Medical
1150 Readiness, Capability 2 – Health Care and Medical Response and Recovery Coordination, and Capability
1151 3 – Continuity of Health Care Service Delivery. Developing a health care coalition (HCC) is especially
1152 important in order to coordinate the medical response across health care organizations. Medical surge
1153 requires building capacity and capability:

- 1154 1. Surge capacity is the ability to manage a sudden influx of patients. It is dependent on a well-
1155 functioning Incident Command System (ICS) and the variables of space, supplies, and staff.⁴⁶ The
1156 surge requirements may extend beyond direct patient care (e.g., extensive laboratory studies).⁴⁷
- 1157 2. Surge capability is the ability to manage patients requiring very specialized medical evaluation
1158 and care. Surge requirements span a range of medical and health care services (e.g., expertise,
1159 information, procedures, or personnel) that are not normally available at the location where
1160 they are needed (e.g., pediatric care provided at non-pediatric facilities or burn care services at
1161 a non-burn center). Surge capability also includes special interventions in response to
1162 uncommon and resource intensive patient diagnoses (e.g., Ebola, radiation sickness) to protect
1163 medical providers, other patients, and the integrity of the medical care facility.

1164 Though these terms are not mutually exclusive (e.g., an emergency with large numbers of burn patients
1165 results in a need for capacity and capability), they provide context for medical surge planning and can
1166 assist HCCs in developing regional approaches to provide care to patients with specific illnesses or
1167 injuries resulting from a wide variety of emergencies (e.g., regional viral hemorrhagic fever plan,
1168 regional mass burn plan, and regional mass pediatric plan).

1169 HCCs and their members that coordinate during a medical surge response are more likely to be able to
1170 manage the emergency without state or federal assets or employing crisis care strategies⁴⁸. However, it
1171 is not possible to plan for all worst case scenarios and there may be times when the health care system
1172 is stressed beyond its maximum surge capacity. During those scenarios, crisis care strategies must be
1173 employed and planned for well in advance. Planning for medical surge should follow the [Medical Surge
1174 Capacity and Capability \(MSCC\)](#) tiered approach, where successive levels of assistance are activated as
1175 the emergency evolves.

⁴⁵ICDRM/GWU Emergency Management Glossary of Terms. P. 14. The George Washington University Institute for Crisis, Disaster, and Risk Management. 30 June 2010 Web. 19 July 2016.

<<https://www.gwu.edu/~icdrm/publications/PDF/GLOSSARY - Emergency Management ICDRM 30 JUNE 10.pdf>>.

⁴⁶Health Care System Surge Capacity Recognition, Preparedness, and Response. American College of Emergency Physicians. 2014. Web. 19 July 2016 <<https://www.acep.org/Clinical--Practice-Management/Health-Care-System-Surge-Capacity-Recognition,-Preparedness,-and-Response/>>.

⁴⁷ICDRM/GWU Emergency Management Glossary of Terms. The George Washington University Institute for Crisis, Disaster, and Risk Management. 30 June 2010 Web. 19 July 2016

<<https://www.gwu.edu/~icdrm/publications/PDF/GLOSSARY - Emergency Management ICDRM 30 JUNE 10.pdf>>.

⁴⁸Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations. Institute of Medicine of the National Academies. 2009. Web. 19 July 2016. <<http://www.nap.edu/read/12749/chapter/1>>.

1176 Goal for Capability 4: Medical Surge

1177 Health care organizations—including hospitals, EMS, and out of hospital providers—deliver
1178 timely and efficient care to their patients even when the demand for health care services
1179 exceeds available supply. The HCC coordinates information and all available resources for its
1180 members to maintain conventional surge response. When an emergency overwhelms the HCC’s
1181 collective resources, the HCC facilitates the health care system’s transition to contingency and
1182 crisis surge response and its return to conventional standards of care.

1183 Objective 1: Plan for a Medical Surge

1184 Health care organizations can only effectively implement and manage medical surge when appropriate
1185 information sharing systems and protocols have been established, appropriate plans have been
1186 developed, and personnel have been trained in their use.

1187 Activity 1. Incorporate Medical Surge Planning into a Health Care
1188 Organization’s Emergency Operations Plan (EOP)

1189 For more information on the health care organization’s Emergency Operations Plan (EOP), see Capability
1190 2 - Health Care and Medical Response and Recovery Coordination.

1191 With regard to medical surge planning, the EOP should summarize the actions to initiate a response to a
1192 medical surge. The EOP should include individual departmental sections that provide specific surge
1193 strategies for each unit or service line. Health care organizations should predetermine surge strategies,
1194 which employees may easily implement with minimal guidance. Further, employees should clearly know
1195 how to communicate with the organization’s Emergency Operations Center (EOC). As the response
1196 evolves, refinement of strategies according to the scope of the emergency can occur with better
1197 situational awareness of the emergency and the status of the health care organizations and HCC.

1198 During an emergency, at a minimum, the health care organization’s EOP should help inform the HCC’s
1199 expectations relative to sharing information, attaining situational awareness, and managing resources.
1200 The health care organization should also assist the HCC with patient and resource distribution or re-
1201 distribution during a surge emergency.

1202 Activity 2. Incorporate Medical Surge into an Emergency Medical
1203 Services EOP

1204 The EMS EOP should detail the implementation of a step-wise approach to medical surge, including the
1205 use of conventional, contingency (e.g., mutual aid), and crisis care strategies (e.g., request for National
1206 Guard resources) to address potential shortfalls. Ultimately, EMS organizations should strive to return to
1207 normal operations as quickly as possible. Common strategies should be developed and consistently
1208 implemented across EMS providers within the HCC. EMS medical directors and managers should
1209 develop and activate surge protocols appropriate for the emergency that enable their employees to
1210 make informed decisions in the field so they can provide the best care possible.

1211 EMS organizations and HCCs support each other during medical surge and should incorporate
1212 information on dispatch, response, prehospital triage and treatment, transportation, and supplies into
1213 the EMS organization’s EOP.

1214 *Table 1 - Elements to Incorporate into an EMS EOP*

Category	Elements to incorporate into an EMS EOP
Dispatch	Identify protocols to <ul style="list-style-type: none"> • Alert hospitals of an emergency, • Communicate hospital capacity to EMS providers, • Track patients, • Change emergency dispatch processes (e.g., not dispatching EMS to motor vehicle crashes until police or fire report significant injuries), and • Assign low priority calls to other resources or alternative forms of transport.
Response	<ul style="list-style-type: none"> • Match appropriate specialized providers and equipment with the nature of the emergency (e.g., hazardous materials trained crews during chemical spill) • Consider surge strategies such as changing shift lengths or crew configurations, using alternate vehicles, using community paramedicine or other non-ambulance responses in coordination with dispatch priorities
Prehospital Triage and Treatment	<ul style="list-style-type: none"> • Implement disaster triage protocols and other standard operating procedures (e.g., no need to obtain verbal orders during responses for advanced life support (ALS) interventions • Plan for specialty responses, such as hazardous materials, viral hemorrhagic fevers, mass burn, mass trauma, and mass pediatric emergencies
Transportation	<ul style="list-style-type: none"> • Identify preferred destination hospitals for trauma and pediatrics • Identify protocols for changing preferred destination facilities or not using the closest hospital • Identify protocols for type of transport (e.g., ALS, basic life support (BLS), and neonatal and critical care) and protocols for the use of single vehicles to transport multiple patients • Develop and implement EMS strategies to avoid overloading a single hospital with patients
Supplies and Equipment	<ul style="list-style-type: none"> • Utilize physical resources including equipment and cached materials to support a medical surge

1215

1216 **Activity 3. Incorporate Medical Surge into the HCC Response Plan**

1217 The HCC response plan as described in Capability 2 - Health Care and Medical Response and Recovery
 1218 Coordination should detail the activation and notification processes for initiating medical surge response
 1219 coordination among HCC members. The HCC should document information related to medical surge,
 1220 particularly for hospitals and EMS, including

- 1221 • Surge related Essential Elements of Information (EEI), especially bed and resource availability,
- 1222 • Coordination of surge strategies and objectives,
- 1223 • Resource requests and management including staff and volunteer management,
- 1224 • Strategies for initial patient distribution and re-distribution of patients in the event a facility
 1225 becomes overwhelmed,

- 1226 • Strategies for patient tracking,
- 1227 • Medical countermeasures distribution – especially in case of need for mass prophylaxis,
- 1228 • Strategies if the emergency overwhelms an HCC’s specialty care (e.g., anthrax, burn, pediatric)
- 1229 resources,
- 1230 • Processes for HCC and member decision making and engagement to avoid crisis conditions
- 1231 based on proactive decisions about resource utilization, and
- 1232 • Jurisdictional interface with the NDMS, including an understanding of assets and services
- 1233 available, coordination with an area’s Federal Coordinating Center, and responsibilities for local
- 1234 support of air and rail heads for patient movement activities.

Objective 2: Respond to a Medical Surge

1235 Independent health care organizations and the HCC will need to respond to a surge in demand for health
 1236 care services as a result of an emergency. This will require a coordinated approach to share information
 1237 and resources and ensure the stewardship of beds, medical equipment, supplies, pharmaceuticals, and
 1238 other key items to provide the best possible care under such conditions.
 1239

Activity 1. Implement Emergency Department and Inpatient Medical Surge Response

1240 Hospitals must activate their EOP to rapidly develop a medical surge response proportionate to the
 1241 emergency. Hospitals should engage HCC members with the end goal of returning to normal operations
 1242 as quickly as possible by either acquiring additional resources or sharing the patient load.
 1243
 1244

1245 Hospitals should develop their MSCC in the following areas:

1246 *Table 2 – Areas to Develop Emergency Department and Inpatient Medical Surge*
 1247 *Capacity and Capability*

Area	Description
Emergency Department	<ul style="list-style-type: none"> • Make beds and surge spaces rapidly available for initial triage and stabilization and obtain additional staff, equipment, and supplies
General Medical, General Surgical, and Monitored Beds	<ul style="list-style-type: none"> • Ensure immediate bed availability (IBA) (at least 20 percent additional acute care inpatient capacity within the first four hours following an emergency) by rapidly prioritizing patients for discharge, maximizing the use of staffed beds, and using non-traditional spaces (e.g., observation areas)
Critical Care	<ul style="list-style-type: none"> • Rapidly expand capacity (for those facilities that provide it) by adapting procedural, pre- and post-operative, and other areas for critical care • Assess staff, equipment, and supply needs for these spaces to facilitate requests
Surgical Intervention	<ul style="list-style-type: none"> • Secure resources such as operating rooms, surgeons, anesthesiologists, operating room nurses, and surgical equipment and supplies to provide time-sensitive, immediate surgical interventions to patients with life threatening injuries
Staffing	<ul style="list-style-type: none"> • Call back supplemental staff, utilize staff in non-traditional roles • Adjust staffing ratios and shifts as required, and implement HCC member staff sharing plans

Area	Description
Health Care Volunteer Management	<ul style="list-style-type: none"> • Identify situations that would necessitate the need for volunteers in hospitals • Estimate the anticipated number of volunteers and health professional roles based on identified situations and resource needs of the facility • Identify volunteer liability issues and scope of practice issues that may deter volunteer use • Leverage existing government and non-governmental volunteer registration programs (e.g., Emergency System for Advance Registration of Volunteer Health Professional (ESAR-VHP) and MRC • Develop rapid credential verification processes to facilitate emergency response
Equipment and Supplies	<ul style="list-style-type: none"> • Implement emergency equipment, supplies and stocking strategies and HCC resource sharing agreements

1248

1249 **Activity 2. Implement Out of Hospital Medical Surge Response**

1250 Patient care settings outside of hospitals may be impacted during an emergency. For example, structural
 1251 impacts from natural disasters or increased demand during epidemics may compromise an outpatient
 1252 clinic’s ability to provide care. If not adequately addressed, the demand for out of hospital care will
 1253 usually fall on hospitals and EMS, further overloading an already burdened system. Safe continued
 1254 operations of a community’s out of hospital care resources is critical to an effective medical surge
 1255 response. Therefore, HCC out of hospital members, including ambulatory care, stand-alone surgical and
 1256 specialty centers, skilled nursing, nursing, and long-term care facilities, and home care should share staff
 1257 and resources and be fully integrated into the region’s surge response activities.

1258

1259 **Activity 3. Develop Alternate Care Systems**

1260 When demand overwhelms a region or the nation’s health care delivery system for a prolonged period,
 1261 or an emergency has significantly damaged infrastructure and limited access to health care, health care
 1262 organizations and the HCC should work together to meet patient care needs.

1263 Below are considerations when developing [alternate care systems](#):

1264 *Table 3 - Key Considerations to Develop Alternate Care Systems*

Category	Key Considerations
Telemedicine/Virtual Medicine	<ul style="list-style-type: none"> • Use telephone, internet, telemedicine consultations, or other virtual platforms to provide consultation between providers • Provide access to specialty care expertise where it does not exist within the HCC to allow for remote triage and initial stabilization of patients

Category	Key Considerations
Screening/Early Treatment	<ul style="list-style-type: none"> Establish assessment and screening centers that allow the health care delivery system to respond to increased demand for screening and early treatment (e.g., during a pandemic). These centers would preferentially manage patients with minor symptoms and those who might require limited medical intervention – patients who might otherwise overwhelm emergency departments. Public health and emergency management have a leadership role in selecting, establishing, and operating the sites, though the health care delivery system may provide support, including personnel and supplies.
Medical Care at Shelters	<ul style="list-style-type: none"> Provide medical care support at community-established shelters (may involve ESAR-VHP, MRC, disaster medical teams, nursing home staff, or a variety of ambulatory care providers).
Disaster Alternate Care Facilities Selection and Operation	<ul style="list-style-type: none"> The support that hospitals and EMS will provide to alternate care sites⁴⁹ for non-ambulatory care should these be needed for hospital overflow.

1265

1266 Activity 4. Implement Specialty Care during a Medical Surge Response

1267 Certain emergencies require a specialized response, either because of the hazard posed by the patient,
 1268 the specific vulnerabilities of the patient populations, or because of a lack of specialty services for that
 1269 patient population in the region. HCCs facilitate the specialty care response through timely information
 1270 and resource sharing (e.g., EEIs, expertise that exists within the HCC, etc.).

1271 Below are specialty surge response considerations:

1272 *Table 4 - Key Considerations to Implement Specialty Care during a Medical Surge*
 1273 *Response*

Category	Key considerations
Pediatrics	All hospitals must be prepared to receive and stabilize pediatric patients. However, given the limited number of pediatric specialty hospitals, an emergency affecting large numbers of children may require HCC involvement to ensure those children that can benefit the most from pediatric specialty services receive priority for transfer. Additionally, pediatric practitioners may be able to help identify patients that are appropriate for transfer to non-pediatric facilities.

⁴⁹*Disaster Alternate Care Facilities: Selection and Operation*. Denver Health. October 2009. Web. 19 July 2016. <<http://archive.ahrq.gov/prep/acfselection/dacfreport.pdf>>.

Category	Key considerations
HAZMAT	Each hospital receiving patients from EMS should be prepared to provide wet and dry decontamination by personnel trained and equipped according to the OSHA First Receiver Guidance ⁵⁰ . Additionally, EMS providers should be aware of the plans for receiving patients, decontamination, patient movement inside the hospital and the hospital’s HAZMAT capabilities. Pre-hospital and hospital staff should work together on a regional HAZMAT approach to manage a response. This includes distributing and administering antidotes, including Chempacks ⁵¹ when necessary.
Radiation	Many radiation emergencies result in contamination that must be managed similarly to a HAZMAT emergency. In some instances, there may be no contamination or the challenge may be to provide screening and appropriate treatment to patients after a local or remote nuclear accident. Specific local and regional radiation risks and assets should be detailed and EMS should be aware of any facility designations relative to radiation screening and treatment. In particular, all trauma receiving hospitals in urban areas or in close proximity to nuclear facilities should be capable of screening patients for radiation contamination.
Burn	All hospitals must be prepared to receive and stabilize burn patients. However, given the limited number of burn specialty hospitals, an emergency that results in large numbers of burn patients may require HCC involvement to ensure those patients that can benefit the most from burn specialty services receive priority for transfer. Additionally, a specialty hospital can identify patients who do not require burn center care and who are appropriate for transfer to other health care facilities.

⁵⁰ OSHA Best Practices for Hospital-based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances. Occupational Safety & Health Administration. January 2005. Web. 19 July 2016. <https://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html>

⁵¹ CHEMPACK Overview. Chemical Hazards Emergency Medical Management, U.S. Department of Health and Human Services. 2016. Web. 19 July 2016. <<https://chemm.nlm.nih.gov/index.html>>

Category	Key considerations
Highly Infectious Diseases	All hospitals should be prepared to screen patients for signs, symptoms, and relevant travel and exposure history, appropriately isolate patients, and provide Personal Protective Equipment (PPE) to their employees and visitors while awaiting either comprehensive evaluation, definitive diagnosis, or transfer. Patients with suspected highly pathogenic respiratory viruses (e.g., severe acute respiratory syndrome (SARS)/MERS) and other highly transmissible infections require assessment and management at a tertiary care facility or designated facility. EMS should coordinate PPE and response protocols with the designated receiving facilities. The HCC should define common visitor policies and expectations across the HCC with regard to infectious diseases. In addition, the HCC should include health care associated infections (HAI) coordinators and quality improvement professionals at the facility and jurisdiction levels in HCC activities, including planning, training, and exercising/drilling. Finally, the HCC should work with its members to document and share promising practices for preventing and responding to HAI and limiting the transmission of infectious diseases within and between health care facilities. This includes utilizing information sharing platforms to notify HCC members of unusually high cases of HAIs or infectious diseases present in member facilities.

1274 Activity 5. Provide Behavioral Health Care during a Medical Surge

1275 Response

1276 Emergencies may cause severe emotional impact on survivors, their families, and responders and also
 1277 cause substantial destabilization of patients with existing behavioral health issues. Hospitals and
 1278 outpatient care providers, including behavioral health professionals, must identify a regional approach
 1279 to assess and address the needs of the community. HCC members should ensure a robust behavioral
 1280 health response that should include, but not be limited to, the following:

- 1281 • A proportional behavioral health response mobilized according to the impact of emergencies on the
 1282 community
- 1283 • The development and use of behavioral health support and strike teams to support the affected
 1284 population
- 1285 • Ongoing support for inpatient and outpatient care of psychiatric patients
- 1286 • Wide dissemination of information to help providers, patients, family, and the community at large
 1287 understand the symptoms and signs of acute stress responses and when and where to seek
 1288 treatment
- 1289 • Behavioral health professionals increasing contact with clients
- 1290 • Provision of psychological first aid to those impacted (including health care workers).

1291 Activity 6. Manage Mass Fatalities

1292 Hospitals must be able to manage an increase in decedents at their facilities. Hospitals should be aware
 1293 of community plans and authorities for an emergency resulting in mass fatalities. Mass fatality
 1294 management may involve emergency management, public health and/or the Office of the Chief Medical
 1295 Examiner, depending on the nature of the emergency. HCCs and their members should consider the
 1296 following:

- 1297 • Preparing for a surge in initial storage of decedents, including those that will not become
1298 medical examiner cases (e.g., pandemic)
- 1299 • Security and management of highly infectious decedents (e.g., Ebola)
- 1300 • Managing large numbers of family members and friends of decedents who may come to the
1301 hospital
- 1302 • Facilitating the identification of ad hoc mass fatality storage sites in the community (e.g., ice
1303 rinks, parking decks, etc.).

1304 Activity 7. Distribute Medical Countermeasures during Medical Surge 1305 Response

1306 In coordination with public health, the HCC and its member organizations must be prepared to receive
1307 and distribute medical countermeasures (MCM) to their patients, employees, and employee-
1308 dependents during a medical surge event (e.g., radiation, botulism, anthrax and other [category A](#)
1309 [bioterrorism agents](#)⁵²).

1310 It is important to keep patients, employees, and their families' safe during biological emergencies. A
1311 [closed point of dispensing \(POD\)](#) should be established when there is potential or confirmed exposure
1312 and where prophylactic MCM exist. Access to such MCM may either be requested through the ESF-8
1313 structure or may exist in HCC or individual HCC member's caches. The closed POD allows for an
1314 organized and timely distribution of medication or vaccines to exposed individuals.

1315 Objective 3: Exercise Medical Surge Response

1316 Health care organizations should test all components of surge capacity and capability through an annual
1317 functional exercise. This includes mobilization of beds, personnel, and key resources, including
1318 equipment, supplies, and pharmaceuticals. HCC members should share information about their
1319 operating status and resource availability.

1320 Often, specific and time-limited drills can suffice to test the systems and reinforce learning. Tabletop
1321 exercises can provide leadership with experience managing a response and testing surge capacity and
1322 capability, including crisis care decisions.⁵³

1323 Part of the surge evaluation process includes the ability to conduct specific requests between health
1324 care organizations, within the HCC, and to coordinate with ESF-8. Upon completing an exercise, health
1325 care organizations should develop an after action report/improvement plan (AAR/IP) to identify gaps,
1326 opportunities for improvement, and training needs for medical surge planning. Please refer to Capability
1327 1 - Foundation for Health Care and Medical Readiness, Objective 4 – Train and Prepare the Health Care
1328 and Medical Workforce.

⁵² Bioterrorism Overview. Centers for Disease Control and Prevention. February 2007. Web. 19 July 2016.
<<http://emergency.cdc.gov/bioterrorism/overview.asp>>

⁵³ *Health Care Coalition Surge Evaluation Tool*. Office of the Assistant Secretary for Preparedness and Response.
June 2016. Web. 19 July 2016. <<http://www.phe.gov/Preparedness/planning/hpp/Pages/coalition-tool.aspx>>

1329
1330

Glossary

Term	Definition
Access and Functional Needs	People with access and functional needs include at-risk individuals such as children, seniors, pregnant women, people with disabilities, and others with unique needs. ⁵⁴
Acute Medical Care	Acute medical care is the delivery of health care services to a patient that requires care for severe injury or episode of illness, an urgent medical condition, or during recovery from surgery. In medical terms, care for acute health conditions is the opposite from chronic care, or longer term care. ⁵⁵
Advanced Life Support (ALS)	If after the preliminary aid is given basic life support (BLS), the emergency medical technician (EMT) feels that more help is required, a member of the Advanced Life Support (ALS) team is requested to take over. The ALS group is a team of highly trained individuals that provide more advanced medical help to the patients in transit when needed. In other words, they are authorized to do the things that EMTs cannot do for the patient. ⁵⁶
All-Hazards	Describing an incident, natural or manmade, that warrants action to protect life, property, environment, and public health or safety, and to minimize disruptions of government, social, or economic activities. ⁵⁷
Alternate Care Sites	Encompasses all non-hospital-based locations where organized non-ambulatory or ambulatory care can be provided at a time of markedly increased need during a naturally occurring or man-made disaster. ⁵⁸
Alternate Care Systems	Encompasses a full array of organizations outside the hospital in which health care can be delivered in a health care emergency, including nursing homes, home care, and skilled nursing, nursing, and long-term care facilities, etc.
Basic Life Support (BLS)	A group that aims to provide basic life support to patients that they are attending to. The group includes <ul style="list-style-type: none"> • First Responder, • Ambulance Driver,

⁵⁴ *At-Risk Individuals*. U.S. Department of Health & Human Services Office of the Assistant Secretary for Preparedness and Response. 1 Mar 2015. Web. 20 July 2016.

<<http://www.phe.gov/preparedness/planning/abc/pages/at-risk.aspx>>.

⁵⁵ *Acute Care*. Canadian Institute for Health Information. Web. 20 July 2016. <<https://www.cihi.ca/en/types-of-care/hospital-care/acute-care>>.

⁵⁶ *Advanced Life Support*. FC Emergency Medical Services. 2016. Web. 20 July 2016.
<<http://www.fcems.org/advanced-life-support.html>>.

⁵⁷ *Glossary*. FEMA. 2016. Web. 20 July 2016. <<https://emilms.fema.gov/IS700aNEW/glossary.htm>>.

⁵⁸ *Disaster Alternate Care Facilities: Selection and Operation*. Denver Health. October 2009. Web. 19 July 2016.
<<http://archive.ahrq.gov/prep/acfselection/dacfreport.pdf>>.

Term	Definition
	<ul style="list-style-type: none"> • Ambulance Care Assistant, and • EMT – Basic.⁵⁹ <p>A basic life support group is the team required to identify emergency situations, give first aid and transport a patient to the nearest hospital if necessary. The emergency medical technician (EMT) is given the task to give all the preliminary aids to the patient if necessary. If the situation calls for it, they can give the patients IV, medicines, and perform oxygen therapies.⁶⁰</p>
Category A Bioterrorism Agents	<p>Category A pathogens are those organisms/biological agents that pose the highest risk to national security and public health because they</p> <ul style="list-style-type: none"> • Can be easily disseminated or transmitted from person to person, • Result in high mortality rates and have the potential for major public health impact, • Might cause public panic and social disruption, and • Require special action for public health preparedness⁶¹
Cities Readiness Initiative (CRI)	<p>A federally funded program designed to enhance preparedness in the nation's largest population centers where more than 50% of the U.S. population resides. Using CRI funding, state and large metropolitan public health departments develop, test, and maintain plans to quickly receive and distribute life-saving medicine and medical supplies from the SNS to local communities following a large-scale public health emergency.⁶²</p>
Closed Point of Dispensing (POD)	<p>Closed PODs are not open to the public; they are company facilities where medication is made available exclusively to a company's employees and family members.⁶³</p>
Community Paramedicine	<p>Allows paramedics and emergency medical technicians (EMTs) to operate in expanded roles to provide health care services to underserved populations. It is a way to improve rural emergency medical services (EMS) as well as address the health care needs of the community.⁶⁴</p>

⁵⁹ *Basic Life Support Team*. FC Emergency Medical Services. 2016. 20 July 2016. <<http://www.fcems.org/basic-life-support.html>>

⁶⁰ *Advanced Life Support*. FC Emergency Medical Services. 2016. Web. 20 July 2016. <<http://www.fcems.org/advanced-life-support.html>>.

⁶¹ *NIAID Emerging Infectious Diseases/Pathogens*. U.S. Department of Health and Human Services National Institutes of Health. 25 Jan. 2016. Web. 20 July 2016. <<https://www.niaid.nih.gov/topics/biodefenselated/biodefense/pages/cata.aspx>>.

⁶² *Cities Readiness Initiative*. Centers for Disease Control and Prevention Office of Public Health Preparedness and Response. 2016. Web. 20 July 2016. <<http://www.cdc.gov/phpr/stockpile/cri/>>.

⁶³ *Successful Partnerships*. Centers for Disease Control and Prevention Office of Public Health Preparedness and Response. 10 Apr. 2015. Web. 20 July 2016. <http://www.cdc.gov/phpr/partnerships/story_closedpods.htm>.

⁶⁴ *Community Paramedicine*. Rural Health Information Hub. 18 May 2015. Web. 20 July 2016. <<https://www.ruralhealthinfo.org/topics/community-paramedicine>>.

Term	Definition
Critical Care	Critical care helps people with life-threatening injuries and illnesses. It might treat problems such as complications from surgery, accidents, infections, and severe breathing problems. It involves close, constant attention by a team of specially-trained health care providers. Critical care usually takes place in an intensive care unit (ICU) or trauma center. ⁶⁵
Emergency Operations Center (EOC)	The physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place. An EOC may be a temporary facility or may be located in a more central or permanently established facility, perhaps at a higher level of organization within a jurisdiction. EOCs may be organized by major functional disciplines (e.g., fire, law enforcement, medical services), by jurisdiction (e.g., Federal, State, regional, tribal, city, county), or by some combination thereof. ⁶⁶
Emergency Operations Plan (EOP)	An ongoing plan for responding to a wide variety of potential hazards. ⁶⁷
Emergency Support Function Mass Care, Emergency Assistance, Housing, and Human Services Annex (ESF-6)	Coordinates federal assistance in support of state and local efforts to meet the mass care needs of victims of a disaster. This federal assistance will support the delivery of mass care services of shelter, feeding, and emergency first aid to disaster victims; the establishment of systems to provide bulk distribution of emergency relief supplies to disaster victims; and the collection of information to operate a Disaster Welfare Information (DWI) system for the purpose of reporting victim status and assisting in family reunification. ⁶⁸
Emergency Support Function Public Health and Medical Services Annex (ESF-8)	ESF-8 – Public Health and Medical Services provides the mechanism for coordinated federal assistance to supplement State, Tribal, and local resources in response to an emergency. Emergency Support Functions (ESFs) is the grouping of governmental and certain private sector capabilities into an organizational structure to provide support, resources, program implementation, and services that are most likely needed to save lives, protect property and the environment, restore essential services and critical infrastructure, and help victims and communities return to normal following domestic incidents. ⁶⁹

⁶⁵ *Critical Care*. U.S. National Library of Medicine MedlinePlus. 2016. Web. 20 July 2016. <<https://medlineplus.gov/criticalcare.html>>.

⁶⁶ *Glossary*. FEMA. 2016. Web. 20 July 2016. <<https://emilms.fema.gov/IS700aNEW/glossary.htm>>.

⁶⁷ *Glossary*. FEMA. 2016. Web. 20 July 2016. <<https://emilms.fema.gov/IS700aNEW/glossary.htm>>.

⁶⁸ *Emergency Support Function #6 – Mass Care, Emergency Assistance, Housing, and Human Services Annex*. FEMA. Jan. 2008. Web. 20 July 2016. <<https://www.fema.gov/pdf/emergency/nrf/nrf-esf-06.pdf>>.

⁶⁹ *Emergency Support Function #8 – Public Health and Medical Services Annex*. FEMA. Jan. 2008. Web. 20 July 2016. <https://www.fema.gov/media-library-data/20130726-1825-25045-8027/emergency_support_function_8_public_health_medical_services_annex_2008.pdf>.

Term	Definition
Emergency Support Function Transportation Annex (ESF-1)	Transportation provides support by assisting local, state, tribal, territorial, insular area, and federal governmental entities, voluntary organizations, nongovernmental organizations, and the private sector in the management of transportation systems and infrastructure during domestic threats or in response to actual or potential incidents. ⁷⁰
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 states and territories 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, credentials, accreditations, and hospital privileges are all verified in advance, saving valuable time in emergency situations ⁷¹ .
Emergency Use Authorization	This authority allows FDA to help strengthen the nation's public health protections against CBRN threats by facilitating the availability and use of MCMs needed during public health emergencies. Under section 564 of the Federal Food, Drug, and Cosmetic Act (<u>FD&C Act</u>), the FDA Commissioner may allow unapproved medical products or unapproved uses of approved medical products to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions caused by CBRN threat agents when there are no adequate, approved, and available alternatives. ⁷²
ESF-8 Lead Agency	ESF-8 language distinguishes between lead and supporting agencies to conduct an emergency response. ⁷³ Within the context of ESF, primary agencies have significant authorities, roles, resources, and capabilities for a particular function within an ESF.
Essential Elements of Information (EEI)	Information collected under the Emergency Support Functions (ESF) to enable situational awareness of an incident or response. ⁷⁴

⁷⁰ *Emergency Support Function #1 – Transportation Annex*. FEMA. Jan. 2008. Web. 20 July 2016. <<https://www.fema.gov/pdf/emergency/nrf/nrf-esf-01.pdf>>.

⁷¹ *The Emergency System for Advance Registration of Volunteer Health Professionals*. U.S. Department of Health and Human Services. 2016. Web. 20 July 2016. <<http://www.phe.gov/esarvhp/Pages/about.aspx>>.

⁷² *Emergency Use Authorization*. U.S. Food and Drug Administration. Web. 20 July 2016. <<http://www.fda.gov/EmergencyPreparedness/Counterterrorism/ucm182568.htm>>.

⁷³ *Emergency Support Function #8 – Public Health and Medical Services Annex*. FEMA. Jan. 2008. Web. 20 July 2016. <https://www.fema.gov/media-library-data/20130726-1825-25045-8027/emergency_support_function_8_public_health_medical_services_annex_2008.pdf>.

⁷⁴ *Essential Elements of Information*. U.S. Department of Health & Human Services Office of the Assistant Secretary for Preparedness and Response. Web. 20 July 2016. <<http://www.phe.gov/Preparedness/planning/playbooks/rdd/Pages/essentialelements.aspx>>.

Term	Definition
Fully Integrated Corporate Health System	An organized, coordinated, and collaborative network that (1) links various health care providers, via common ownership or contract, across three domains of integration – economic, noneconomic, and clinical – to provide a coordinated, vertical continuum of services to a particular patient population or community, and (2) is accountable both clinically and fiscally for the clinical outcomes and health status of the population or community served, and has systems in place to manage and improve them. ⁷⁵
Hazard Vulnerability Analysis (HVA)	A systematic approach to identifying all hazards that may affect an organization and/or its community, assessing the risk (probability of hazard occurrence and the consequence for the organization) associated with each hazard, and analyzing the findings to create a prioritized comparison of hazard vulnerabilities. The consequence, or “vulnerability,” is related to both the impact on organizational function and the likely service demands created by the hazard impact.
HAZMAT	A material (as flammable or poisonous material) that would be a danger to life or to the environment if released without precautions. ⁷⁶
Health and Medical Coordination Center (HMCC)	A health care or health care-related entity in the geographic area of an emergency, with the ability to support the situational awareness, surge response including resource coordination and patient movement, risk communication, and just-in-time training.
Health Care Coalition (HCC) Member	An HCC member is defined as an entity within the defined boundaries of the HCC that actively contributes to HCC strategic planning, operational planning and response, information sharing, and resource coordination and management.
Health Care Coalition(s) (HCC)	A group of individual health care organizations (e.g., hospitals, clinics, nursing homes, etc.) in a defined geographic location. HCCs serve as a multi-agency coordination group that supports and integrates with emergency management and Emergency Support Function Public Health and Medical Services Annex ESF-8.
Health Care Facility	Any asset where point-of-service medical care is regularly provided or provided during an incident. It includes hospitals, integrated health care systems, private physician offices, outpatient clinics, nursing homes and other medical care configurations. During an emergency response, alternative medical care facilities and sites where definitive medical care is provided by EMS and other field personnel would be included in this definition.

⁷⁵ *Integrated Delivery Systems*. AJMC. 15 Dec. 2009. Web. 20 July 2016. <http://www.ajmc.com/journals/supplement/2009/a264_09dec_hlthpolicycvrone/a264_09dec_enthovens284to290/>.

⁷⁶ HAZMAT. Merriam-Webster. Web. 20 July 2016. <<http://www.merriam-webster.com/dictionary/hazmat>>.

Term	Definition
Health Insurance Portability and Accountability Act (HIPAA)	The Health Insurance Portability and Accountability Act (HIPAA) offers protections for millions of America’s workers that improve portability and continuity of health insurance coverage. ⁷⁷
Health Care Associated Infections (HAI)	Health care-associated infections, or HAIs, are infections that people acquire while they are receiving treatment for another condition in a health care setting. ⁷⁸
Homeland Security Exercise and Evaluation Program (HSEEP) Fundamentals	Principles that frame a common approach to exercises. These principles include the following: ⁷⁹ <ul style="list-style-type: none"> • Guided by Elected and Appointed Officials • Capability-based, Objective Driven • Progressive Planning Approach • Whole Community Integration • Common Methodology
Hospital Incident Command System	Incident management system that can be used by any hospital to manage threats, planned events, or emergency incidents. It is based on the same principles as the Incident Command System (ICS) component of the NIMS, adapted for the health care environment. ⁸⁰
Immediate Bed Availability (IBA)	The ability of a health care coalition to provide no less than 20% bed availability of staffed members’ beds within four hours of a disaster. It is built on three pillars: continuous monitoring across the health system; off-loading of patients who are at low risk for untoward events through reverse triage; and on-loading of patients from the disaster. ⁸¹
Incident Action Plan (IAP)	A tool to synchronize operations at the incident level and ensures that incident operations are conducted in support of incident objectives. ⁸²
Incident Action Planning Cycles	The iterative incident action planning cycles provides preparedness and response partners involved in incident management operations the primary tool for managing incidents. A disciplined system of

⁷⁷ *The Health Insurance Portability and Accountability Act*. United States Department of Labor. Nov. 2015. Web. 20 July 2016. <<https://www.dol.gov/ebsa/newsroom/fshipaa.html>>.

⁷⁸ *National Action Plan to Prevent Health Care Associated Infections*. Health.gov Web. 20 July 2016. <<http://health.gov/hcq/prevent-hai.asp>>.

⁷⁹ *HSEEP*. FEMA. Apr. 2013. Web. 20 July 2016. <http://www.fema.gov/media-library-data/20130726-1914-25045-8890/hseep_apr13_.pdf>.

⁸⁰ *Hospital Incident Command System*. California Emergency Medical Services Authority. May 2014. Web. 20 July 2016. <http://www.emsa.ca.gov/media/default/HICS/HICS_Guidebook_2014_11.pdf>.

⁸¹ *Immediate Bed Availability*. U.S. Department of Health & Human Services. Web. 20 July 2016. <<http://www.phe.gov/coi/Pages/iba.aspx>>.

⁸² *FEMA Incident Action Planning Guide*. FEMA. Jan. 2012. Web. 20 July 2016. <http://www.fema.gov/media-library-data/20130726-1822-25045-1815/incident_action_planning_guide_1_26_2012.pdf>.

Term	Definition
	planning phases and collaboration sessions fosters partnerships and clearly focuses incident operations. ⁸³
Incident Command System (ICS)	A standardized on-scene emergency management construct specifically designed to provide an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations. ⁸⁴
Incident Management Structures	A structure used to guide government agencies, non-governmental organizations (NGO), and the private sector in working together seamlessly and managing incidents involving all threats and hazards—regardless of cause, size, location, or complexity—in order to reduce loss of life, loss of property, and harm to the environment. ⁸⁵
Joint Commission	An independent, not-for-profit organization, The Joint Commission accredits and certifies nearly 21,000 health care organizations and programs in the United States. Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization’s commitment to meeting certain performance standards. ⁸⁶
Joint Information System (JIS)	The JIS provides the mechanism to organize, integrate, and coordinate information to ensure timely, accurate, accessible, and consistent messaging across multiple jurisdictions and/or disciplines with nongovernmental organizations and the private sector; it includes the plans, protocols, procedures, and structures used to provide public information. Federal, state, tribal, territorial, regional, or local Public Information Officers and established Joint Information Centers (JICs) are critical supporting elements of the JIS. ⁸⁷
Medical Countermeasures (MCM)	Medical countermeasures, or MCMs, are FDA-regulated products (biologics, drugs, devices) that may be used in the event of a

⁸³ *FEMA Incident Action Planning Guide*. FEMA. Jan. 2012. Web. 20 July 2016. <http://www.fema.gov/media-library-data/20130726-1822-25045-1815/incident_action_planning_guide_1_26_2012.pdf>.

⁸⁴ *Glossary*. FEMA. 2016. Web. 20 July 2016. <<https://emilms.fema.gov/IS700aNEW/glossary.htm>>.

⁸⁵ *NIMS Doctrine Supporting Guides & Tools*. FEMA. 23 Dec. 2016. Web. 20 July 2016. <<http://www.fema.gov/nims-doctrine-supporting-guides-tools>>.

⁸⁶ *About the Joint Commission*. The Joint Commission. Web. 20 July 2016. <https://www.jointcommission.org/about_us/about_the_joint_commission_main.aspx>.

⁸⁷ *Joint Information Systems Concept*. FEMA. Web. 20 July 2106. <<https://emilms.fema.gov/IS702A/PIO0103summary.htm>>.

Term	Definition
	potential public health emergency stemming from a terrorist attack with a biological, chemical, or radiological/nuclear material, a naturally occurring emerging disease, or a natural disaster. MCMs can be used to diagnose, prevent, protect from, or treat conditions associated with chemical, biological, radiological, or nuclear (CBRN) threats, or emerging infectious diseases. ⁸⁸
Medical Reserve Corps (MRC)	A national network of local groups of volunteers engaging local communities to strengthen public health, reduce vulnerability, build resilience, and improve preparedness, response, and recovery capabilities. ⁸⁹
Medical Surge Capacity and Capability (MSCC)	A management methodology based on valid principles of emergency management and the ICS. Medical and public health disciplines may apply these principles to coordinate effectively with one another, and to integrate with other response organizations that have established ICS and emergency management systems (fire service, law enforcement, etc.). This promotes a common management system for all response entities—public and private—that may be brought to bear in an emergency. In addition, the MSCC Management System guides the development of public health and medical response that is consistent with the National Incident Management System (NIMS).
Medical Unit Leader	Individual primarily responsible for the development of the Medical Plan ICS Form 206, obtaining medical aid and transportation for injured and ill incident personnel, establishment of Responder Rehabilitation, and preparation of reports and records. ⁹⁰
Member Type	A category of HCC members that represents a type of facility or organization (e.g., all nursing facilities, all hospitals, or all EMS agencies within one HCC).
Mission Essential Functions (MEFs)	The limited set of organization-level government functions that must be continued or resumed quickly after a disruption of normal activities. ⁹¹
National Disaster Medical System (NDMS)	The National Disaster Medical System (NDMS) is a federally coordinated system that augments the Nation's medical response capability. The overall purpose of the NDMS is to supplement an integrated national medical response capability for assisting State and local authorities in dealing with the medical impacts of major

⁸⁸ *What are Medical Countermeasures?* U.S. Food and Drug Administration. 29 Apr. 2016. Web. 20 July 2016. <<http://www.fda.gov/EmergencyPreparedness/Counterterrorism/MedicalCountermeasures/AboutMCMi/ucm431268.htm>>.

⁸⁹ *Medical Reserve Corps.* Medical Reserve Corps. Web. 20 July 2016. <<http://www.medicalreservecorps.gov/volunteerfldr/AboutVolunteering>>.

⁹⁰ *Coffee Break Training.* United States Fire Administration. 12 May 2014. Web. 20 July 2016. <https://www.usfa.fema.gov/downloads/pdf/coffee-break/cc/cc_2014_5.pdf>.

⁹¹ *Continuity Guidance Circular 2.* FEMA. Oct. 2013. Web. 20 July 2016. <<https://www.fema.gov/media-library-data/1386609058826-b084a7230663249ab1d6da4b6472e691/Continuity-Guidance-Circular2.pdf>>.

Term	Definition
	peacetime disasters and to provide support to the military and the Department of Veterans Affairs medical systems in caring for casualties evacuated back to the U.S. from overseas armed conventional conflicts. ⁹²
National Disaster Recovery Framework	A guide that enables effective recovery support to disaster-impacted states, tribes, territorial and local jurisdictions. It provides a flexible structure that enables disaster recovery managers to operate in a unified and collaborative manner. It also focuses on how best to restore, redevelop and revitalize the health, social, economic, natural and environmental fabric of the community and build a more resilient Nation. ⁹³
National Incident Management System (NIMS)	A set of principles that provides a systematic, proactive approach guiding government agencies at all levels, nongovernmental organizations, and the private sector to work seamlessly to prevent, protect against, respond to, recover from, and mitigate the effects of incidents, regardless of cause, size, location, or complexity, in order to reduce the loss of life or property and harm to the environment. ⁹⁴
OSHA First Receiver Guidance	Practical information to help hospitals address employee protection and training as part of emergency planning for mass casualty incidents involving hazardous substances. ⁹⁵
Personal Protective Equipment (PPE)	Equipment worn to minimize exposure to a variety of hazards. Examples of PPE include such items as gloves, foot and eye protection, protective hearing devices (earplugs, muffs) hard hats, respirators and full body suits. ⁹⁶
Psychological First Aid	An evidence-informed modular approach for assisting people in the immediate aftermath of disaster and terrorism to reduce initial distress and to foster short- and long-term adaptive functioning. ⁹⁷
Public Information Officer (PIO)	As part of the incident response team, responsible for communicating with the public, media, and/or coordinating with other agencies, as necessary, with incident related information requirements. The PIO is responsible for developing and releasing

⁹² *National Disaster Medical System*. U.S. Department of Health & Human Services Office of the Assistant Secretary for Preparedness and Response. Web. 20 July 2016.

<<http://www.phe.gov/Preparedness/responders/ndms/Pages/default.aspx>>.

⁹³ *National Disaster Recovery Framework*. FEMA. 28 June 2016. Web. 20 July 2016.

<<https://www.fema.gov/national-disaster-recovery-framework>>.

⁹⁴ *Glossary*. FEMA. 2016. Web. 20 July 2016. <<https://emilms.fema.gov/IS700aNEW/glossary.htm>>.

⁹⁵ *OSHA Best Practices for Hospital-Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances*. Occupational Safety & Health Administration. Jan. 2005. Web. 20 July 2016.

<https://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html>.

⁹⁶ *Personal Protective Equipment*. Occupational Safety and Health Administration. 2013. Web. 20 July 2016.

<<https://www.osha.gov/Publications/OSHA3151.html>>.

⁹⁷ *Psychological First Aid Field Operations Guide 2nd Edition*. National Child Traumatic Stress Network & National Center for PTSD. Web. 20 July 2016. <[http://www.ptsd.va.gov/professional/manuals/manual-](http://www.ptsd.va.gov/professional/manuals/manual-pdf/pfa/PFA_2ndEditionwithappendices.pdf)

[pdf/pfa/PFA_2ndEditionwithappendices.pdf](http://www.ptsd.va.gov/professional/manuals/manual-pdf/pfa/PFA_2ndEditionwithappendices.pdf)>.

Term	Definition
	information about the incident to the news media, incident personnel, and other appropriate agencies and organizations. Depending on the size or complexity of the incident, a lead PIO should be assigned for each incident and may have assistants, as necessary, including supporting PIOs representing other responding agencies or jurisdictions. ⁹⁸
Regional Healthcare Coordination Center (RHCC)	A multi-agency center that coordinates the emergency response operations during a major emergency. ⁹⁹
Risk Benefit Analysis	The method by which the risks of treatment for a patient are evaluated against the benefits of the treatment outcomes. ¹⁰⁰
Section 1135 of the Social Security Act Waivers	Under Section 1135, the secretary can waive or modify specific requirements to match the particular needs of the emergency event and service providers. Section 1135 allows the secretary to waive or modify the following reimbursement requirements. ¹⁰¹
Strategic National Stockpile (SNS)	Designed to supplement and resupply state and local inventories of medicines and supplies during emergencies severe enough to exhaust local supplies. State governors or their designees request deployment of SNS assets when there has been an overt terrorist event that will harm the public’s health or where epidemiological, laboratory, or other surveillance systems have identified unusual patterns of disease or deaths that may indicate a terrorist event or other national emergency. ¹⁰²
Threat and Hazard Identification and Risk Assessment (THIRA)	A four step common risk assessment process that helps the whole community—including individuals, businesses, faith-based organizations, nonprofit groups, schools and academia and all levels of government—understand its risks and estimate capability requirements. ¹⁰³
Whole Community	A means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective

⁹⁸ *Basic Guidance for Public Information Officers*. FEMA. Nov. 2007. Web. 20 July 2016.

<https://www.fema.gov/media-library-data/20130726-1623-20490-0276/basic_guidance_for_pios_final_draft_12_06_07.pdf>.

⁹⁹ *Regional Hospital Coordinating Center*. Northern Virginia Hospital Alliance. 2016. Web. 20 July 2016.

<<http://www.novaha.org/active-projects/regional-hospital-coordinating-center-rhcc1/>>.

¹⁰⁰ *Commentary: psychiatric medications and lactation*. International Medical News Group. 2014. 20 July 2016

<<http://www.thefreelibrary.com/Commentary%3a+psychiatric+medications+and+lactation.-a0363104087>>.

¹⁰¹ *Emergency Authorization and Immunity Toolkit*. Association of State and Territorial Health Officials. 2016. Web. 20 July 2016. <<http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Emergency-Authority-and-Immunity-Toolkit/Social-Security-Act,-Section-1135-Waiver-Authority-in-National-Emergencies-Fact-Sheet/>>.

¹⁰² *Emergency Use Authorization Toolkit*. Association of State and Territorial Health Officials. 2016. Web. 20 July 2016. <<http://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Emergency-Use-Authorization-Toolkit/Strategic-National-Stockpile-Fact-Sheet/>>.

¹⁰³ *Threat and Hazard Identification and Risk Assessment*. FEMA. 19 Mar. 2016. Web. 20 July 2016.

<<https://www.fema.gov/threat-and-hazard-identification-and-risk-assessment>>.

Term	Definition
	communities and determine the best ways to organize and strengthen their assets, capacities, and interests. ¹⁰⁴
Whole of Hospital	All hospital departments including administration, clinical, and non-clinical support services.

1331

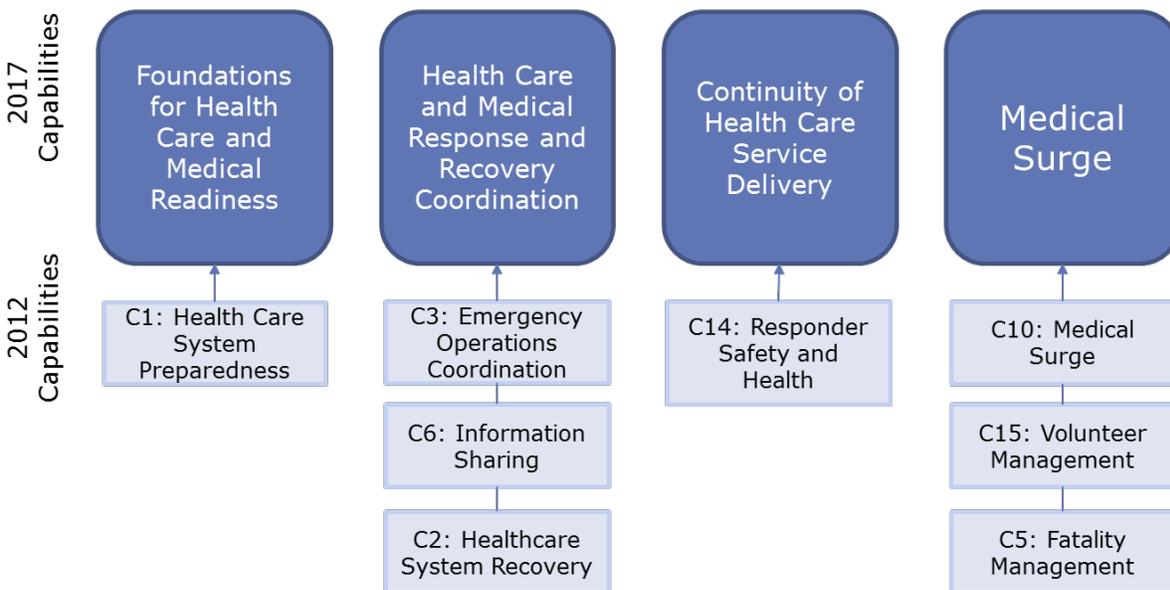
¹⁰⁴ *Whole Community*. FEMA. 10 June 2016. Web. 20 July 2016. <<https://www.fema.gov/whole-community>>.

1332 Appendix 1: The 2017 Health Care Preparedness and
 1333 Response Capabilities Revision Process

1334 The 2017 Health Care Preparedness and Response Capabilities improve upon the 2012 Healthcare
 1335 Preparedness Capabilities: National Guidance for Healthcare System Preparedness. ASPR incorporated
 1336 the lessons learned from previous responses to emergencies and extensive stakeholder engagement.
 1337 Stakeholder feedback included a Capability Needs Assessment in 2015, which involved surveys and
 1338 facilitated discussions with awardees, HCCs, and other stakeholders, to obtain their reactions to the
 1339 capability content, structure, and level of detail in the 2012 version, and suggested areas for revision.
 1340 ASPR also solicited input from over 50 national associations whose members have an interest in
 1341 emergency preparedness and response. Finally, ASPR facilitated discussions at emergency preparedness
 1342 and response conferences, solicited public feedback on ASPR’s TRACIE website, and consulted
 1343 preparedness and health care subject matter experts. ASPR also conducted a thorough review of
 1344 relevant preparedness and response literature and researched recent past events to inform the revision
 1345 process.

1346 Based on stakeholder feedback, ASPR streamlined the eight capabilities in the 2012 version into four
 1347 capabilities. While the number of capabilities have decreased, the concepts from all of the capabilities in
 1348 the 2012 version can be found within the new set of four capabilities. As seen in the figure below, the
 1349 2017 capabilities were informed by the content found in the 2012 capabilities.

1350 Figure 1 – Crosswalk of the 2012 and 2017 Capabilities



1351

1352 Appendix 2: Health Care Preparedness and Response
1353 Capabilities and Public Health Preparedness Capabilities
1354 Areas for Alignment

1355 This appendix will be developed upon the completion of the Public Health Preparedness Capabilities in
1356 2017.