HOSPITAL IMPLEMENTATION GUIDE

Developed by Troutman Sanders LLP

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INTRODUCTION TO THE IMPLEMENTATION GUIDE

The Critical Resource Shortages Planning Guide (Planning Guide) was designed as a tool that provides a systematic approach to addressing the complex issues surrounding modification of care and, in some cases, even allocation of resources, during large scale disasters and emergencies that result in critical resource shortage events.¹ The approach described in the Planning Guide is flexible enough to be used by any health or medical delivery organization (HMDO) or group of HMDOs (Planning Unit). HMDOs that follow the process outlined in the Planning Guide will create a Critical Resource Shortage Response Plan (CRSRP) containing, among other things, ethical and operational frameworks for responding to critical resource shortage events, and resource-specific Protocols that providers at the point of care can use to modify care provided by or with, or to allocate, specific critical resources. A more detailed explanation of the Planning Guide can be found in the Introduction of the Planning Guide.

The complexity of planning for critical resource shortage events can be overwhelming, even for experienced emergency planners and healthcare executives. Recognizing this, we have developed this Hospital Implementation Guide to assist those who are involved in preparing hospitals to respond to for critical resource shortage events.

This Hospital Implementation Guide serves as an “instruction manual” or “teacher’s edition” of the Planning Guide for use in a hospital setting. Each Chapter of the Hospital Implementation Guide begins with a “Chapter Overview” which (i) provides an introduction to the information included in the Chapter, (ii) assigns responsibility for completing the tasks within the Chapter, and (iii) lists the goals that will be accomplished in the Chapter.

Each section of the Hospital Implementation Guide corresponds to a section of the Planning Guide and contains the following:

- Actual language from the Planning Guide (set-off by a yellow text box);
- Explanation of the goal of the section;
- Explanation of the context for the section in relation to the other chapters of the Planning Guide;
- Explanation of the rationale for including the section in the Planning Guide;
- “Real world examples” which provide a practical application of the material in the section²;
- A step-by-step action item list to achieve the goal of the section³;

¹ A CRSE is a circumstance in which a critical resource is depleted, and all alternate methods of obtaining the critical resource have been exhausted, such that remaining resources will not allow a hospital to treat patients in accordance with the traditional standard of care.
² All “Real World Examples” are entirely fictional. The hospital names and situations, while based on real experiences, are not intended to represent any specific hospital, event or individual.
³ The specific recommendations and suggested considerations contained in the Hospital Implementation Guide are offered only for your consideration and are by no means required or mandatory. Similarly, the Hospital
• Helpful Hints for implementing the section; and
• A “toolbox” graphic beside specific action items and helpful hints that tells you if there are Implementation Aids available in the *Critical Resource Shortages Planning Guide Implementation Toolkit (Implementation Toolkit)* to provide further implementation assistance.

This *Hospital Implementation Guide* and *Implementation Toolkit* will be especially useful to anyone who is charged with organizing, leading or supporting any aspect of the *Planning Guide* process. The *Implementation Toolkit* includes additional resources, template documents to facilitate the *Planning Guide* process, a template Critical Resource Shortage Response Plan (CRSRP) that can serve as a starting point for your Planning Unit’s CRSRP. Also included in the *Implementation Toolkit* are template PowerPoint presentations for use during Implementation Team, Critical Resource Advisory Group (CRAG), and Protocol Development Subcommittee meetings for Chapters 1-7 and 10 of the *Planning Guide*. These presentations include extensive text and robust graphics that explain the content and application of the corresponding *Planning Guide* chapter.

We hope that this *Hospital Implementation Guide* will be a helpful resource for the Convener, Implementation Team and facilitators as they undertake this important work. Any questions about the *Implementation Guide* can be directed to Dr. Marissa Levine at 804-864-7026 or marissa.levine@vdh.virginia.gov, Steve Gravely at 804-697-1308 or steve.gravely@troutmansanders.com or Erin Whaley at 804-697-1389 or erin.whaley@troutmansanders.com.

*Implementation Guide* does not presume to be an exhaustive compendium of relevant examples or suggestions for the myriad of issues that arise in planning for CRSEs.
CHAPTER 1: 
PLANNING INFRASTRUCTURE

1. Develop the critical resource shortage response planning infrastructure

Developing an ethically sound and implementable Critical Resource Shortage Response Plan (CRSRP), which includes Protocols for altering traditional standards of care, does not just happen—it requires significant planning. Advance planning allows Health and Medical Delivery Organizations (HMDOs) to anticipate many scenarios that may arise during an actual emergency or disaster and provide guidance to those making decisions during the event. Planning also allows for time to discuss and debate issues away from the chaos and intense pressures of an emergency event. Creating a planning infrastructure that fosters these discussions is an important preliminary step that will set the tone for the entire planning process. Outlined below is a suggested process for assembling the proper team to do this important work.

Introduction
Creating a planning infrastructure is a vitally important initial step in the critical resource shortage response planning process. Each Planning Unit that undertakes preparedness planning using the Critical Resource Shortages Planning Guide (Planning Guide) and this Hospital Implementation Guide will develop its own unique infrastructure. Variations in the infrastructure will result due to the types of stakeholders involved, the community dynamics, and the Planning Unit’s existing planning infrastructure. This section will walk the Convener and the Implementation Team through the process of creating a planning infrastructure that will support the development of an ethically and operationally sound Critical Resource Shortage Response Plan (CRSRP).

Responsibility
Convener and Implementation Team

In this Chapter you will:
✓ Identify the “Convener.”
✓ Establish an “Implementation Team.”
✓ Identify a resource to facilitate the planning activities in the Planning Guide.
✓ Determine the “Planning Unit” for key activities in the Planning Guide.
✓ Establish Critical Resource Advisory Groups for each Planning Unit identified.
✓ Set forth clear expectations for the critical resource shortage response planning process.
1.1. Identify the “Convener.”

Identifying a person or organization to serve as a “Convener” will enhance the likelihood of success. The Convener will not necessarily be required to lead the planning process, but the Convener should be able to actively engage key stakeholders.

What is the goal of this section?
The goal of this section is to select the individual or entity that will serve as the “Convener.”

How does this section fit into the overall planning process?
The “Convener” will initiate the entire critical resource shortage response planning process. The Convener will play a vital role in the success of the planning efforts by selecting an Implementation Team (Section 1.2), identifying the relevant Planning Units for key activities (Section 1.4), and establishing Critical Resource Advisory Groups (CRAGs) for each Planning Unit (Section 1.5).

Why is this section included in the Planning Guide?
While many within the healthcare community may recognize the importance of critical resource shortage response planning, few actually take the initiative to plan. The reasons that hospitals fail to plan for critical resource shortage events (CRSEs) vary, but one common reason is simply that many hospitals believe that someone else within the healthcare community is addressing the need. Sometimes hospitals do not think that they have the wherewithal to complete this demanding process. To overcome these initial obstacles, a “Convener” should be selected to begin the planning process and shepherd it through to completion.

ACTION ITEMS

☐ Identify candidates to serve as the Convener. Consider the following sample list of possible organizations and individuals that could serve in this role:
  ➢ State department of health/state health officer
  ➢ Local health department/local health officer
  ➢ Other government agencies
  ➢ Local hospitals
  ➢ Emergency management
  ➢ Regional Hospital Coordinating Centers/Coordinators
Evaluate who is the most appropriate Convener against the following important characteristics of the Convener:

- Recognized by the relevant stakeholders in the Planning Unit as having a logical role in the process.
- Well-respected and regarded within the community as fair and neutral.
- Has the ability to access resources needed for critical resource shortage response planning.
- Capable of bringing key stakeholders together to form an engaged, knowledgeable and effective planning team.
- Able to communicate with a broad spectrum of the community.
- Past experience in similar roles and success of previous initiatives.

Choose a Convener based on which candidate best meets the required characteristics.

**Helpful Hints for Implementation**

💡 In many cases, a Convener will self-select. If a Convener has not self-selected in your Planning Unit, consider getting input from various stakeholders on who they believe would be an effective and appropriate Convener.

💡 If you select an individual to serve in the role of Convener, realize that if he or she becomes unable to serve in this role, a new Convener will be required. This may cause a delay in the planning process.

💡 It is possible that an earlier planning process faltered and that you are trying to restart the planning process. In that case, you should consider if there was a Convener and if the process faltered because of the Convener. If so, you should select someone else even though this might be difficult.

💡 If an organization is selected, consider that several members from the organization may be sharing the role of Convener. Depending on the personalities of those involved, this may make the job of Convener easier or more difficult.
1.2. Establish an “Implementation Team.”

The “Implementation Team” will be a small group of critical stakeholders who will be responsible for working closely with the Convener to guide, manage, oversee and facilitate the critical resource shortage response planning process. The Implementation Team will also be responsible for working with the Convener to determine the Planning Unit for key activities in the Critical Resource Shortages Planning Guide (see Section 1.4) and establishing a Critical Resource Advisory Group (CRAG) for each Planning Unit (see Section 1.5).

What is the goal of this section?
The goal of this section is to select the individuals who will serve on the Implementation Team.

How does this section fit into the overall planning process?
The Implementation Team will work in conjunction with the Convener to ensure the success of the critical resource shortage response planning process. The Implementation Team will be responsible for determining the appropriate Planning Unit for each key activity in the planning process (Section 1.4) and selecting the individuals who will serve as members of the Critical Resource Advisory Group (CRAG) for each Planning Unit that is given responsibility for a key activity (Section 1.5). The Implementation Team will also work with CRAG members to set expectations for and oversee the planning process (Section 1.6).

Why is this section included in the Planning Guide?
Dedicated leadership is needed to create a Critical Resource Shortage Response Plan (CRSRP). While most people involved in the planning process will see the Convener as the primary leader, this individual cannot do it alone. To be successful, the Convener should surround himself with an Implementation Team composed of representatives of key stakeholders who are committed to the success of the process. The Implementation Team will essentially serve as an “executive committee” that is responsible for working closely with the Convener to guide, manage, oversee, and facilitate the critical resource shortage response planning process. The members of the Implementation Team, together with the Convener, will be expected to work within their respective hospitals and healthcare organizations to help move the planning process along and engage others in the process.

ACTION ITEMS

☐ Consider the following roles on the Implementation Team:

➢ Convener: will initiate and actively engage key stakeholders in the planning process.
- **Administrative Champion**: will work with hospital executives to enhance this group’s understanding and buy-in to the overall planning process and resulting CRSRP.

- **Physician Champion**: will engage physicians working at the hospital(s) in the Planning Unit to get their perspectives on issues addressed through the critical resource shortage response planning process, encourage other physicians to participate in planning activities and relay planning decisions to physicians to obtain their buy-in.

- **Nurse Champion**: will engage nurses working at the hospital(s) in the Planning Unit to get their perspective on issues addressed through the critical resource shortage response planning process, encourage other nurses to participate in planning activities and relay planning decisions to nurses to obtain their buy-in.

- **Public Health Champion**: will engage public health officials within the Planning Unit to get their perspective on issues addressed through the critical resource shortage response planning process, encourage other public health officials to participate in planning activities and relay planning decisions to public health officials to obtain their buy-in.

- **Emergency Planning Champion**: will engage emergency planners within the Planning Unit to get their perspective on issues addressed through the critical resource shortage response planning process, encourage other emergency planners to participate in planning activities and relay planning decisions to emergency planners to obtain their buy-in.

- **Support Staff**: will assist the Implementation Team by performing various administrative functions, such as scheduling meetings, arranging meeting space, taking notes, obtaining necessary equipment for presentations, ordering lunch, and sending meeting reminders.

Consider how the size of the Implementation Team will impact its efficiency and effectiveness. It needs to be small enough to be flexible and efficient, but large enough to capture champions for key stakeholders. As a general rule, the larger the Planning Unit, the larger the Implementation Team will need to be.

### Helpful Hints for Implementation

🎉 You may not need each of the suggested champions on your Implementation Team and you may need additional champions. This will depend on the size of the Planning Unit and the stakeholders you are seeking to engage in the process.

- The broader your Planning Unit, the more champions you will likely need on the Implementation Team. These champions will be essential to your ability to seek input and buy-in from the various groups.

- Similarly, if your Planning Unit is relatively small (e.g., single hospital), you may not need all of the suggested champions.
💡 Recognize that the Implementation Team will need to meet extensively when beginning the planning process. Be sure to select people who can commit the time to participate and not merely send “deputies” to the meetings who take notes and report back to the principal.
1.3. Identify a resource to facilitate the planning activities in the Planning Guide.

Planning to address shortages of critical resources is a difficult and complicated task. While the Planning Guide presents a clear, systematic method for approaching this planning, it is not easy work. The Planning Unit’s activities will benefit substantially from the use of a resource who can facilitate this process effectively. This resource will be responsible for working with the Implementation Team to prepare a schedule of planning activities, developing materials for meetings of the CRAGs, facilitating CRAG meetings to help participants reach consensus, capturing consensus points in summary documents, and designing and conducting exercises to test the CRSRP.

What is the goal of this section?
The goal of this section is to identify a resource who can effectively facilitate the key activities in the Critical Resource Shortages Planning Guide (Planning Guide).

How does this section fit into the overall planning process?
The Planning Guide encourages the “Implementation Team” to assign a Planning Unit to be responsible for each key activity (Section 1.4) and establish a Critical Resource Advisory Group (CRAG) for each Planning Unit (Section 1.5). The CRAG will convene meetings to complete the key activities described throughout the Planning Guide. These meetings are critical to the success of the entire planning process. The Implementation Team should secure resources which can facilitate these meetings as well as the other activities described in the Planning Guide.

Why is this section included in the Planning Guide?
The Convener, the members of the Implementation Team and the members of the CRAGs are all busy professionals who have fulltime jobs and very little time to spare. To keep them engaged in the planning process, their time must be used effectively whenever it is requested. To help ensure that this will happen, the Implementation Team should select a resource who can facilitate the planning activities. This resource needs to have facilitation skills but must also have subject matter expertise in health care and emergency preparedness. The subject matter expertise is at least as important as the facilitation skills; therefore, not just any “facilitator” will do. This resource will be responsible for preparing a

Real World Example
Troutman Sanders facilitated the critical resource shortage response planning process at Sentara Norfolk General Hospital. According to participants in the process, the Troutman Sanders team’s extensive experience in both healthcare and emergency preparedness issues and their ability to dedicate the time needed to structure the process, prepare for meetings, facilitate the meetings, draft a CRSRP based on decisions made at the meetings, and design exercises to test the draft CRSRP, assured that the process was a success.
schedule of planning activities for the Implementation Team to review and approve, developing meeting materials, facilitating meetings to help participants reach consensus, capturing consensus points in summary documents and the Critical Resource Shortage Response Plan (CRSRP), and designing and conducting exercises to test the CRSRP.

ACTION ITEMS

☐ Identify all roles that the “facilitator” should serve.

- **Leader**: Who will lead the CRAGs? This individual should be able to keep the CRAGs on task and motivated, and be able to facilitate consensus building among the members.
- **Facilitator**: Who will facilitate meetings of the CRAG? Will this be the same individual as the Leader?
- **Scheduler**: Who will schedule and coordinate meetings of the CRAG? Consider administrative support staff from the hospital(s) in the Planning Unit.
- **Recorder**: Who will record the decisions of the CRAG and take effective notes?
- **Timekeeper**: Who will ensure that the CRAG is proceeding in a timely fashion and according to the established schedule?

☐ Based on the “facilitator’s” roles, identify the characteristics of an effective “facilitator.” Consider the following:

- Excellent communicator and listener
- Respected in community
- Respects differing viewpoints
- Nonjudgmental
- Logical
- Goal-oriented
- Ability to lead groups to consensus
- Knowledgeable about the healthcare system, disaster planning and response in general, and critical resource shortage response planning in particular
- Ability to engage multiple individuals in discussions
- Experienced in facilitating large groups
- Perceived as neutral party without an agenda
- Ability to prepare materials for use before, during and after a meeting
- Project management experience and skills
Consider whether the facilitation resource should be someone within the Planning Unit or an outside third-party.

Identify a facilitation resource for the initiative.

**Helpful Hints for Implementation**

💡 In many instances, having an outside third-party may be helpful because it is often difficult for those who work at the hospital(s) in the Planning Unit to separate their activity within the committee from their interaction with committee members outside the committee. There may be real or perceived agendas from outside that play out in the committee. This will limit the member’s ability to effectively facilitate the process. Also, it may be difficult for those within the Planning Unit to push members past their point of comfort to develop realistic plans to address critical resource shortage events. A third-party should be able to do this more easily.

💡 The “facilitator” must be knowledgeable about the subject matter. He must feel comfortable with concepts related to planning for and responding to a critical resource shortage event (CRSE) and be able to explain these concepts to the CRAG members.

💡 Thorough preparation is required for all meetings related to critical resource shortage response planning. While the *Critical Resource Shortages Planning Guide Implementation Toolkit* contains numerous tools to help the “facilitator” prepare for meetings, the “facilitator” must customize and become familiar with these tools. This requires a significant amount of time so make sure that the “facilitator” is able to devote the necessary time. If the meetings are not worthwhile, then the key participants will stop attending and the process will grind to a halt.
1.4. Determine the “Planning Unit” for key activities in the Planning Guide.

It is important to assign each key activity in the Planning Guide to a Planning Unit that has responsibility for seeing that the activity is completed. The Planning Unit can be a single HMDO, a group of HMDOs, a community, a region, a state, or a nation depending on the relationship, characteristics and needs of the HMDOs within the Planning Unit. The Planning Unit may remain constant for all activities in the Planning Guide or it may vary based on the activities. As you review the remainder of this Planning Guide, determine the most appropriate Planning Unit for each activity.

What is the goal of this section?
The goal of this section is to determine the most appropriate Planning Unit for key activities in the Critical Resource Shortages Planning Guide (Planning Guide).

How does this section fit into the overall planning process?
The concept of a Planning Unit is introduced in this Section 1.4 and is a model carried throughout the Planning Guide and this Hospital Implementation Guide. The Planning Unit is the level at which the critical resource shortage response planning occurs and may vary by task. For each Planning Unit selected by the Implementation Team and Convener, a Critical Resource Advisory Group (CRAG) will be assembled to conduct the activities assigned to the Planning Unit (Section 1.5).

Real World Example
The Planning Unit to develop the ethical framework (Chapter 3) may be the entire state because this is an area where consistency across the state should be expected. Each hospital, however, may establish its own operational infrastructure (Chapter 4) because this activity depends on the unique operations and capabilities of each hospital. The state and each hospital would each be considered a Planning Unit for its particular task.

Why is this section included in the Planning Guide?
Disaster planning takes place at many levels, including the nation, state, region, and individual facilities. Critical resource shortage response planning is no different in that respect. The type of task which is being considered will often govern and guide the selection of the proper Planning Unit. In many cases, it will be difficult to select a single Planning Unit to complete a key activity because there are important roles for multiple Planning Units. The Implementation Team’s challenge will be to select the Planning Unit that should be primarily responsible for seeing that the key activity is completed. Likewise, there may be key activities where different Planning Units are assigned to different tasks within the activity. While this is perfectly understandable and acceptable, the Planning Guide and Hospital Implementation Guide will not go
into this level of detail in each section, although the Implementation Team is encouraged to do so.

**ACTION ITEMS**

☐ Identify the various Planning Units that could conduct the key activities in the *Planning Guide*. Consider the following:

- A single hospital;
- A health system;
- A group of hospitals or health systems;
- A community/locality;
- A region/multi-locality unit;
- A state;
- A group of states, or
- The nation.

☐ Identify the advantages and disadvantages of each type of Planning Unit.

- **Broader Planning Unit**
  - Consider these advantages of selecting a broad Planning Unit that covers a large area, such as a state or region, and is composed of numerous hospitals:
    - Larger pool of potential CRAG members;
    - Greater diversity of viewpoints so that more alternatives may be considered;
    - Consistent Critical Resource Shortage Response Plans (CRSRPs) and Protocols will be developed which will cover a larger region.
  - Consider these disadvantages of selecting a broader Planning Unit:
    - Difficulty arranging meetings because of travel times involved for some members;
    - Diverse stakeholder interests may make consistent planning decisions difficult;
    - Possible development of a CRSRP and Protocols by a group that may not take into consideration the viewpoints and requirements of less vocal stakeholders.

- **Narrower Planning Unit**
  - Consider these advantages of selecting a narrower Planning Unit that may only include a single hospital or localized group of hospitals or a health system:
- More homogenous views of CRAG members as well as familiarity with hospital-specific concerns may make planning easier;
- Ease of arranging meetings, given little or no travel required by members;
- The CRSRP and Protocols developed will be “tailor-made” for the hospital or localized hospitals and will be able to address hospital-specific concerns.

- Consider these disadvantages of selecting a narrower Planning Unit:
  - Smaller pool of potential CRAG members;
  - Less diverse membership may result in fewer viewpoints expressed;
  - The CRSRP and Protocols developed by the hospitals or localized group of hospitals may conflict with similar plans developed by other hospitals in the region or state and will lack consistency across the state.

☐ Identify the appropriate Planning Unit for the following key activities in this Planning Guide:
- Conducting a Critical Resource Vulnerability Analysis (CRVA) (Chapter 2)
- Developing an ethical framework that will guide the development of the CRSRP and associated Protocols (Chapter 3)
- Developing an operational infrastructure that will support an effective response to a critical resource shortage event (CRSE) (Chapter 4)
- Identifying or developing resource-specific Protocols (Chapter 5)
- Creating an infrastructure to support the development, implementation and operationalization of Ad Hoc Protocols during a critical resource shortage event (Chapter 6)
- Engaging in collaborative planning and coordination with other Health and Medical Delivery Organizations (HMDOs) (Chapter 7)
- Determining how the CRSRP will be evaluated and maintained (Chapter 8)
- Obtaining approval of the CRSRP and integrating it into all relevant emergency operations plans (Chapter 9)
- Developing comprehensive communication plans with strategies addressing communication before, during and after a CRSE (Chapter 10)

☐ To the extent that different Planning Units are chosen to be primarily responsible for performing different activities, consider how the Planning Units will interact.
Helpful Hints for Implementation

The Planning Unit concept is designed to introduce flexibility into the planning process because the Planning Unit selected may differ for each key activity. This is probably a new concept to most and will require some discussion so that participants can become comfortable with the idea. You should not assume that existing provider organizations or government agencies can serve as the most effective Planning Unit.

Multiple Planning Units may perform a group of tasks within the key activity, or multiple Planning Units may perform the same key activity. For example, Chapter 3 presents a three-step process for developing an ethical framework. A statewide Planning Unit may complete the first two steps of this process while a single hospital Planning Unit may complete the third step. While the Implementation Team is encouraged to consider these various options when determining which Planning Unit(s) will be primarily responsible for each key activity, the Hospital Implementation Guide does not address this level of detail.

Hospitals that are part of a broader Planning Unit will ultimately be responsible for providing care during a critical resource shortage event by implementing CRSRPs and the Protocols included therein. As a result, it is important to obtain buy-in from the hospital(s) that make up the Planning Unit.

If the same Planning Unit is tasked with multiple activities, the same CRAG will perform these activities. This consistency may help the process move more quickly because the CRAG members will have the necessary background information to complete each activity.

If different Planning Units are chosen for one or more of the key activities, understand that different CRAGs will be involved in conducting these activities. Consider how the various CRAGs will interact and collaborate.

- This may slow down the planning process because you will have to provide background information and education to each CRAG whenever they begin a new activity.

- You will also have to allow time so that the decisions reached by the different CRAGs are coordinated. Coordination between CRAGs is important so that conflicting decisions are not reached. Such coordination is also important because the key activities build on each other; thus, the CRAG for each Planning Unit chosen will need to be kept informed about what the other CRAGs are doing.
PLANNING INFRASTRUCTURE
SECTION 1.5

1.5. Establish Critical Resource Advisory Groups for each Planning Unit identified in Section 1.4.

For each Planning Unit identified in Section 1.4, the Implementation Team will need to establish a diverse, multi-disciplinary body, composed of representatives of the member(s) of the Planning Unit. This body – the Critical Resource Advisory Group or CRAG – will be responsible for conducting the critical resource shortage response planning activities assigned to the Planning Unit (see Section 1.4). While the exact composition of each CRAG will depend on the Planning Unit that it represents, each CRAG should have a strong combination of stakeholders. If the Implementation Team chooses to have multiple Planning Units be responsible for various key activities, it will have to establish multiple CRAGs and be responsible for management, oversight and coordination of these groups.

What is the goal of this section?
The goal of this section is to select the members for the Critical Resource Advisory Groups (CRAGs) for each Planning Unit chosen to conduct a key activity.

How does this section fit into the overall planning process?
Once the Implementation Team and Convener have selected the relevant Planning Units in Section 1.4, it will be necessary for the Team to identify members of the CRAGs for the Planning Unit. The CRAG will perform the key activities assigned to its respective Planning Unit in Section 1.4.

Why is this section included in the Planning Guide?
Planning to respond to a critical resource shortage event (CRSE) requires a diverse array of perspectives. Accordingly, the selection of a diverse, multi-stakeholder group (the CRAG) is necessary to bring a broad set of skills and perspectives to the critical resource shortage response planning process. A diverse membership will offer varying viewpoints and ideas that will result in the CRAG’s consideration of a wide array of options during the planning process and, often, better solutions. Those who participate in the planning process will be crucial to its success; therefore, the CRAG should be comprised of members who have skills and resources that are representative of the various aspects of critical resource shortage response planning process discussed in the Critical Resource Shortages Planning Guide (Planning Guide). The CRAG should be composed of a strong mix of stakeholders, including, but not limited to, clinicians representing various relevant specialties, ancillary service providers, ethicists, administrators, and emergency planners. Given the variation which exists among Planning Units, the exact composition of each CRAG will depend on the Planning Unit and the tasks assigned to that Planning Unit.
ACTION ITEMS

☐ Identify key stakeholders who represent a broad spectrum of disciplines to serve on each CRAG, including representatives from the following:
  ➢ Appropriate nursing specialties (e.g., critical care, emergency department, floor, and operating room);
  ➢ Medical staff leadership;
  ➢ Physicians from appropriate specialties (e.g., intensivists, surgeons, internal medicine, pediatrics, emergency medicine, trauma, hospitalists, primary care, palliative care);
  ➢ Therapy services;
  ➢ Administration and management;
  ➢ Laboratory;
  ➢ Pharmacy;
  ➢ Information systems and medical records;
  ➢ Ethics;
  ➢ Legal;
  ➢ Risk management;
  ➢ Human resources; and
  ➢ Incident Command.

☐ Identify whether there are other stakeholders who should be consulted as part of the critical resource shortage response planning process, but who are unable to participate or are not necessarily needed for all of the planning activities.
  ➢ If such individuals or organizations are identified, develop a process for obtaining their input and keeping them informed about the planning process.
  ➢ Consider the following mechanism for soliciting input and seeking feedback on critical resource shortage response planning from the general public:
    ▪ Town Hall meetings
    ▪ Focus groups
    ▪ Surveys

☐ Select CRAG members for each Planning Unit from the hospital(s) in the Planning Unit. Regardless of the number of CRAGs needed to accommodate various Planning Units, each CRAG should have a strong combination of stakeholders, including clinicians from various specialties, administrators, and emergency planners.
Helpful Hints for Implementation

This section contains a list of representatives that you should consider when developing your CRAGs. The recommendations are meant to be specific enough that they can help you establish your CRAGs, but general enough that they will be scalable and adaptable to all types of Planning Units. This list is simply meant to get you thinking about who should be represented on the CRAG, it is not meant to be exhaustive.

While ideal, it may not be possible to engage representatives from all of the areas listed in this Section 1.5. The inability to do so should not impede the planning process unless the representative’s absence will discredit the process. For instance, if you are unable to secure an administration representative’s participation, this may signal to other participants that the initiative is not important. This perception may decrease the other members’ level of participation.

It is critical that hospital or health system management show its support for the planning activities so that staff recognizes the importance of participation as a member of the CRAG. If management is unaware of the planning activities or fails to appreciate the significance, consider conducting a targeted educational program on the importance of disaster and critical resource shortage response planning.

Some of the Planning Units may already have one or more multi-disciplinary disaster planning committees in place. If so, you may want to consider using these existing committees, depending on the committee’s capacity, to undertake the planning process. By doing so, you may be able to leverage off of the existing infrastructure and avoid the likely delay associated with developing a new planning infrastructure. You may also consider creating a subcommittee of an existing disaster planning committee to complete the key activities. This subcommittee could be composed of some existing committee members as well as others new to the disaster planning process.

It may not be realistic to rely on one CRAG to complete all of the key activities assigned to a Planning Unit, depending on the number of activities assigned. Accordingly, you may choose to appoint separate subcommittees of the CRAG for particular functions. If you do so, it is probably best to have the Implementation Team coordinate and manage these separate subcommittees to ensure consistency and collaboration.

Do not assume that the individuals you identify will be willing to participate on the CRAG. Secure their participation by having the Convener and Implementation Team issue a formal invitation.

If you experience difficulty securing participation on the CRAGs, consider offering incentives. These incentives may include bonuses, gift cards, meals and recognition in facility newsletters/announcements. Consult counsel regarding any Stark and Anti-Kickback issues implicated by the provision of such incentives.
1.6. Set forth clear expectations for the critical resource shortage response planning process.

The Implementation Team, together with members of each CRAG, must agree upon the expectations of participation in the group related to completion of the CRAG’s assigned activity(ies) and sources of funding to support these activity(ies). Reaching an understanding on these issues at the beginning of the process will help the CRAG operate effectively and increase the likelihood that the CRAG will be successful in its tasks.

What is the goal of this section?
The goal of this section is to set expectations related to participation in the critical resource shortage response planning process.

How does this section fit into the overall planning process?
Each Critical Resource Advisory Group (CRAG) will be assigned certain activities based upon the Planning Unit assignments made in Section 1.4. Members of each CRAG need to understand what is expected of them and what will be required to complete the assigned activities.

Why is this section included in the Planning Guide?
Uncertainty about the duration of the planning process and the time commitment required from the CRAG members may result in a lack of interest or inadequate engagement from the members. Busy people are reluctant to commit to an “open ended” process, no matter how important they think the process is. Setting out a clear workplan and timeline at the beginning of the process will help each CRAG engage the participation of key persons and operate as effectively as possible. Each CRAG should have a strategy for keeping its members engaged and actively involved in the planning process. Such strategies are key to the overall success of the planning efforts.

ACTION ITEMS

☐ Determine CRAG logistics.

➢ Determine how often the CRAG will meet and the length of the meetings to establish a timeline for completion of each key activity in the Critical Resource Shortages Planning Guide (Planning Guide).

➢ Determine where the CRAG will meet. Identify a location that is accessible for all members of the CRAG.

➢ Decide if members will be allowed to participate by telephone, video conference or web-based conferencing.
Create a budget to support the CRAG’s activities. Consider costs for:

- Meeting space;
- Conference lines/web-based conferencing;
- Office supplies/copies;
- Possible compensation for CRAG members;
- Engaging subject matter experts, including a facilitator;
- CRAG member travel; and
- Food/beverage.

Consider whether the CRAG members will or should be paid for their time.

- Can members of the CRAG accept compensation? This determination may vary depending on the individual and his fulltime employment.
  - If you offer compensation to participants, including physicians, consult counsel regarding any Stark and Anti-Kickback issues implicated by the proposed compensation arrangements.
  - Government officials may not be able to accept compensation.
  - Individuals employed in grant-funded positions may not be able to accept compensation.
  - Consult legal counsel to address any concerns.
- Will payment be in addition to their salary from their employer, if any?

Determine whether the CRAG members, their employers or the entities they represent will be expected to make either financial or in-kind contributions to the planning efforts.

- If so, will a minimum contribution be required?
- How will the contribution amount be determined for each employer/entity represented?

Consider other funding sources for the planning efforts.

- Federal, state or local grants for emergency preparedness;
- Federal, state or local grants for pandemic issues;
- Other sources for funding by various governmental entities;
- Grants from non-profit organizations and foundations;
- Hospital/health system emergency preparedness budgets.
Helpful Hints for Implementation

💡 You should consider having written compensation agreements with each CRAG member, to the extent you will provide compensation.

💡 Schedule meetings around a meal—preferably breakfast or lunch. You may have a better turn out if you offer a “free” meal.

💡 Try to schedule meetings for a consistent time and day of the week. In addition, schedule meetings at least eight weeks in advance since peoples’ calendars fill up quickly.

💡 If you experience difficulty identifying funding sources for preparedness planning, consider talking to relevant state and local health departments to determine whether they have any funding available or whether they know of any funding sources. In addition, consult the hospital(s) in the Planning Unit to determine whether the hospital has money budgeted for preparedness planning.
CHAPTER 2: CRITICAL RESOURCE VULNERABILITY ANALYSIS

2. **Conduct a Critical Resource Vulnerability Analysis**

HMDOs require and use numerous critical resources in the care that they provide. Many of these resources are taken for granted because in today’s healthcare system, they are readily available for all patients in need. Supply chain management has become so effective that it is difficult for HMDOs to imagine a situation in which critical resources are truly scarce. This makes it very difficult for them to identify critical resources, much less prioritize them for planning purposes. The Critical Resource Vulnerability Analysis (CRVA) is a systematic approach to prioritizing these resources and ultimately identifying those resources that are the highest priority for Protocol development (see Chapter 5).

### Introduction

There are many critical resources used in healthcare today, especially in the hospital setting. If you were to ask healthcare providers which resources should be considered the most “critical” for planning purposes, you would get varying answers. Despite this difficulty, one of the Planning Unit’s initial activities should be identifying and prioritizing critical resources for Protocol development. This prioritization is essential because the Planning Unit cannot create Protocols to address shortages of each critical resource used in hospitals today. Instead, the Planning Unit must focus its Protocol development efforts on those that are the most critical and most likely to be depleted during a large scale disaster. To identify these resources, the Planning Unit should use a systematic approach called the Critical Resource Vulnerability Analysis (CRVA). The CRVA, detailed in this Chapter 2, contains four steps:

1. compile a list of all critical resources and skill sets necessary to sustain human life, prevent permanent injury, or stabilize a patient experiencing a medical emergency;
2. prioritize this list of critical resources;
3. identify and evaluate the mechanisms for mitigating the depletion of the prioritized resources; and,
4. determine which critical resources are the highest priority for immediate Protocol development.

The findings of the CRVA will be sent to the Critical Resource Advisory Group (CRAG) for the Planning Unit that has primary responsibility for Protocol development (if different from the Planning Unit that has primary responsibility for completing the CRVA) to focus its attention appropriately (see Chapter 5).
Responsibility
Critical Resource Advisory Group

In this Chapter you will:
✓ Develop a list of critical resources.
✓ Prioritize the list of critical resources.
✓ Identify mechanisms for mitigating depletion of the resources identified and prioritized.
✓ Determine which critical should be immediately considered for Protocol development.
✓ Revisit the Critical Resource Vulnerability Analysis at appropriate intervals or immediately following an emergency or disaster.
2.1. Develop a list of critical resources.

The CRAG should develop a comprehensive list of all critical resources used by the member(s) of the Planning Unit (e.g., those resources necessary to sustain human life, prevent permanent injury/disability, or stabilize a patient experiencing a medical emergency).

What is the goal of this section?

The goal of this section is to develop a comprehensive list of critical resources used by the hospital(s) in the Planning Unit.

How does this section fit into the overall planning process?

The first step in the process of conducting a Critical Resource Vulnerability Analysis (CRVA) is creating a comprehensive list of the critical resources used or required by the hospital(s) in the Planning Unit to provide services. This list will provide the foundation for the remaining activities in Chapter 2.

Why is this section included in the Planning Guide?

Hospitals and healthcare providers require and use numerous critical resources in the care that they provide. Many of these resources are taken for granted because in today’s healthcare system, they are readily available for all patients in need. As a result, it is challenging for hospitals and healthcare providers to identify critical resources. Nevertheless, it is important to create a comprehensive list of critical resources so that the Critical Resource Advisory Group (CRAG) can make educated and informed decisions about prioritizing resources for Protocol development.

ACTION ITEMS

- Develop a list of all critical resources used by the hospital(s) in the Planning Unit.
- Identify all of the equipment that can be considered a critical resource.
- Identify all of the staff functions that can be considered a critical resource. This can include specific skill sets, functions that cross over multiple job positions, and employees who have specific experience/capabilities that would be extremely difficult to replace.
- Identify all of the space requirements that can be considered a critical resource.
- Consider both critical resources that are used throughout a facility and those used by a specific specialty and without which that specialty cannot function. This could be staff, equipment, supplies, or space.
Once a comprehensive list has been created, go back and review the list, removing any resources that may not be considered “critical.” If the Planning Unit does not have its own definition of a “critical” resource, consider the following:

- A resource is “critical” if it is necessary to (i) sustain human life, (ii) prevent permanent injury or disability, (iii) stabilize a patient experiencing a medical emergency, and (iv) few people in the facility have this skill set and cross-training or just-in-time training is not practical or realistic because of the specialization of the skill.

**Helpful Hints for Implementation**

- “Brainstorming” is an effective way to get ideas on the table and can help the group to begin thinking about this new concept. List every resource that is suggested during the brainstorming process. After this list is complete, the CRAG can debate whether certain items are truly critical. If there is a disagreement over what should be considered “critical,” put it on the list. Do not let this disagreement slow down the process.

- Though the CRAG conducting the CRVA will include diverse representation from the hospital(s) in the Planning Unit, important specialties may go unrepresented. Consider bringing in individuals that will provide a unique perspective or a fresh viewpoint to the process – they may propose critical resources that the CRAG had not identified.

- During the process of developing a list of critical resources, disagreements may surface over whether an item/procedure/piece of equipment is a resource or a service. Ultimately, this distinction should not slow the process. Include the item/procedure/piece of equipment on the initial comprehensive list. Once the list is complete, then review the item to determine whether it should be removed.

- It is difficult to classify personnel as “critical” or “non-critical.” In fact, over the course of a long duration event, like an influenza pandemic, everyone will be critical. It is more accurate and realistic to identify skill sets that are critical in responding to emergencies and disasters. However, individuals may have experience, credentials, licenses, or certifications that cannot be easily replaced. For these individuals, these characteristics support an argument that they are “critical.”

- Have an easel pad and markers available to write down all of the critical resources the CRAG identifies. Having the resources listed in front of everyone will allow them to see the list as it is created and limit duplications. Also, seeing the list as it is created may help the CRAG members think of other related resources.
**CRITICAL RESOURCE VULNERABILITY ANALYSIS**
**SECTION 2.2**

2.2. **Prioritize the list of critical resources.**

The CRAG will likely develop a long list of critical resources, all of which cannot be addressed at once through the development of a resource-specific Protocol. As a result, prioritization of the identified critical resources is crucial to allow Protocol development efforts to focus on the critical resources that are most at risk of being depleted during an emergency or disaster. Those resources which are likely to be depleted quickly and have a significant impact on the way that care is provided should be given high priority.

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**What is the goal of this section?**
The goal of this section is to prioritize the comprehensive list of critical resources identified in Section 2.1.

**How does this section fit into the overall planning process?**
In Section 2.1, the Critical Resource Advisory Group (CRAG) created a list of all of the critical resources used by the hospital(s) in the Planning Unit. In this Section 2.2, the CRAG will prioritize this list of critical resources using the hazard vulnerability analysis of the hospital(s) in the Planning Unit to identify the critical resources that are most likely to be depleted based on the threats to the facility(ies). In Section 2.3, existing surge plans for the prioritized critical resources will be evaluated to determine if there are mechanisms in place to mitigate shortages of the critical resource. Section 2.4 will combine the prioritization process from this Section 2.2 and the surge evaluations from Section 2.3 to identify the critical resources to be recommended for Protocol development in Chapter 5.

**Why is this section included in the Planning Guide?**
There will likely be many critical resources identified in Section 2.1. Because the Planning Unit responsible for Protocol development cannot develop Protocols to address shortages of each resource, the CRAG should prioritize the list so that Protocol development efforts can be appropriately focused. This prioritization should be tied to the most likely threats that the hospital(s) in the Planning Unit will face. The CRAG should examine the hazard vulnerability analysis of the hospital(s) in the Planning Unit. This hazard vulnerability analysis will tell the CRAG which threats are most likely to impact the hospital(s) in the

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**Real World Example**
Oberant General Hospital’s top threat identified on its hazard vulnerability analysis is a chemical explosion at a nearby plant. This will cause a large influx of burn patients into the ED. Burn care kits will be in high demand and likely depleted. Burn care kits should, therefore, be given high priority.
Planning Unit. Based on this information, the CRAG can decide which critical resources are most at risk to become scarce given these threats. These are the critical resources that should be given high priority.

**ACTION ITEMS**

- Obtain a copy of the hazard vulnerability analysis or comparable “threat assessment” for the hospital(s) in the Planning Unit
- Review the hazard vulnerability analysis for identified threats.
- Prioritize the list of critical resources into high, medium, or low priority. Consider the following questions when prioritizing the resources:
  - Which critical resources are most likely to be depleted based on events identified in the hazard vulnerability analysis of the hospital(s) in your Planning Unit?
  - Which critical resources, when depleted, will have the most significant negative impact on patient morbidity and mortality?
  - Which resources constrain a hospital’s ability to provide care effectively? In other words, what is the rate limiting resource?

**Helpful Hints for Implementation**

For those not familiar with a hazard vulnerability analysis, the Emergency Management Strategic Health Care Group’s *Emergency Management Program Guidebook*, states “a hazard vulnerability analysis is 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 Joint Commission requires accredited hospitals to conduct an annual hazard vulnerability analysis. If none of the hospitals in the Planning Unit are Joint Commission accredited, the CRAG may want to conduct a limited hazard vulnerability analysis to assess the threats to the Planning Unit.

Consider having someone who is familiar with the hazard vulnerability analysis of the hospital(s) in the Planning Unit summarize for the CRAG both the process and the results of the analysis.

If the list of critical resources the CRAG created in Section 2.1 is long, and it most likely will be, consider dividing the resources into separate categories for the initial prioritization process: equipment/materials, staff skill sets, and physical space. This will allow the CRAG
members to prioritize smaller individual lists of critical resources and then combine the high priority items from each category into a comprehensive list for the final prioritization process (Section 2.4).
CRITICAL RESOURCE VULNERABILITY ANALYSIS
SECTION 2.3

2.3. Identify mechanisms for mitigating depletion of the resources identified in Section 2.1 and prioritized in Section 2.2.

The CRSRP and associated Protocols are intended to be used as a last resort after the member(s) of the Planning Unit has implemented and exhausted its surge plans and other plans to mitigate resource shortages. While finalizing the prioritization of the critical resources identified in Section 2.1, the CRAG should identify existing mechanisms for mitigating depletion of each resource. After these mechanisms have been identified, the CRAG should evaluate them to determine if they are sufficient to address a disaster resulting in high demand for each resource.

What is the goal of this section?
The goal of this section is to identify mechanisms for mitigating depletion of prioritized critical resources.

How does this section fit into the overall planning process?
In Section 2.1, a comprehensive list of critical resources was created. In Section 2.2, this list was prioritized by determining which resources would be most seriously affected by hazards facing the hospital(s) in the Planning Unit. In this Section 2.3, the Critical Resource Advisory Group (CRAG) will evaluate existing surge plans for the prioritized critical resources to determine if there are mechanisms in place to mitigate shortages of the critical resource. Section 2.4 will combine the prioritization process from Section 2.2 and the surge evaluations from this Section 2.3 to identify the critical resources to be recommended for Protocol development in Chapter 5.

Real World Example
Oberant General Hospital (OGH) has designated burn care kits as a high priority because the greatest threat to its area is a chemical plant explosion. When the CRAG reviews the surge plan for burn care kits, it finds that OGH has stockpiled enough burn care kits to treat 40% of plant employees and has a Memorandum of Agreement to have the manufacturer deliver 20% of OGH’s normal inventory within 12 hours of making a request. Because these surge strategies are likely sufficient to address a significant increase in demand for burn care kits over a prolonged period of time, this resource, while important, is a low priority for Protocol development.

Why is this section included in the Planning Guide?
Even after prioritizing the comprehensive list of critical resources, there will probably still be more resources on the list than the Planning Unit can develop Protocols to address. To continue the systematic approach of identifying critical resources for Protocol development, surge plans must be evaluated for the critical resources in question. The Protocols that will be developed in Chapter 5 are meant to be used only after all surge plans have been exhausted. If there are surge plans in place that can address needs created by a prolonged...
event with high patient demand for the particular resource, there may be no need to develop a Protocol for this resource.

**ACTION ITEMS**

- Identify existing surge mechanisms in place for significantly mitigating the depletion of the high priority critical resources identified in the previous Section 2.2. Some examples of mitigation mechanisms include:
  - Stockpiling the critical resource in question.
  - Memoranda of Agreement or Memoranda of Understanding with others to provide the critical resource when needed.
  - “Just in time” training programs for staff.
  - Identifying other resources that can be substituted for the critical resource in question to alleviate any burdens caused by the depletion of that critical resource.

- Determine whether the existing surge plans will realistically address the potential scope of the disasters or emergencies identified in the hazard vulnerability analysis. If the surge plan can create enough supply to meet a significant increase in patient demand over a prolonged period of time, consider removing it from the prioritized critical resource list.

**Helpful Hints for Implementation**

⚠️ There may not be an individual surge or mitigation plan for the specific critical resources on your prioritized list. The surge strategies may be more general. If they are general, determine whether the specific critical resources are addressed in these general plans.

👩‍⚕️ The Planning Unit’s Emergency Planner, emergency planners from the hospital(s) in the Planning Unit, or department heads from the hospital(s) in the Planning Unit for departments that use a critical resource in question may be helpful resources for information regarding resource-specific surge plans.

💡 When evaluating the limits of specific surge plans, consider creating a disaster or emergency scenario or a series of scenarios to test the plans. A scenario should address threats identified in the hazard vulnerability analysis and should be a “worst case” scenario so that the absolute limits of surge plans can be identified.
CRITICAL RESOURCE VULNERABILITY ANALYSIS
SECTION 2.4

2.4. Determine which critical resources should be immediately considered for Protocol development.

Even after following the process outlined in the first three sections of this Chapter 2, the CRAG may have a list of more resources than it can realistically develop Protocols to address. To select the top resources for Protocol development, the CRAG should examine both the prioritization and the availability of mechanisms to mitigate shortages. If these mechanisms appear to be sufficient to allow the member(s) of the Planning Unit to surge its supply of a resource and accommodate a prolonged increase in demand, these resources may not be a priority for Protocol development. Through this analysis, the CRAG should identify the most important resources for which Protocols should be developed and forward its conclusions to the CRAG for the Planning Unit that will be responsible for Protocol development.

What is the goal of this section?
The goal of this section is to identify those resources that should be recommended for Protocol development.

How does this section fit into the overall planning process?
The first three sections of this Chapter 2 provided a method for creating and prioritizing a list of critical resources in your Planning Unit. This Section 2.4 combines the work of the previous three sections to finalize the Critical Resource Vulnerability Analysis (CRVA). In this section, the Critical Resource Advisory Group (CRAG) will choose those resources that should be considered for immediate Protocol development. This finalized list of critical resources will be forwarded to the CRAG responsible for Protocol development (see Chapter 5).

Why is this section included in the Planning Guide?
Developing a successful Protocol for a single resource is a complicated and time consuming process in most cases. Therefore, it is imperative that the most critical resources be identified for Protocol development. Even after determining which resources are “critical,” prioritizing these resources, and excluding resources which have effective surge plans, there may still be many critical resources that could be candidates for the development of a Protocol. The CRAG must narrow down this list to a manageable number of critical resources to recommend for immediate Protocol development.

ACTION ITEMS

☐ Review the prioritized list of resources created in Section 2.2 along with the surge mechanisms evaluated in Section 2.3.
Determine the critical resources for which Protocols should be developed. Consider the following questions:

- Which resources will be extensively used by every hospital in the Planning Unit?
- Which resources will impact the most patients?
- Which resources lend themselves to effective Protocol development?
- If a Protocol is developed for a particular resource, will the hospital(s) in the Planning Unit accept it and use it?

Communicate the results of the CRVA to the CRAG charged with Protocol development.

**Helpful Hints for Implementation**

💡 Inevitably, a significant number of critical resources will be left off of the final list. These resources are still of great importance to the planning process and should, therefore, not be discarded. Keep a list of these critical resources. If a critical resource shortage event does occur, the probability is high that Ad Hoc Protocols will need to be created for these resources (see Chapter 6).

💡 When determining the critical resources that should ultimately be recommended for Protocol development, consider whether consumable or durable resources should be given higher priority.
CRITICAL RESOURCE VULNERABILITY ANALYSIS
SECTION 2.5

2.5. Revisit the Critical Resource Vulnerability Analysis at appropriate intervals or immediately following an emergency or disaster.

Over time, the emergencies and disasters that threaten a Planning Unit, the resources that are considered “critical” and even the patient population of a Planning Unit may change. As a result, the Critical Resource Vulnerability Analysis should be re-visited at appropriate intervals or after an emergency or disaster. Relevant, up-to-date plans will enable the Planning Unit to best respond in the face of a critical resource shortage event (CRSE).

What is the goal of this section?
The goal of this section is to maintain an up-to-date Critical Resource Vulnerability Analysis (CRVA) for your Planning Unit.

How does this section fit into the overall planning process?
The CRVA provides the Critical Resource Advisory Group (CRAG) responsible for Protocol development with a comprehensive list of the most important critical resources for the Planning Unit. The ultimate result of the CRVA is a list of critical resources to be recommended for Protocol development. This section encourages the CRAG to re-visit the CRVA frequently to make sure that it remains relevant.

Why is this section included in the Planning Guide?
It is unlikely that the considerations made in the process of completing the CRVA will remain constant. In fact, significant changes will most likely occur that could alter the outcome of the CRVA. For instance, there could be changes in the resources that the hospital(s) in the Planning Unit use, the threats to the community, and the make-up of the patient population. To best respond to a critical resource shortage event in the future, it is imperative that the CRAG keep the CRVA current so that it can help ensure that Protocols are developed for the most relevant and important critical resources.

ACTION ITEMS

☐ Determine how often the CRAG should convene to re-evaluate the CRVA.

☐ Identify the significant factors that have changed since the last time the CRAG conducted the CRVA. Consider several questions when making this determination:
  ➢ Are there resources that should be added to the critical resource list? Are there resources that should be removed?
➢ Have threats to the Planning Unit or the community changed based on new information about likely threats?

➢ Have any surge plans been created, or existing ones altered that change the list of critical resources and how they are prioritized?

➢ How do these factors impact the prioritization and selection of critical resources for Protocol development?

**Helpful Hints for Implementation**

!!. The Joint Commission requires that accredited facilities review their hazard vulnerability analysis annually. Consider reviewing your Planning Unit’s CRVA at the same time.
CHAPTER 3:
ETHICAL FRAMEWORK

3. Develop an ethical framework that will guide the development of the Critical Resource Shortage Response Plan and associated Protocols

There is a relative consensus across the country that HMDOs will use their best efforts to appropriately modify the way that care is provided and allocate scarce resources during a critical resource shortage event. There is much less consensus, if any, on exactly what “appropriately” means and how HMDOs will make this decision. Your Planning Unit needs a guiding ethical framework if it hopes to make these very complicated decisions in a way that will be recognized by all as having a solid ethical foundation. This section of the Planning Guide walks through a three step process to develop this ethical framework. The three step process encourages the CRAG for the Planning Unit responsible for this activity to (i) identify ethical principles, (ii) define the Goal(s) of Protocols, and (iii) determine conceptually how to alter standards of care and allocate scarce resources to meet its Goal(s). The ethical framework created in this Chapter will become part of the Planning Unit’s Critical Resource Shortage Response Plan and will inform the development of all other sections of the CRSRP, including resource-specific Protocols.

Introduction
During an emergency or disaster which leads to a critical resource shortage event (CRSE), all Health and Medical Delivery Organizations (HMDOs), including hospitals, will have to make difficult decisions about how to alter standards of care by modifying the way that care is provided and allocating scarce critical resources. This type of decision-making will pose many different ethical challenges for those involved. If not openly addressed, these ethical issues can impede the effectiveness of a Planning Unit’s entire planning process for responding to critical resource shortages. To avoid this, the Planning Unit should create an ethical framework to guide their decision-making. Ethics, broadly defined, is a system of societal moral values and judgments which guides human behavior. A Planning Unit’s ethical framework, therefore, should be based upon the societal standards of right and wrong, individual rights, benefits to society, obligations, fairness, justice, and other identified virtues. Chapter 3 of the Critical Resource Shortages Planning Guide (Planning Guide) will help you lead your Critical Resource Advisory Group (CRAG) through a process for creating this ethical framework that will support and guide the development of a Critical Resource Shortage Response Plan (CRSRP), including resource-specific Protocols.

There are some existing ethical frameworks for allocating resources during an emergency or disaster. The Ethics and Allocation of Scarce Resources: An Annotated Bibliography (included in the Critical Resource Shortages Planning Guide Implementation Toolkit)
compiles several articles discussing existing ethical frameworks for allocation decisions. While these frameworks may be a good resource for the CRAG, the CRAG should develop its own ethical framework, which will reflect the Planning Unit’s unique culture and values.

Creating an ethical framework will likely be a challenging process. The CRAG is encouraged to identify ethics leaders who can assist it in the ethical framework development process that the Planning Guide describes. These ethics leaders should not only be very familiar with the values, beliefs, ideals, and principles that inform ethical decision-making but also have the ability to explain these concepts to others. These leaders will greatly assist the CRAG in developing an ethical framework that will serve as the foundation for the development of a CRSRP and associated Protocols.

All three sections in this Chapter 3 form your Planning Unit’s ethical framework. It will be important to carry this framework forward and integrate it into all subsequent CRSE planning and response activities. The ethics leaders, as well as the CRAG, can play a key role in helping to ensure that CRSE planning and response decisions are made consistently and objectively using the established ethical framework.

**Responsibility**
Critical Resource Advisory Group (CRAG)

**In this Chapter you will:**
- Develop a set of ethical principles that will form the foundation of the Planning Unit’s ethical framework.
- Define the Goal(s) of the CRSRP and Protocols.
- Determine conceptually how the ethical principles and the Goal(s) will impact allocation of scarce resources during a CRSE.
ETHICAL FRAMEWORK
SECTION 3.1

3.1. Develop a set of ethical principles that will form the foundation of the Planning Unit’s ethical framework.

Almost every ethical framework is built upon a set of core principles. The CRAG’s first step in developing an ethical framework is to identify the principles that will form the basis of the framework. Current literature on ethics and allocation of scarce resources suggests numerous principles that the CRAG may adopt. In some states, a statewide or regional task force may have already identified these ethical principles. In states where these principles have not yet been determined, the CRAG must decide which of the ethical principles to incorporate into its framework based on the needs, characteristics, and values of the member(s) of the Planning Unit.

What is the goal of this section?
The goal of this section is to identify ethical principles that will serve as the foundation of your Planning Unit’s ethical framework.

How does this section fit into the overall planning process?
This Chapter 3 provides a process for establishing an ethical framework that will guide your Planning Unit’s development of a Critical Resource Shortage Response Plan (CRSRP), which includes resource-specific Protocols. This Section 3.1 provides assistance in identifying the ethical principles that should be the basis for the ethical decisions that your Planning Unit makes. In the remainder of this Chapter 3, the Critical Resource Advisory Group (CRAG) will define the Goal of the ethical framework and determine how to apply the ethical principles and Goal to some basic allocation concepts that will be addressed when developing each Protocol (“implementation specifications”). When used in conjunction with the other chapters of the Critical Resource Shortages Planning Guide (Planning Guide), the CRSRP and associated Protocols developed to address the use of scarce resources should be ethically sound.

Why is this section included in the Planning Guide?
Decisions to modify or allocate scarce critical resources must be ethical. To be ethical, they must be based on a sound ethical framework and made through an ethically acceptable process. The Planning Unit should develop an ethical framework as part of its preparedness activities so that ethics is fully integrated into the emergency preparedness process. If your Planning Unit waits until it is in the midst of a critical resource shortage event (CRSE) to begin thinking about ethics, it will be impossible to thoughtfully consider the complex ethical issues that are involved in modifying care and allocating scarce critical resources.

The first step in developing the framework is to identify the ethical principles on which the framework will be built. This is a challenging activity and can be especially challenging when those identifying the principles do not speak the “ethics language.” In all likelihood, many of the
CRAG members, while ethical people, have never been asked to identify ethical principles for use in this manner. This Section 3.1 encourages the CRAG to become familiar with some basic ethical principles and identify those principles that will form the basis of its ethical framework.

**ACTION ITEMS**

☐ Determine if there are any existing ethical principles developed or adopted by governmental entities (local, state, federal) with jurisdiction over the Planning Unit or the hospital(s) in the Planning Unit.⁴ If there are such principles, determine whether they are mandatory.
  - If they are mandatory, proceed to Section 3.2.
  - If they are not mandatory, the CRAG should develop its own baseline ethical principles for use during a CRSE. This section will guide the development of these ethical principles.

☐ Review existing literature on the need for and use of ethical principles during a CRSE. The CRAG must be familiar with this literature, update their research regularly, and evaluate which baseline ethical principles, if any, are appropriate for its needs.

☐ Identify ethical principles that will be relevant in responding to a CRSE.
  - Consider the following substantive ethical principles (those principles that should guide decisions about modifying the way that care is provided and allocating scarce resources).
    - Individual liberty
    - Protection of the public from harm
    - Proportionality
    - Distributive justice and fairness
    - Beneficence
    - Non-maleficence
    - Privacy
    - Duty to provide care
    - Reciprocity
    - Respect for Autonomy
    - Trust
    - Solidarity

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⁴ When addressing the questions in this section, look at both existing resources and those that are under development or anticipated for future promulgation.
Ethical Framework

- Stewardship

- Consider the following **procedural** ethical principles (those principles that should guide the process by which decisions about altering standards of care and allocating scarce resources will be made).
  - Reasonable
  - Open and transparent
  - Inclusive
  - Responsive
  - Accountable

- Identify any potentially conflicting principles and describe any points of conflict among them.

- If the CRAG identifies numerous principles for use in the ethical framework, consider prioritizing them so that others will know which are the most important when all of the principles cannot be satisfied.

- If the CRAG prioritizes the principles, consider whether the prioritization will change based on the primary use of the critical resource (treatment v. prophylaxis).

- Develop a communication plan around these principles that will be easy for others involved in CRSE planning and response to understand, assimilate and use. (See Chapter 10.)

### Helpful Hints for Implementation

👍 Engage your Planning Unit’s ethics leaders in the process. If your Planning Unit does not have an identified ethics leader, ask members of hospital ethics committees to participate but understand that they may be reluctant because decisions about modifying the way care is provided and allocating scarce resources are typically outside an ethics committee’s normal role.

👍 Recognize that this may be the first time that those involved in ethics have been asked to participate in the emergency preparedness planning process. It may take some conversation with ethics resources to help them understand why their participation is important.

👍 When the CRAG begins to discuss ethics, recognize that some members of the CRAG may not feel as though the discussion is necessary or helpful. These members may feel that since they always operate in an ethical manner, they do not need an ethical framework to inform decisions made during a CRSE. Remind these participants that an ethical framework will enhance the effectiveness of, and lend credibility and consistency to, the development and implementation of the CRSRP and its associated Protocols.

👍 The facilitator will need to be familiar with the meaning of the ethical principles so that he can help familiarize and educate the CRAG.
In many cases, especially where principles conflict or where there are a large number of principles, it will be difficult to make decisions that honor all principles. Recognizing this, it is important to prioritize these principles in advance so that this prioritization will not have to occur in the midst of a CRSE.

To prioritize the ethical principles, consider conducting a “straw poll” by asking each CRAG member to rank each principle as high, medium, or low priority relative to each other. Encourage the CRAG members to evenly distribute the principles between these three categories. Tally the results of the poll and work toward reaching consensus on the prioritization.

You might find it helpful and enlightening to ask the CRAG members to prioritize the principles from the patients’ point of view and from the providers’ point of view. Any differences may ultimately help the CRAG to prioritize the principles for use in the ethical framework.

As the CRAG identifies and ranks the ethical principles, consider whether any hospital(s) in the Planning Unit has religious affiliations (e.g., a hospital owned/operated by a religious order), ethical mandates, or other controlling authorities that will impact its view of or ability to accept certain ethical principles.

As you prioritize the substantive and procedural ethical principles, you may find it helpful to distinguish those that inform how a decision is made from those that inform what decision is made.

Keep in mind that all of the ethical principles are important, but the emphasis given to each may depend upon the context when being applied. Planning Units may rank the principles differently when considering different scenarios.
CHAPTER 3
ETHICAL FRAMEWORK
SECTION 3.2

3.2. Define the Goal(s) of CRSRP and Protocols.

Once the CRAG has developed ethical principles for the framework, it will need to apply these principles to define the Goal of the CRSRP and associated Protocols. The Goal is the ultimate purpose that the CRSRP and Protocols are designed to accomplish. Examples of Goals used in existing literature on allocation of scarce resources during a disaster include, but are not limited to, preserving societal infrastructure, preventing morbidity and mortality, and doing greatest good for the greatest number. To the extent that a relevant governmental entity has not already established the Goal, the CRAG will need to do so.

What is the goal of this section?
The goal of this section is to define the ultimate purpose (Goal) of the Critical Resource Shortage Response Plan (CRSRP).

How does this section fit into the overall planning process?
In Section 3.1, the Critical Resource Advisory Group (CRAG) identified the principles that will shape your Planning Unit’s ethical framework. This Section 3.2 integrates the ethical principles identified in Section 3.1 and assists your Planning Unit in determining the Goal of your ethical framework. The Goal the CRAG determines in this section is important because, along with the ethical principles it identified in the previous section, it will guide the development of the CRSRP and associated Protocols. The CRAG will use the ethical principles and Goal to provide guidance on specific allocation issues in Section 3.3.

Why is this section included in the Planning Guide?
During a critical resource shortage event (CRSE), care provided with resources that are typically plentiful will need to be modified and the resources may need to be allocated. To make ethical modification and allocation decisions, the hospital(s) in the Planning Unit need to know the ultimate Goal of these decisions. The CRAG will probably refer to this Goal several times in the planning process to remind it and others of the ethical framework guiding development of the CRSRP and associated Protocols. If the Goal selected by the CRAG is vague or could be interpreted in numerous ways, the CRAG should consider further elaborating on the Goal so that others in the planning process can easily understand it.

Real World Example
If the Goal is to do the greatest good for the greatest number of people, it is not entirely obvious what this means. It could mean saving the most lives, saving the most life years, or saving the most quality life years. Consequently, it is very important for the CRAG to not only identify the Goal, but to also explain the intent and purpose of the Goal.
ACTION ITEMS

☐ Determine if there are any existing Goals for critical resource shortage response planning developed or adopted by governmental entities (local, state, federal) with jurisdiction over your Planning Unit.
   ➢ If there is such a Goal, determine whether it is mandatory or voluntary.
     ▪ If it is mandatory, proceed to Section 3.3.
     ▪ If it is not mandatory, the CRAG should develop its own Goal for use during a CRSE. This Section will walk through the development of this Goal.

☐ Identify, based on the ethical principles determined in Section 3.1, the Goal that will guide the development of the CRSRPs and Protocols.
   ➢ Consider the following examples of Goals. (The following are offered as examples only and should not be considered mandatory or all inclusive.)
     ▪ Protecting the functionality of society
     ▪ Protecting societal and community infrastructure
     ▪ Preventing morbidity and mortality
     ▪ Greatest good for the greatest number
     ▪ Greatest good for the greatest number with constraints
     ▪ Graceful degradation of care
     ▪ Greatest number of people benefited
     ▪ Greatest number of lives saved
     ▪ Greatest number of life years saved
     ▪ Greatest number of quality life years saved
   ➢ Consider whether the Goal will change based on the primary use of the critical resource (treatment vs. prophylaxis).
   ➢ Consider how the ethical principles identified in Section 3.1 are integrated into your Goal.
   ➢ Determine how prescriptive the CRAG wants the Goal to be.
   ➢ Consider how various audiences (e.g., healthcare providers, patients, local governments) will interpret the Goal.

☐ Develop a communication plan around the definition of the Goal that will be easy for the hospital(s) in the Planning Unit to understand, assimilate and use (See Chapter 10).
Helpful Hints for Implementation

While it is unlikely that governmental entities (local, state, and federal) have developed or adopted a Goal for critical resource shortage response planning, it is critical that you conduct an “environmental assessment” to be certain.

As the CRAG works to select its Goal, it should keep in mind that its Goal will inform how the CRSRP and associated Protocols are developed. As a result, it may want to consider whether the selected Goal could be quantified or implemented objectively in accordance with the selected ethical principles.

- It may be easier to quantify the Goals of doing the greatest good for the greatest number or saving the greatest number of lives than it would be when applying the Goals of protecting the functionality of society or protecting societal and community infrastructure.
- Just because a Goal cannot be easily quantified does not mean that it is not an advantageous Goal. A non-quantifiable Goal is still acceptable as long as the process for implementing the Goal can be applied consistently and objectively during the CRSE.

Once a Goal has been selected, the CRAG may find it difficult to define the meaning of its selected Goal.

- For example, if a CRAG selects the goal of doing the “greatest good for the greatest number,” it may find that defining the scope of the Goal is outside of its experience. Remember, during “normal” times when resources are abundant, healthcare providers are accustomed to providing care by focusing on what is best for the one patient they are treating and dedicating all necessary resources to that one patient. During a CRSE, it will be necessary to transition to providing care with a view towards a population of patients that all need the scarce resource and allocating resources among them to do “greatest good for the greatest number.” This paradigm shift is difficult for providers to envision and discuss. Providing specific examples to facilitate discussion may be helpful.
- Consider the following example: You have three patients. Patient 1 is a single 25 year old male. Patient 2 is a single father of 5 children under the age of 16. Patient 3 is a 7 year old female. You have limited resources and based on their conditions, you can either save Patient 1 and Patient 3 or you can save Patient 2. If you save Patient 1 (25 year old) and Patient 3 (7 year old), you have saved two lives but negatively impacted the lives of 5 others (Patient 2’s children). If you save Patient 2 (the father), you have positively impacted the lives of 6 people (the patient and his children), but 2 patients die. Which scenario results in the “greatest good for the greatest number”? This is a relatively small scale scenario, but it illustrates the difficult questions that must be asked.

The CRAG may have difficulty identifying just one Goal. Based on the circumstances, it may be necessary to identify multiple Goals that work in conjunction when responding to a CRSE. For example, the CRAG may select the Goal of doing the greatest good for the greatest number defined as saving the greatest number of lives, but in situations when all other factors are equal use the additional Goal of saving the greatest number of life years.
ETHICAL FRAMEWORK
SECTION 3.3

3.3. Determine conceptually how the ethical principles and the Goal(s) will impact allocation of scarce resources during a CRSE.

The ethical principles and Goal(s) will inform the development of the Protocols used to govern the response to a CRSE. Almost every Protocol Development Subcommittee will confront some similar ethical questions regarding allocation of scarce resources. If a relevant government entity has not already done so, the CRAG should use the ethical principles and Goal(s) to provide guidance on three common allocation issues: withdrawal and reallocation decisions; withholding decisions; and “exclusion” criteria. These three areas are referred to as “implementation specifications.”

What is the goal of this section?
The goal of this section is to determine how the ethical principles and Goal will impact the allocation of scarce resources during a critical resource shortage event (CRSE) by providing guidance on implementation specifications.

How does this section fit into the overall planning process?
This section highlights the practical application of the ethical framework that the Critical Resource Advisory Group (CRAG) has been developing. In Section 3.1, the CRAG identified the principles that shape its ethical framework. In Section 3.2, the CRAG used the ethical principles to determine the Goal for the ethical framework. This Section 3.3 incorporates the ethical principles and defined Goal from the previous sections and encourages the CRAG to develop guidance on implementation specifications such as the withdrawal and reallocation of scarce resources, withholding medical assistance and identifying inappropriate “exclusion criteria.”

Why is this section included in the Planning Guide?
Identifying ethical principles and defining the Goal are the first steps in preparing for an ethical response to a CRSE. These steps lay the foundation for ethical decision-making. The principles and Goal will inform the development of the CRSRP and its associated Protocols, which will govern the response to a CRSE. When applying the ethical principles and Goal to develop a Protocol, almost every Protocol Development Subcommittee (see Chapter 5) will confront some similar ethical questions regarding allocation of scarce resources. To promote consistency in addressing these difficult ethical questions, in this Section 3.3, the CRAG will use the ethical principles and Goal to provide guidance on three common allocation issues: withdrawal and reallocation decisions; withholding decisions; and “exclusion” criteria. These three areas are referred to as “implementation specifications.”
ACTION ITEMS

☐ Ensure that the CRAG understands that they are being asked to apply the ethical principles and Goal to provide guidance on the following “implementation specifications”:
  ➢ Whether resources can be withdrawn from one patient to reallocate to another;
  ➢ Whether resources can be withheld from current patients who are seeking care and conserved for future patients; and
  ➢ Whether there are any criteria that should never be used as “exclusion criteria.”

☐ Determine if these issues have already been addressed in existing implementation specifications developed or adopted by governmental entities (local, state, federal) with jurisdiction over your Planning Unit.
  ➢ If they have been addressed in implementation specifications, determine if the implementation specifications are mandatory.
    ▪ If they are mandatory, proceed to Chapter 4.
    ▪ If they are not mandatory, the CRAG should develop its own implementation specifications for use during a CRSE. This section will assist in developing implementation specifications.

☐ Withdrawal. Determine whether providers will be allowed to withdraw or stop providing the critical resource to one patient to give to another patient for whom the critical resource is more appropriate or beneficial.
  ➢ Consider whether the determination will be different when withdrawing resources because the care provided by or with the resource is futile as opposed to withdrawing resources because another patient has a greater need.
  ➢ If withdrawal and re-allocation are permissible, determine under what general circumstances it is permissible. Consider the following circumstances:
    ▪ Patient currently receiving the resource has high potential for death according to an appropriate predictive model;
    ▪ Patient currently receiving the resource has a poor prognosis based on epidemiology of the specific disease/injury or severe underlying disease with poor prognosis;
    ▪ Patient currently receiving the resource has a long duration of need relative to needs of others;
    ▪ Patient currently receiving the resource is worsening over a period of time;
Chapter 3
Ethical Framework

- Patient who needs the resource will likely have a significantly better outcome.5

☐ Withholding. Determine whether providers will be allowed to withhold a critical resource from one patient to conserve it for a future patient during a CRSE.
  ➢ Consider the difference between consumable and reusable resources.
  ➢ If withholding is permissible, determine under what general circumstances it is permissible.

☐ Exclusion Criteria. Determine whether there are any “exclusion” criteria that Protocol Development Subcommittees should be prohibited from using. “Exclusion” criteria are those patient characteristics that remove a patient from consideration for the critical resource even when “inclusion” criteria are met.
  ➢ Consider whether the following are inappropriate “exclusion” criteria that should never be used to determine whether a patient should receive a critical resource. (The following are offered as examples only and should not be considered mandatory or all-inclusive.)
    ▪ Ability to pay
    ▪ Social worth
    ▪ Patient contribution to the disease
    ▪ Past use of resources
    ▪ Race or ethnicity
    ▪ Religion
    ▪ Gender

☐ Ensure that the choices made in this Section 3.3 are consistent with the ethical principles developed in Section 3.1 and the Goal developed in Section 3.2.

☐ Develop a communication plan around the implementation specifications that will be easy for the hospital(s) in the Planning Unit to understand, assimilate and use (see Chapter 10).

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5 Vawter DE, et al. (Jan 2009) “For the Good of Us All: Ethically Rationing Health Resources in Minnesota in a Severe Influenza Pandemic.” Minnesota Pandemic Ethics Project. Available online at: http://www.ahc.umn.edu/mpnflu/prod/groups/Ahc/@pub/@ahc/@ethicsmpep/documents/content/ahc_content_090503.pdf (last visited March 9, 2009).
**Helpful Hints for Implementation**

Many of the discussions in this section will raise questions about the legal liability of the providers who will ultimately make allocation decisions. Consider having experienced legal counsel in this discussion to address these questions and concerns.

As the CRAG begins to discuss withdrawal and withholding of resources, some participants may assert that hospitals and healthcare providers make such decisions on a daily basis. As a result, they do not need further guidance on how to make these decisions during a CRSE. Remind these participants that the decisions made during a CRSE will probably be far more numerous, more visible and of greater severity than the decisions made during “normal” times. During a CRSE, such decisions could mean the difference between life and death.

**Withdrawal**

It may be difficult for CRAG members to discuss withdrawing and reallocating scarce resources on the scale contemplated in a CRSE because these decisions are so far outside of their realm of experience. To help facilitate the discussion, consider using hypothetical scenarios. Consider the following example of the allocation of ventilators:

- A facility has ten patients that would benefit from mechanical ventilation, but there are only eight ventilators. This facility allocates these eight ventilators according to its Protocol for ventilators. The next day a new patient presents for care who, under the Protocol, would have qualified for one of the eight ventilators the previous day, but the ventilators are now all being used by other patients. There are two options: (i) take one of the patients from yesterday off the ventilator and give it to the new patient or (ii) the eight patients from yesterday remain on their ventilators and the new patient is not given a ventilator.

Keep in mind that if the CRAG decides that resources will not be withdrawn from a patient once the patient begins receiving them, the CRAG has basically chosen a “first come, first served” policy.

In “normal” times, the decision to withdraw life sustaining resources is usually a slow and methodical process in which every effort is made to obtain the assent of the care team and family members. This process is not practical in a CRSE. Consider that the withdrawal process during a CSRE will be much quicker than it is in “normal” times and it may not always be possible to obtain the support and understanding of the patient’s family.

Withdrawing a resource from a patient is difficult for healthcare providers. Some providers may refuse to participate in such actions. If the CRAG decides that it will allow the withdrawal of resources from a patient for reallocation of those resources to another patient for whom the resources are more appropriate or beneficial, it will need a mechanism to enforce these decisions. (See Section 4.6 for information on handling non-compliant healthcare providers.)

Consider the difference between consumable and durable resources when evaluating the use of withdrawal criteria. It may not be appropriate to develop withdrawal criteria for a
Some consumable resources, however, may be able to be withdrawn and re-allocated at a certain point. Consider, for example, a 10-day course of antibiotics. If the patient is not improving after 5 days of the antibiotic, would you consider discontinuing the antibiotic on days 6 through 10 in order to provide these doses to another patient?

**Withholding**

Some have said that if a critical resource is available when a suitable patient presents, no provider will withhold the resource from the patient to “hold” it for a more suitable patient who may present in the future. Determine whether the CRAG agrees with this and how it will impact the decision about whether to allow withdrawal and re-allocation of a critical resource.

Keep in mind that if your CRAG decides that resources will not be withheld for conservations, the CRAG will essentially be implementing a “first come, first served” policy.

Withholding care from a patient is difficult for healthcare providers. Some providers may refuse to participate in such actions. If the CRAG decides that it will allow withholding of resources to conserve them for future patients, it will need a mechanism to enforce these decisions. (See Section 4.6 for information on handling non-compliant healthcare providers.)

**“Exclusion” Criteria**

“Exclusion” criteria are those patient characteristics that remove a patient from consideration for the critical resource even when “inclusion” criteria are met. “Exclusion” criteria can be very controversial because they automatically disqualify a patient from consideration for the critical resource and are sometimes not clinical in nature.

Consider the following as other potential “exclusion” criteria that the CRAG may want to prohibit the Protocol Development Subcommittees from using.

- Age
- Diagnosis
- Citizenship

To challenge the CRAG on certain exclusion criteria, you may consider the following scenarios:

- **Patient Contribution to Disease:** You have two patients who need open heart surgery but you only have the resources for one surgery. The first patient is a 55 year old male who has smoked two packs a day for the last twenty years and has a history of non-compliance with taking his medications for hypertension and high cholesterol. The second patient is a 55 year old, 175 pound male who has a congenital heart defect. Assume that all other clinical indicators are equal and each will die if they don’t have the surgery. Should the...
patient’s contribution to disease or lack thereof impact the decision of who receives the surgery?

- **Past Use of Resources:** You have two patients who need a pacemaker but only one pacemaker left in the inventory. The first patient has never had any heart problems until now. The second patient had a pacemaker put in 20 years ago and now it needs to be replaced. Assume that all other clinical indicators are equal and each will die if they don’t get a pacemaker. Should the patient’s past use of resources or lack thereof impact the decision of who receives the pacemaker?

- **Age:** You have two patients who need IV antibiotics but you only have enough to treat one. The first patient is 35 and the second patient is 95. Assume that all other clinical indicators of need are equal and each will die if they don’t get the antibiotics. Should the patient’s age impact the decision of who receives the antibiotics?
CHAPTER 4: OPERATIONAL INFRASTRUCTURE

4. Develop an operational infrastructure that will support an effective response to a critical resource shortage event

An effective response to a CRSE will require that each Planning Unit and each member(s) of a Planning Unit have an infrastructure that supports and aids the implementation of a CRSRP. While the majority of HMDOs have an emergency response infrastructure, many have not yet developed the type of infrastructure that will be needed to efficiently implement a CRSRP and the associated Protocols. Development of this infrastructure prior to an event is critically important so that all Protocols, regardless of whether these Protocols are mandated by a governmental entity or developed by a single HMDO for its own use, can be implemented at the point of care in a consistent manner. Without this consistent operational infrastructure, the member(s) of the Planning Unit will not be able to successfully use Protocols, which may render them moot. To avoid this result, the Planning Unit and each of its members is encouraged in this chapter to develop the basic framework of an operational infrastructure that will support the consistent development, implementation and operationalization of the CRSRP and associated Protocols. Recognizing that each Protocol may present separate implementation and operationalization challenges, the Planning Unit is encouraged to further define the details of this basic framework as each Protocol is developed (see Chapter 5).

Introduction
In Chapter 3, the Critical Resource Advisory Group (CRAG) created an ethical framework – the ethical principles and Goal – that will guide the development of the Critical Resource Shortage Response Plan (CRSRP) and its associated Protocols. In this section, the CRAG will develop the basic elements of the operational infrastructure. These basic elements will not only facilitate implementation of the CRSRP and its associated Protocols during a critical resource shortage event (CRSE), but will also help the Planning Unit develop resource-specific Protocols prior to and during an event.

The development of this operational infrastructure provides consistency to the Protocol development, implementation and operationalization processes. If the Planning Unit is broader than one hospital, then the hospitals that are part of the Planning Unit will likely operate differently. By developing a common operational infrastructure to be used by each of the hospitals within the Planning Unit to implement and operationalize the CRSRP, the Planning Unit will be doing the utmost to ensure that the Plan and the Protocols within the Plan are implemented at the point of care in the most consistent and effective manner possible.
Responsibility
Critical Resource Advisory Group (CRAG)

In this Chapter you will:
- Determine how the Planning Unit will activate and terminate its CRSRP.
- Determine how the Planning Unit will activate and terminate each Protocol.
- Determine how resource allocation decisions will be made for individual patients using a Protocol.
- Develop the infrastructure that will support reviewing and revising the CRSRP and associated Protocols during an event.
- Develop a standard definition of “essential documentation.”
- Establish expectations for compliance with the CRSRP and mechanisms for addressing non-compliance.
- Identify what resources will be available to provide psychological and emotional support to providers of care, patients and their families during a CRSE.
- Develop a general “palliative care” strategy for addressing the needs of patients who do not receive critical resources.
- Develop a comprehensive communication plan related to the operational infrastructure that will support the use of the CRSRP during a CRSE.
OPERATIONAL INFRASTRUCTURE
SECTION 4.1

4.1. Determine how the Planning Unit will activate and terminate its CRSRP.

As with all plans, someone within the Planning Unit will have to authorize the activation of the CRSRP once a critical resource shortage event occurs and terminate the CRSRP once the event ends. For those Planning Units with a unified incident command structure, these decisions will probably be made by the Incident Commander. For those Planning Units without an incident command structure, someone will have to be granted the authority to make these decisions. Regardless, it is likely that the person charged with making these decisions will not be familiar with the concept of, or the decisions presented by, a CRSE. As a result, it is critical that the CRAG develop mechanisms and a process to identify the beginning and the end of a critical resource shortage event so that the decisions to activate and terminate the CRSRP can be made in a timely and appropriate manner.

What is the goal of this section?
The goal of this section is to determine how the Planning Unit will activate and terminate its Critical Resource Shortage Response Plan (CRSRP).

How does this section fit into the overall planning process?
Through the process outlined in the Critical Resource Shortages Planning Guide (Planning Guide), the Planning Unit is creating a CRSRP. Part of the CRSRP must include a process for determining when and how to activate the Plan and a corresponding process for determining when and how to terminate the Plan. This Section 4.1 provides a method for the Critical Resource Advisory Group (CRAG) to use in developing these CRSRP activation and termination processes. Section 4.2 addresses the activation and termination of each Protocol within the CRSRP.

Why is this section included in the Planning Guide?
The implementation of a CRSRP is intended to be a “last resort” for the hospital(s) in the Planning Unit. Implementation of the CRSRP will signify that critical resources are so scarce that modifications to care or, in extreme situations, allocation of resources is required. Because the consequences of implementing a CRSRP are so drastic, it is important that implementation of the Plan be done within the framework of a well thought-out process that will provide a certain degree of comfort for the hospitals and healthcare providers who will be operating under the Protocols set forth in the CRSRP. Hospitals will need to be comfortable that any decision to implement a CRSRP was made by someone with appropriate authority, typically the Incident Commander, and that all other options for obtaining more resources have been exhausted.

While decisions about when to implement the CRSRP will be difficult to make, equally difficult will be decisions about when to terminate the CRSRP. Termination of a CRSRP will signify that your Planning Unit is no longer experiencing a critical resource shortage event (CRSE) and that the hospital(s) in the Planning Unit should resume providing care as it does during “normal”
times. This shift back to a more traditional care model will be difficult and will become increasingly more difficult the longer the CRSE transpires and the longer healthcare providers work under the processes and procedures set forth in the CRSRP. While the termination of the CRSRP may be a welcome change for hospitals, healthcare providers and patients alike, any significant change presents challenges related to required adjustments and implementation. Accordingly, your Planning Unit will need specific policies and procedures to analyze the critical resource shortage situation and determine when the CRSRP should be terminated.

**ACTION ITEMS**

**Activation of the CRSRP**

- Develop a mechanism for identification of a CRSE.
  - How will a CRSE be identified?
  - What information will be needed to identify a CRSE?
  - Who is the most appropriate person to identify a CRSE?
  - To whom within your incident command structure should this finding be reported?

- Develop a mechanism for activating the CRSRP.
  - Who within your incident command structure will declare that a CRSE exists?
  - Who within your incident command structure will authorize the activation of the CRSRP?

- Develop a mechanism for identifying any federal, state or local emergency declarations related to disasters or emergencies that may result in a CRSE and activation of the CRSRP.
  - Does someone within incident command currently have this responsibility? If not, who will be given this responsibility?
  - Determine whether this person will be actually responsible for finding the declaration, reading it, and summarizing it for others within incident command.
  - Will legal counsel be engaged in the process of reviewing any emergency declaration and advising the facility of the legal effect of the emergency declaration?

**Termination of the CRSRP**

- Develop a mechanism for identification of the end of a CRSE.
  - How will the end of a CRSE be identified?
  - What information will be needed to identify the end of a CRSE?
  - Who is the most appropriate person to identify the end of a CRSE?
To whom within your incident command structure should this finding be reported?

☐ Develop a mechanism for terminating the CRSRP.

➢ Who within your incident command structure will declare that a CRSE no longer exists?

➢ Who within your incident command structure will authorize the termination of the CRSRP?

**Helpful Hints for Implementation**

👍 Incident command will most likely be involved in the decision to activate and terminate the CRSRP. It may be helpful to review an incident command organizational chart and to include someone involved and familiar with the incident command structure in this discussion.

👍 Depending on the composition of the Planning Unit, coordination with incident command may involve coordination among the incident command structures of various hospitals within the Planning Unit and the Planning Unit itself. This coordination can be complex but it will better enable each hospital in the Planning Unit to respond to a CRSE and all other disasters.

👍 A federal, state or local emergency declaration related to the event that is causing the CRSE may include “triggers” for activating Governmental Protocols, information on liability protection for providers, or changes to professional licensure requirements. Consider asking legal counsel to be involved in the identification and interpretation of these declarations.

👍 Determining when to terminate a CRSRP may be difficult. Consider the effect that termination may have on providers and patients.

- Terminating a CRSRP too early may result in another wave of a CRSE and the Planning Unit could find itself in the position of having to re-activate the CRSRP. Multiple swings between a “normal” standard of care and a standard of care under the CRSRP may result in undue strain on providers and patients.

- On the other hand, your Planning Unit will not want to continue operating under a CRSRP for any longer than necessary, which favors early termination.
4.2. Determine how the Planning Unit will activate and terminate each Protocol.

The CRSRP will contain various Protocols for specific resources (see Chapter 5). The CRAG will need to determine whether activation of the CRSRP activates all Protocols contained therein or whether the Protocols will be activated separately based on specific resource levels. Likewise, the CRAG will need to determine whether each of the Protocols will be terminated once specific resources are restored or whether all Protocols will be terminated simultaneously with the termination of the CRSRP. If Protocols will be activated and terminated individually, the CRAG will need to develop mechanisms for making these important decisions.

What is the goal of this section?
The goal of this section is to determine how the Planning Unit will activate and terminate each Protocol.

How does this section fit into the overall planning process?
Protocols are specific algorithms that identify how care will be modified and allocated to stretch supplies of a particular resource. Protocols will either be created by governmental agencies or Protocol Development Subcommittees (see Chapter 5). In Section 4.1, the Critical Resource Advisory Group (CRAG) determined how the Planning Unit will activate and terminate its Critical Resource Shortage Response Plan (CRSRP). In this Section 4.2, the CRAG will make decisions regarding how the individual Protocols will be activated and terminated, and how this process will relate to the activation and termination of the CRSRP.

Why is this section included in the Planning Guide?
Preparedness planning takes place on many levels and involves decisions regarding many resources. The CRSRP is the Planning Unit’s overall plan for addressing resource shortages arising during disasters and emergencies, while individual Protocols contained therein are specific to individual resources. Consider that during a disaster or emergency, hospitals may not experience shortages of all resources at one time. They may have shortages of one resource and an abundance of another. The CRAG will want to consider whether all Protocols will be activated and terminated at the same time as the CRSRP or, alternatively, whether separate activation and termination decisions should be made for each Protocol depending on the supply of the specific resource in question. If the CRAG favors the latter option, it will need to develop a process for

Real World Example
In a hurricane, demand for inpatient care may exceed supply. The Planning Unit may implement its Protocol for inpatient admission, but not its Protocol for allocating ventilators if the supply of ventilators is sufficient to address demand.
making these Protocol-specific activation and termination decisions. This Section 4.2 will help the CRAG develop this process.

**ACTION ITEMS**

**Activation of Protocols**

☐ Determine whether activation of the CRSRP will also activate all of the Planning Unit’s Protocols. Alternatively, the CRAG may determine that Protocols can be separately activated according to the level of scarcity of the particular resource that the Protocol addresses.

- If activation of the CRSRP will activate all of the Planning Unit’s Protocols, proceed to Termination of Protocols.
- If each Protocol will be separately activated, continue with this Section 4.2.

☐ If the Protocols will not be activated simultaneously with the CRSRP, consider the following:

- Who will make the decision to activate the Protocols? Will the answer vary by Protocol, or will it be the same for all Protocols?
- What information will be needed to determine whether to activate a Protocol?
- Consider activation of the Protocol in a tiered fashion. For example, the portion of the Protocol addressing modifications to the way care is provided with or by the critical resource may be activated before the portion of the Protocol addressing allocation of the critical resource.

**Termination of Protocols**

☐ Determine whether your Planning Unit will terminate all of the Protocols at the same time as the CRSRP is terminated. Alternatively, the CRAG may determine that Protocols can be separately terminated prior to the termination of the CRSRP according to the level of scarcity of the particular resource that the Protocol addresses.

- If termination of the CRSRP will terminate all of the Planning Unit’s Protocols, proceed to Section 4.3.
- If each Protocol will be separately terminated, continue with this Section 4.2.

☐ If the Protocols will not be terminated simultaneously with the CRSRP, consider the following:

- Who will make the decision to terminate the Protocols? Will the answer vary by Protocol, or will it be the same for all Protocols?
- What information will be needed to determine whether to terminate the Protocols?
Consider termination of the Protocol in a tiered fashion. For example, the portion of the Protocol addressing allocation of the critical resource may be terminated before the portion of the Protocol addressing modifications to the way care is provided with or by the critical resource.

**Helpful Hints for Implementation**

💡 Consider that a decision to activate all Protocols at the same time that the CRSRP is activated may be easier for the Planning Unit to implement. This decision, however, may result in the implementation of modification and allocation algorithms when a shortage of a specific resource may not actually exist during a particular critical resource shortage event (CRSE).

💡 Like activation, a decision to terminate all Protocols at the same time that the CRSRP is terminated may be easier for the Planning Unit to implement. This decision, however, may result in the termination of Protocols for resources that remain in short supply. It could also delay the termination of a CRSRP until the last resource is no longer in short supply, thus unnecessarily extending the time that other Protocols are in effect.

💡 The decision about whether to activate the Protocol simultaneously with the activation of the CRSRP is distinct from the decision to terminate the Protocol simultaneously with the termination of the CRSRP. Consider the impact of selecting a different option for activation than for termination.
OPERATIONAL INFRASTRUCTURE

SECTION 4.3

4.3. Determine how resource allocation decisions will be made for individual patients using a Protocol.

Once the CRSRP and associated Protocols are activated, individuals will have to apply the Protocols to make specific resource allocation decisions for individual patients. The CRAG will need to identify who at the point of care will be designated to make these decisions and, if multiple people are involved, how they will interact (e.g., coordination between triage officers and a triage committee). Because these decisions may have dire results for some patients, it is critically important to ensure that whatever processes the CRAG establishes result in the ethical and consistent application of the Protocol.

What is the goal of this section?
The goal of this section is to determine how resource allocation decisions will be made for individual patients using a Protocol.

How does this section fit into the overall planning process?
In Section 4.2, the Critical Resource Advisory Group (CRAG) established general mechanisms for activating Protocols. This Section 4.3 encourages the CRAG to develop a general infrastructure that will support applying Protocols to make specific allocation decisions when the needs of patients compete for the same critical resource. In Section 5.5, Protocol Development Subcommittees will “drill down” on this general infrastructure and create a detailed decision-making mechanism for specific Protocols.

Why is this section included in the Planning Guide?
Protocols will likely contain algorithms, guidance and criteria that can be used to determine who receives a critical resource when demand for the resource exceeds supply. Whether these Protocols are developed by a governmental entity or the Planning Unit, once they are activated, they will need to be applied at the point of care. As of the publication of this Critical Resource Shortages Planning Guide Implementation Toolkit (Implementation Toolkit), the vast majority of hospitals do not currently have an infrastructure that will support the efficient and effective use of Protocols. Planning Units and the hospital(s) within them are strongly encouraged to develop this infrastructure immediately so that they can be prepared to make allocation decisions based on Protocols, including Governmental Protocols, during a critical resource shortage event (CRSE). Building this infrastructure now is important regardless of whether such Protocols currently exist because even if they do not exist now, they may be developed in the midst of an event. The CRAG can look to the few models that have been suggested in the literature and either adapt these models to fit the unique needs of the hospital(s) in the Planning Unit or create an entirely new model. Either way, the CRAG should carefully consider this issue since those charged with applying a Protocol will have enormous responsibility and will be making decisions that may have dire consequences for some patients.
ACTION ITEMS

☐ Once a Protocol, including a Governmental Protocol, is activated, determine who will apply the Protocol to make specific allocation decisions. Will one person, a committee, or individual treating physicians be charged with this duty? Consider the following models:

➢ Model 1: Each treating physician allocates the critical resource for his patients based on the Protocols.
  ▪ Benefits of this model include: (i) preserving the physician’s autonomy and independence; (ii) preserving more of the traditional physician-patient relationship because the physician will continue to make decisions for the patients he is treating; and (iii) minimizing the limitations on the role of an otherwise active physician.
  ▪ Drawbacks of this model include: (i) a lack of coordination in resource allocation because the decision making process is decentralized; (ii) potential conflicts of interest for a physician because he may have to allocate resources among his patients; and (iii) lack of objectivity since the treating physician has developed a care plan and may be invested in seeing this care plan followed even when resources would be more beneficial for another patient.

➢ Model 2: The hospital designates one physician per shift – referred to as the “triage officer” – to allocate resources to all patients in need based on a Protocol.
  ▪ Benefits of this model include: (i) coordination in resource allocation because the decision making process is centralized; (ii) the triage officer has all of the relevant information on all of the patients in need of the critical resource and can evaluate them as a group according to the Protocol; and (iii) the triage officer is theoretically not treating specific patients so there is no patient “loyalty” which could influence his decision.
  ▪ Drawbacks of this model include: (i) interference with the traditional physician-patient relationship; (ii) a greater burden has been placed on just one person which could result in this person becoming isolated and overwhelmed; (iii) there is potential for non-compliance by the treating physicians with the allocation decisions made by the triage officer; and (iv) the removal of a physician from patient treatment functions is required at a time when there may already be a shortage of physicians.

➢ Model 3: The hospital designates a group of physicians per shift – referred to as the “triage committee” – to allocate resources to all patients in need based on a Protocol. This is similar to Model 2, except instead of one person making the allocation decisions, a group of people are making the allocation decisions.
  ▪ Benefits of this model include: (i) coordination in resource allocation because the decision making process is centralized; (ii) the triage committee has all of the
relevant information on all of the patients in need of the critical resource and can evaluate them as a group according to the Protocol; (iii) the triage committee is theoretically not treating specific patients so there is no patient “loyalty” which could influence their decision; (iv) the burden of making allocation decisions is spread over a group of people who may take solace in reaching the decision as a group; and (v) there may be more buy-in to the decisions from treating physicians if they know the decision was made by a group instead of one individual.

- **Drawbacks of this model include:** (i) interference with the traditional physician-patient relationship; (ii) there is potential for non-compliance by the treating physicians with the allocation decisions made by the triage committee; (iii) the removal of several physicians from patient treatment functions is required at a time when there may already be a shortage of physicians; (iv) it may be difficult to reach consensus on allocation decisions, which means that the process will take longer; and (v) the larger the triage committee, the harder it is to protect the physical security of all members.

- **Model 4:** The facility designates one physician per shift (the “triage officer”) to apply exclusion criteria contained in the Protocol for the critical resource. After the exclusion criteria are applied to limit the patients eligible for the critical resource, a group of physicians per shift (the “triage committee”) will allocate resources to the remaining patients based upon the Protocol. This is essentially a combination of Model 2 and Model 3, with a triage officer making the initial decisions to exclude certain patients from receiving the critical resource and with a triage committee then being tasked with the responsibility of allocating resources to a smaller group of patients.

  - The benefits are similar to those of Model 2 and Model 3, except that the decision-making process is divided so that a smaller burden is placed on the triage officer and triage committee.
  - The drawbacks are similar to those of Model 2 and Model 3, but to the extent that both a triage officer and members of the triage committee are not otherwise treating patients, you have now taken even more physicians out of clinical operations when you need them the most.

☐ If you choose to use a triage officer or triage committee, determine how individuals will be selected to fill these roles.

  - Will the selection be dependent upon the resource that is scarce or will the selection remain constant for all resources?
  - What skill sets are required to serve as the triage officer or as a member of a triage committee? Consider clinical skills and expertise, problem solving, decision making, and communication.
If applicable, determine what powers the triage officer or triage committee will have with respect to application of a Protocol.

- Will the triage officer/committee only have the power to recommend how the critical resource should be allocated, or to actually enforce the allocation decisions?
- If in Section 3.3 the CRAG decided to allow critical resources to be withdrawn from one patient and given to another, will the triage office/committee have the power to withdraw these critical resources and re-allocate them?
- Will the triage officer/committee have the power to require physicians and staff to provide care according to the Protocol?
- Will the triage officer/committee have the power to reprimand non-compliant staff or physicians (see Section 4.6)?
- Will the triage officer/committee have the power to re-assess and modify the Protocol itself (see Section 4.4)?

If applicable, how will the triage officer/committee interact with incident command?

If applicable, how will the triage officer/committee interact with incident command?

Recognize that any individual asked to apply a Protocol may have concerns about potential malpractice liability. Create a strategy for addressing these concerns.

- Consult legal counsel to determine how existing law may (or may not) provide protection to providers who modify care and allocate resources in response to a CRSE.
- Determine whether the Planning Unit will provide any additional liability protection for triage officers, members of triage committees and other providers who are asked to modify care or allocate resources in response to a CRSE.
- Review applicable insurance policies to determine to what extent the triage officer/committee is protected. Consider protection for medical malpractice, general liability, and directors and officers insurance. If the current policy will not provide adequate protection, meet with an insurance agent to discuss revisions to include these individuals.

**Helpful Hints for Implementation**

 крыш № Человека, который занимается распределением ресурсов, особенно триажные врачи и триажные комитеты, могут стать целями гнева пациентов и родственников, которым не предоставляется то, к чему они считают себя причетными. В результате, триажные врачи и комитеты, члены который могут бояться за свою личную безопасность. Существует вопрос, может ли Планировщик предоставить эти индивидуумы с каким-то уровнем безопасности и защиты. 

Chapter 4
Operational Infrastructure
When considering the characteristics of a triage officer or member of a triage committee, consider an individual’s normal role within the hospital or the Planning Unit. What is the individual’s relationship to the medical staff? To the administration? Are there any relationships that will either positively or negatively impact an individual’s ability to function as a triage officer or member of a triage committee?

As mentioned before, the triage officer or committee will need to coordinate and interact with incident command, especially medical control and resource management. It is important to identify when, how and why the triage officer or committee will interact with incident command and if they will actually be part of incident command. These interactions should be done in the most efficient manner possible to allow everyone time to fulfill their other responsibilities.

Potential liability concerns may pose a significant issue for triage officers and members of triage committees if not proactively addressed. Remember that allocation decisions necessarily mean that a patient will not receive the same resources that he or she would have received in “normal” times. These situations have the potential to result in a suit against the triage officer or members of the triage committee. If the triage officer or members of a triage committee do not feel protected, they may hesitate to apply a Protocol and make the hard choices that must be made.
4.4. **Develop the infrastructure that will support reviewing and revising the CRSRP and associated Protocols during an event.**

No matter how good a CRSRP and associated Protocols are, they cannot anticipate every circumstance that may arise during an event. Like all plans, the CRSRP and Protocols will need to be continually re-evaluated during a CRSE in light of the actual circumstances presented by the event and then revised accordingly. With respect to Protocols in particular, new clinical data may become available during the event which will make revisions to the Protocol imperative. The CRAG will need to develop an infrastructure for this review and revision process because without such an infrastructure, it is likely that this important step will be overlooked during the chaos of an event.

**What is the goal of this section?**

The goal of this section is to develop a process for re-assessing and revising Critical Resource Shortage Response Plans (CRSRPs) and associated Protocols during an event.

**How does this section fit into the overall planning process?**

Once a Planning Unit completes all chapters of the *Critical Resource Shortages Planning Guide* (*Planning Guide*), it will have a complete CRSRP, which includes resource-specific Protocols. During a critical resource shortage event (CRSE), as circumstances evolve and new information becomes available, the CRSRP and Protocols should be reevaluated and revised to reflect the actual circumstances of the event. This Section 4.4 provides a process for the Critical Resource Advisory Group (CRAG) to use to create the infrastructure that will allow these necessary reviews and revisions to take place during an event.

**Why is this section included in the Planning Guide?**

Like all policies, procedures and emergency preparedness plans, CRSRPs are living documents that should be re-assessed during an event to ensure the plan is accomplishing the stated goals. Even the best CRSRP cannot anticipate every situation that may arise during a CRSE. Every disaster is unique and the conditions are constantly evolving. As a result, a crucial part of the CRSRP is developing an infrastructure that will allow the Plan to be reviewed and revised during an event. This infrastructure should also support the review and revision of specific Protocols contained in the CRSRP. Without a pre-established infrastructure for these re-evaluations and
revisions, it is likely that this re-evaluation process will be overlooked during the chaos of CRSE.

**ACTION ITEMS**

- Determine the frequency of reassessment.
  - Once a CRSRP is activated, how often will the CRSRP be re-assessed to determine if changes should be made to the Plan?
  - Once a specific Protocol is activated, how often will the Protocol be re-assessed to determine if changes should be made to the Protocol?

- Determine the triggers for reassessment.
  - Determine which situations, information, developments, or data will trigger the need to reassess the CRSRP.
  - Determine what situations, information, developments, or data will trigger the need to reassess Protocols.

- Determine who will be responsible for reassessment.
  - Determine who will be responsible for re-assessing the CRSRP.
  - Determine who will be responsible for re-assessing Protocols. Will the person(s) assigned this responsibility change based on the resource addressed in the Protocol?
  - Identify at least one alternate for each of these individuals.
  - Consider that any person(s) charged with this responsibility will need access to all relevant information available from incident command, the triage officer/committee (if applicable), the floor units, and federal, state and local government organizations.

- Determine the process for revisions.
  - Develop a process for revising the CRSRP when necessary following the reassessment.
  - Develop a process for revising a Protocol when necessary following the reassessment.
  - Consider the role of and interactions with incident command during the revision process.

- Determine the process for communicating revisions.
  - Determine who needs to be made aware of revisions to the CRSRP and the associated Protocols.
Develop a method for communicating any intra-event changes to the CRSRP or Protocols to the hospital(s) in the Planning Unit and its staff so they can modify their practices to be consistent with the revised CRSRP or Protocol(s).

Consider using multiple modes of communication including meetings (if social distancing is not a concern), e-mail alerts, short flyer postings at strategic locations, and individual handouts.

☐ Determine how these intra-event changes to the CRSRP and Protocols will be documented.

**Helpful Hints for Implementation**

💡 Intervals for re-assessing a CRSRP or associated Protocols may be constant or may vary depending on the event. Consider the differences between a short, fixed duration event like an explosion; a longer but still fixed duration event like a hurricane; and an indefinite event like a pandemic. In a short, fixed duration event there may not be time to re-assess the CRSRP and Protocols during the actual event. In an indefinite event, the CRSRP and Protocols may be re-assessed with relative frequency.

💡 The hospital(s) in the Planning Unit may already have mechanisms in place to re-assess its emergency operations plan in the midst of an event. If so, consider including re-assessment of the CRSRPs and Protocols as part of this larger process.

💡 Consider the appropriateness of using Protocol Development Subcommittees, triage officers or members of triage committees, incident command, and medical control as the individuals who are responsible for re-assessing a Protocol and revising it accordingly.

💡 It is important to document any changes to the CRSRP or Protocols and the rationale behind the changes for future reference. This documentation assists in communication of the changes and in the defense of any claims that are brought by patients in the wake of an emergency or disaster. There is no need for the documentation to be extensive, but it should be comprehensive enough to explain the rationale behind any permanent changes made to the CRSRP and the Protocols.
4.5. Develop a standard definition of “essential documentation.”

Obtaining appropriate documentation often poses a problem for HMDOs in the best of circumstances. During a CRSE, it is going to be even more difficult for HMDOs to complete documentation according to “normal” standards. The CRAG should determine what type of documentation is “essential” during a CRSE for the care and safety of the patient, the proper operation of Protocols, quality assessment, and reimbursement.

What is the goal of this section?
The goal of this section is to develop a standard definition of “essential” documentation.

How does this section fit into the overall planning process?
In this Section 4.5, the Critical Resource Advisory Group (CRAG) will develop a standard definition of “essential documentation” – that documentation which is absolutely necessary during a critical resource shortage event (CRSE) for the care and safety of the patient, the proper operation of Protocols, quality assessment, and reimbursement for care provided. In Section 5.6, the Protocol Development Subcommittee will use this standard definition as the basis to further define the elements of “essential documentation” related to the specific Protocols that are subsequently developed. In Section 7.6, the CRAG will use this definition to coordinate documentation expectations with other Health and Medical Delivery Organizations (HDMOs).

Why is this section included in the Planning Guide?
Documentation in healthcare is always critical and usually a challenge. During an emergency or disaster, hospitals and healthcare providers will be concerned with one primary objective – providing the best healthcare they can under the circumstances. They will be under significant stress due to the volume of patients and the lack of staff and other resources. This stress, combined with the need to focus on providing care to many more patients than usual, will make it very difficult to properly document the care provided. In addition, healthcare providers may not have access to their usual systems to fully document the care provided. This could be due to a disruption to the hospital’s computer systems, severe staff shortages or even damage to the hospital itself.

Documentation will remain important, however, for numerous reasons. Most importantly, this documentation is necessary to support continuity of care and claims for reimbursement from Medicare, Medicaid, and private payors. Despite the obvious importance of documentation, during a CRSE, hospitals and healthcare providers will not be able to continue the same level of documentation as during “normal” times due to time and resource constraints. Based on this reality, the CRAG should identify the minimum components of documentation that will be required during a CRSE. This will be referred to as “essential documentation.”
ACTION ITEMS

☐ Determine the primary functions of documentation during a CRSE. Consider the care and safety of the patient, the proper operation of Protocols, quality assessment, and reimbursement.

☐ Identify the types of documentation that are necessary for the care and safety of the patient.
  ➢ What type of information is collected today for the care and safety of the patient?
  ➢ What is the minimum amount of information about the patient that the next healthcare provider or HMDO will need to care for the patient?
  ➢ Who should collect and document this information? Can the documentation responsibility be delegated?
  ➢ Consider whether the Protocol itself modifies “normal” documentation related to the care of the patient. For instance, if a Protocol modifies practices so that nursing checks vital signs every four hours instead of every two hours, this will decrease the number of times that nursing documents vital signs.

☐ Identify general types of documentation that are necessary to support Protocols. These types will be further delineated when Protocols are developed in Chapter 5.

☐ Identify the types of documentation that are necessary to monitor the quality of care being provided during the disaster. Consider information such as:
  ➢ The number of patients treated during a standard timeframe;
  ➢ The outcomes experienced by those patients;
  ➢ The average length of stay of those patients;
  ➢ The types of care received; and
  ➢ Readmission rate.

☐ Identify the types of documentation that are necessary to obtain reimbursement for care provided.
  ➢ Consult with billing staff to understand what type of documentation is normally required for reimbursement purposes.
  ➢ Identify the types of “normal” documentation that may prove difficult to obtain during a CRSE and explain why it will be difficult.
  ➢ Consult with the billing staff about these concerns and suggested modifications.
  ➢ Encourage the CFO to begin discussions with insurers about the suggested modifications and the impact on reimbursement.
Determine how documentation responsibilities may be reassigned to free up as many resources as possible for patient care.

- If documentation responsibilities will be reassigned, will “just-in-time” training be required to make these reassignments successful?

Consider how each hospital within the Planning Unit will implement “essential documentation” within its medical records system.

- If the hospital has a paper records system, consider how all of the suggested modifications will interact with this system.
  - How can the paper records help support “essential documentation”?
  - How might the paper records hinder the use of “essential documentation”?
  - What can be done to facilitate the use of “essential documentation” within the paper system (e.g., develop templates and forms)?
  - Involve medical records staff in these discussions.

- If the hospital has an electronic medical records (EMR) system, consider how all of the suggested modifications will interact with the EMR.
  - How can the EMR help support “essential documentation”?
  - How might the EMR hinder the use of “essential documentation”?
  - Determine whether a “disaster setting” can be developed within the framework of the EMR. A “disaster setting” can provide a streamlined approach to collecting the required “essential documentation” during a CRSE. If such a “disaster setting” can be implemented, consider who will be in charge of switching the system into disaster mode.
  - Involve health information technology staff in these discussions since they are most knowledgeable on the architecture of the EMR.
  - In what types of disasters will the EMR be most vulnerable and what steps can be taken to protect it?

Document decisions made with respect to “essential documentation” during a CRSE.

Helpful Hints for Implementation

💡 Consider the documentation required for good clinical practice. How can documentation standards be modified to ensure enough information to support care and obtain reimbursement without posing an undue administrative burden during the CRSE?

💡 Consider having discussions with insurers, Medicare and your state’s Medicaid program regarding the possibility of reduced documentation requirements during an emergency or...
disaster. If any decisions are reached during these meetings, the decisions should be confirmed in a letter to the applicable payor and a copy of this letter should be included with the “essential documentation” standards developed.

💡 The CRAG may experience difficulty in making determinations regarding what documentation can be considered “nonessential” during a CRSE. To assist the CRAG in making these decisions, remind the CRAG that during a CRSE “altered standards of care” are being implemented in many areas of patient care, which will allow for the stretching of available resources. Documentation must also be evaluated as part of altering the standards of care.
OPERATIONAL INFRASTRUCTURE
SECTION 4.6

4.6. Establish expectations for compliance with the CRSRP and mechanisms for addressing non-compliance.

Those who will be asked to operate under the CRSRP need to clearly understand what will be expected of them during a critical resource shortage event and what their role will be with respect to the Plan. It will be crucial that everyone understand that they must comply with the CRSRP, especially the Protocols, for the Plan to function as intended. If one fails to comply with the CRSRP and associated Protocols, it will have a detrimental impact on the response and operations of the member(s) of the Planning Unit. The CRAG should develop mechanisms to address non-compliance through appropriate disciplinary mechanisms so that the member(s) of the Planning Unit are prepared to handle these situations.

What is the goal of this section?
The goals of this section are to (i) establish expectations for compliance related to the Critical Resource Shortage Response Plan (CRSRP) and associated Protocols, and (ii) develop mechanisms for addressing non-compliance with expectations.

How does this section fit into the overall planning process?
Through the use of the Critical Resource Shortages Planning Guide (Planning Guide), the Planning Unit is developing a CRSRP, which will contain resource-specific Protocols. The Protocols will likely provide specific instructions for individual providers at the point of care to use when determining how to modify the type of care they provide and, in extreme cases, allocate scarce resources. For the CRSRP and its Protocols to be used effectively, individual providers must understand that compliance with Protocols is expected and non-compliance will be met with specific consequences. This Section 4.6 informs the Critical Resource Advisory Group (CRAG) of the decisions that will need to be made regarding setting expectations and developing consequences for failure to comply.

Why is this section included in the Planning Guide?
Complying with a CRSRP and its associated Protocols will, in many cases, require a dramatic change in the way that individual providers render care. Because this change may be extreme, many providers may feel uncomfortable with the requirements of the CRSRP and its associated Protocols if expectations for compliance are not clearly explained both prior to and during a critical resource shortage event (CRSE). Non-compliance can be extremely detrimental to the Planning Unit’s response to an event and greatly impair its ability to effectively implement its CRSRP. To avoid this negative impact, not only should the Planning Unit clearly establish expectations for all providers but it should also ensure that the consequences for failing to comply are understood by all.
ACTION ITEMS

☐ Identify the negative impacts of non-compliance with the CRSRP and associated Protocols. Consider the following:
  ➢ More scarce critical resources will be consumed by those providers not operating under the CRSRP and associated Protocols. As a result, critical resources will be depleted to an even greater extent requiring more drastic modifications and allocation by those following the CRSRP and associated Protocols.
  ➢ If certain providers choose not to comply with the CRSRP and associated Protocols, the CRSRP may lose some of its validity. In this case, one non-compliant provider could result in other providers choosing to be non-compliant.
  ➢ Other providers who are complying with the CRSRP and associated Protocols may face even greater liability risk if every provider is not providing care in accordance with the CRSRP and associated Protocols.

☐ Determine the expectations related to the CRSRP for specific groups of providers. Consider the following groups:
  ➢ Administrative staff;
  ➢ Physicians;
  ➢ Nursing staff;
  ➢ Ancillary providers; and
  ➢ Support staff.

☐ Based on the decision-making infrastructure developed in Section 4.3 (treating provider v. triage officer v. triage committee), identify how providers may exhibit non-compliant behavior.

☐ Determine how the hospital(s) in the Planning Unit will address non-compliant behavior exhibited by members of its staff.
  ➢ Consider current methods and procedures that are used to discipline medical, nursing and administrative staff. Are any of these relevant or useful?
  ➢ Will there be designated levels of non-compliance such that each level carries a different consequence or disciplinary measure? For example, will a first offense be punished as a warning? A second offense as a formal reprimand? A third offense will require dismissal?
  ➢ If there will be consequences for non-compliance, who will be responsible for enforcing such consequences?
With respect to physicians, review the medical staff bylaws to determine whether the hospital has the ability to enforce consequences for non-compliant behavior.

- Should medical control have the authority to take over patient care from individual physicians? If so, is this reflected in the medical staff bylaws and in the hospital’s emergency operations plan?

With respect to nursing staff, review any applicable collective bargaining agreements to determine whether the hospital has the ability to enforce consequences for non-compliant behavior.

Determine how the hospital(s) in the Planning Unit will address providers who refuse to expand their scope of practice if such expansion is required by the CRSRP or its associated Protocols.

Determine how the hospital’s expectations of compliance with the CRSRP and Protocols will be communicated both pre-event and intra-event (see Chapter 10).

Helpful Hints for Implementation

💡 When making these decisions, the CRAG should carefully balance the need to ensure compliance with the CRSRP and the Protocols with the need to obtain buy-in from providers so as not to alienate them.

💡 When considering whether dismissal may be a response to non-compliance, remember that providers may already be in short supply during a CRSE. Understand that in these circumstances, any dismissed staff will likely not have a difficult time finding another job.

💡 Ensure that human resources representatives are involved in developing plans to institute disciplinary measures against providers who fail to comply with the CRSRP and associated Protocols.
OPERATIONAL INFRASTRUCTURE
SECTION 4.7

4.7. Identify which resources will be available to provide psychological and emotional support to providers of care, patients and their families during a CRSE.

A CRSE will be a very trying time for everyone, especially providers of care, their employees, patients and their families. All of these groups will likely need much more psychological and emotional support than normal. The CRAG should identify psychological and emotional support resources that will be available during and after a CRSE to provide needed support.

What is the goal of this section?
The goal of this section is to develop mechanisms for providing psychological and emotional support to individual providers, patients and their families during and after a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
In many instances, individual healthcare providers will be the most critical resource that is in danger of becoming scarce during a CRSE. Without these providers, the Critical Resource Shortage Response Plan (CRSRP) and associated Protocols will have little chance of being successfully implemented. To help protect this most valuable asset, Planning Units must be prepared to provide psychological and emotional support to providers and their families to help them cope with the devastating effects of a CRSE. Many of these support resources can be shared with patients and their family members, as they will require support too. This Section 4.7 will help the Critical Resource Advisory Group (CRAG) identify mechanisms for providing this psychological and emotional support during and after a CRSE.

Why is this section included in the Planning Guide?
The stress of providing care during an emergency or disaster of any type will cause emotional and psychological issues for individual healthcare providers, patients and their families. The magnitude of the event will determine how pronounced and debilitating these issues are and the type of support that is required. While many hospitals have programs in place to provide emotional and psychological support to staff and patients, the majority of these programs are not designed or equipped to provide the level and quantity of support that will be needed during and after a CRSE. To help ensure that psychological and emotional support resources will be available when needed during and after a CRSE, the Planning Unit needs to plan accordingly.

ACTION ITEMS

☐ Consider to whom psychological and emotional support and recovery services will be provided during and after a CRSE.
Will they be provided to individual healthcare providers, both employed and non-employed?

Will they be provided to hospital employees?

Will they be provided to non-employee volunteers?

Will they be provided to employees’ families?

Will they be provided to patients?

Will they be provided to patients’ families?

Will the services offered differ depending on the group?

Determine the mechanisms and services that will be used to provide support and recovery services to providers, patients, and families during and after a CRSE.

Consider utilizing psychiatrists, psychologists, counselors, support groups, and chaplains. Consider volunteers who may be willing to assist with these services.

Consider whether the hospital(s) in the Planning Unit will provide these services in-house or contract with an outside provider (e.g., Employee Assistance Program).

- Does the contracted service have the expertise and capacity to provide the needed services?
- If services are contracted out, will the hospital(s) in the Planning Unit receive priority over other clients?
- Ask counsel to review existing contracts for force majeure clauses that may limit the provision of services during a disaster.

Consider any just-in-time training that may be needed for mental health providers specific to the event at hand. If volunteers are utilized, consider if any just-in-time training may be required for these individuals.

Involves your human resources professionals in the development of these mechanisms.

**Helpful Hints for Implementation**

🔥 Consider that more emotional and psychological support may be needed in an event like a pandemic, where many may die, no one is “safe” from infection and the end is uncertain, as compared to a tornado, where the event ends quickly and there is little residual risk of injury or sickness.

💰 High levels of absenteeism will also impact psychological service providers, and they may not be as readily available to provide support. Consider alternate support mechanisms like support groups, regular breaks, and space for recuperation and relaxation. During an infectious disease outbreak, any mechanisms used for psychological or emotional support should incorporate social distancing strategies to limit any further spread of the disease.
The hospital(s) in the Planning Unit will likely have some type of employee assistance program for its staff. However, this type of program is often an outsourced service and may not be available or have the expertise to address the types of issues that will manifest during a disaster.
OPERATIONAL INFRASTRUCTURE
PALLIATIVE CARE
SECTION 4.8

4.8. Develop a general “palliative care” strategy for addressing the needs of patients who do not receive critical resources.

During a CRSE, there will be patients who present for care who will not receive the level of care or the resources that they would under a traditional standard of care because the resources required for such care are not available. These patients cannot be abandoned. The member(s) of the Planning Unit should provide some level of care to these patients, including “palliative care.” Since “palliative care” presents many challenges in “normal” times, the CRAG should develop a strategy for addressing “palliative care” during a CRSE so that it can be provided effectively.

Introduction to Palliative Care
The duty to provide care is an ethic that most providers hold as sacrosanct. While providers may compromise many of their ideals when responding to a disaster, they will not compromise their commitment to this duty. In fact, many disasters may serve to reinforce this duty and lead providers to volunteer their services to disaster victims in impacted areas. Many critical resource shortage events (CRSEs), especially those caused by a public health emergency like a pandemic, will force providers to re-evaluate how they fulfill their duty to provide care. By definition, during a CRSE, there will not be enough resources to provide care to patients as “normal.” In some cases, there will not even be enough of the resource to provide modified care – the resource will have to be allocated. To be even slightly comfortable with this type of allocation, providers and patients alike have to know that patients who do not receive the resource will not be abandoned. They will be provided with other resources that attempt to treat their condition and, if such resources are not available either, they will at least be made comfortable.

This type of “palliative care” may be different from the palliative care provided outside of a CRSE. In fact, many palliative care providers may be uncomfortable using the term “palliative care” to describe the type of care provided to patients who do not receive critical resources. To be able to plan to provide this care, therefore, the Critical Resource Advisory Group (CRAG) should first determine the goal of “palliative care” during CRSEs (Section 4.8.1). This will help the CRAG to develop a definition of “palliative care” to clarify exactly what “palliative care” means during a CRSE (Section 4.8.2). Once the CRAG defines “palliative care” for CRSEs, it should develop mechanisms to provide this type of care on a large scale (Section 4.8.3).
4.8.1. Determine the goal of “palliative care” during a CRSE.

Palliative care is traditionally associated with end-of-life care. During a CRSE, however, palliative care may be used primarily for other purposes such as symptom control and comfort care. For this reason, it is important for the CRAG to determine its goal for “palliative care” during a CRSE.

What is the goal of this section?
The goal of this section is to determine the goal of “palliative care” during a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
The application of the Protocols developed in Chapter 5 may result in some patients failing to receive needed critical resources. Hospitals cannot abandon these patients even though they do not have the resources to treat these patients as they would outside of a CRSE. Instead, they should consider providing these patients with at least some palliative care. This Section 4.8.1 encourages the Critical Resource Advisory Group (CRAG) to define the goal of palliative care provided during a CRSE as it may be different from the goal of palliative care in “normal” times. In Section 4.8.2, this goal will be incorporated into a standard definition of “palliative care” during a CRSE. In Section 4.8.3, the definition will be used to identify mechanisms to provide this type of care during a CRSE.

Why is this section included in the Planning Guide?
During a CRSE, palliative care will have different purposes than it does during “normal” times. During “normal” times, palliative care is reserved for those individuals who have serious illness and are facing the last phases of life. However, during a CRSE, there will be individuals who will not receive certain critical resources that they would have received if not for the CRSE (e.g., ventilators, anti-virals). These individuals must be provided with some level of care. They cannot be abandoned or ignored. It is important for the CRAG to identify the goals of this type of care during a CRSE since the goals may be different from traditional palliative care goals.

ACTION ITEMS

☐ Determine the goal of “palliative care” during a CRSE. Consider the following goals (the following are offered as examples only and should not be considered mandatory or all-inclusive):
  ➢ To relieve pain.
➢ To manage symptoms without use of the critical resource in question.
➢ To ensure that patients are not abandoned or ignored even though they are not receiving the critical resource.
➢ To minimize the physical and psychological suffering of those not given the critical resource.

☐ When evaluating various goals, think about whether the goal is consistent with the ethical framework (see Chapter 3).

☐ Engage palliative care providers in these discussions.

Helpful Hints for Implementation

💡 “Palliative care” provided during a CRSE may be different from the palliative care provided in “normal” times. In fact, many palliative care providers may be uncomfortable using the term “palliative care” to describe the type of care provided to patients who do not receive critical resources. The facilitator should be aware of this sensitivity.

💡 In considering the goal of palliative care, the CRAG is not limited to selecting only one goal; it may select as many or as few goals as it deems appropriate.

💡 Remember that there may be more patients receiving palliative care during a CRSE than would receive palliative care during “normal” times. Some of these patients may not have chosen to receive palliative care and, in fact, some may not have been given any choice at all.

💡 If the hospital(s) in the Planning Unit do not have palliative care providers on staff and you experience difficulty locating palliative care providers to work with the CRAG, consider contacting a local hospice provider or major medical center to ask for palliative care resources.
OPERATIONAL INFRASTRUCTURE
PALLIATIVE CARE
SECTION 4.8.2

4.8.2. Develop a standard definition of “palliative care” during a CRSE based on the goal of such care as identified in Section 4.8.1.

Once the CRAG has determined the goal of “palliative care” during a CRSE, the CRAG should capture this goal in a standard definition. Use of a standard definition will allow the Planning Unit to easily and quickly communicate to multiple audiences what “palliative care” during a CRSE means to the member(s) of the Planning Unit.

What is the goal of this section?
The goal of this section is to develop a standard definition of “palliative care” during a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
In Section 4.8.1, the Critical Resource Advisory Group (CRAG) determined the goal of palliative care during a CRSE. In this Section 4.8.2, the CRAG will take the next step in developing a palliative care strategy by developing a standard definition of palliative care during a CRSE. With the palliative care framework developed in sections 4.8.1 and 4.8.2, the CRAG will be in a position to identify the mechanisms for providing palliative care during a CRSE in Section 4.8.3.

Why is this section included in the Planning Guide?
Once the CRAG has determined the goal of palliative care during a CRSE (Section 4.8.1), the CRAG will need to take this one step further to actually develop a definition of “palliative care during a critical resource shortage.” It is important that everyone in the Planning Unit, especially those responsible for implementing the Critical Resource Shortage Response Plan (CRSRP), understand what is meant by the term palliative care as it relates to a CRSE. The best way to convey this information consistently is through the development of a definition. Consideration of definitions of “palliative care” developed by other entities may be useful in the discussions.

ACTION ITEMS

☐ Based on the goal determined in Section 4.8.1, draft a standard definition for palliative care during CRSE.

☐ Consider whether any existing definitions capture the goal identified in Section 4.8.1 or whether they can be modified to do so.
Helpful Hints for Implementation

Several definitions of palliative care are included in Chapter 4 of the *Critical Resource Shortages Planning Guide Implementation Toolkit (Implementation Toolkit)* for your reference. The CRAG should review these and determine if any of them fit the goals of palliative care during a CRSE as determined in Section 4.8.1. Other resources discussing palliative care may be consulted as the CRAG determines appropriate. Remember, however, that the definitions of palliative care contained in the Toolkit were not designed with CRSEs in mind – they were developed for use in “normal” times.

If the hospital(s) in the Planning Unit has established palliative care programs, reviewing its current policies may be helpful in developing a definition of palliative care during a CRSE.
4.8.3. Identify mechanisms for providing “palliative care” during a CRSE.

“Palliative care” presents many challenges in “normal” times and can be difficult for HMDOs to provide. During a CRSE when more patients than normal may need “palliative care,” it will be even more challenging to provide. The CRAG will need to identify mechanisms for providing this greater amount of “palliative care” during a CRSE.

What is the goal of this section?
The goal of this section is to identify mechanisms for providing palliative care during a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
In Sections 4.8.1 and 4.8.2, the Critical Resource Advisory Group (CRAG) identified the goals of providing palliative care during a CRSE and developed a definition of palliative care to reflect these goals. In this Section 4.8.3, the CRAG will develop the mechanisms for providing this type of palliative care during a CRSE.

Why is this section included in the Planning Guide?
Palliative care is challenging to provide during “normal” times. During a CRSE, it may be even more challenging for providers to provide this type of care. There will likely be a greater demand for palliative care coupled with fewer staff to provide it. Given this foreseeable scenario, as part of the planning process, it is critical that your Planning Unit, through the CRAG, develop mechanisms and a process for providing palliative care during a CRSE. To bolster their ability to provide palliative care, providers may turn to support organizations in the community to provide assistance as well as volunteers who can be trained to play a part in the provision of palliative care. The availability of community support organizations and volunteers will not happen by accident, however. The Planning Unit must actively seek out these resources and coordinate them so that they are prepared to render assistance during a CRSE.

ACTION ITEMS

☐ Review the existing protocols, policies and procedures for the provision of palliative care during “normal” times for the hospital(s) in the Planning Unit. While palliative care during a CRSE will be different, there are still some basic principles that will remain the same. Taking into account the goals and definitions that you have developed for palliative care in Sections 4.8.1 and 4.8.2, you should review these existing policies to:
  ➢ Take advantage of the work that has already been done;
Determine which of the existing policies are applicable to a CRSE and may be used for that purpose; and

Ensure that any policies developed for palliative care during a CRSE fit into the existing palliative care infrastructure.

Determine who will provide palliative care during a CRSE.

Will palliative care only be provided by existing palliative care specialists? Will staff members or volunteers be providing palliative care during a CRSE?

Consider partnering with existing local palliative care support organizations to provide palliative care to your patients, advise on palliative care policies and procedures, provide emotional and psychological support to your staff, and/or provide training for your staff. To the extent that you can relieve some burdens by partnering with support organizations, including community-based palliative care providers, you should do so as part of the CRSE planning process.

Determine what training is needed to prepare individuals to provide palliative care during a CRSE. This training may be different for existing palliative care providers and for those staff who normally do not provide palliative care.

Identity possible alternate care sites for palliative care.

Determine whether different levels of palliative care will be delivered in different settings. If so, who will provide the palliative care in each identified setting?

Determine the location of any supplies for providing palliative care, including stockpiles and personal protective equipment.

Consider what psychological and emotional support will be offered to the palliative caregivers during the CRSE and who will provide this support (see Section 4.7).

Draft a palliative care policy which clearly sets forth the palliative care strategy and mechanisms developed and communicate this policy to the hospital(s) in the Planning Unit and its staff.

Helpful Hints for Implementation

To find local palliative care organizations in your area, contact the National Hospice and Palliative Care Organization (http://www.nhpco.org) or the Hospice and Palliative Nurses Association (http://www.hpna.org).
Remember that outside of a CRSE, palliative care is a specialty performed by providers who have specialized training in this area. These providers, like all others, may experience high rates of absenteeism depending on the type of disaster. A higher than normal absenteeism rate combined with an increase in number of patients needing palliative care will mean that the hospital(s) in your Planning Unit will have to find and train other staff or volunteers to provide “palliative care” as defined in Section 4.8.2. In situations where all areas of hospitals will experience significant absenteeism and seek to use staff from other areas of the hospital, the CRAG should consider who will provide the needed “palliative care” services.

Staff who will provide palliative care during a CRSE will need just-in-time training on clinical issues, handling end-of-life issues, communicating with patients and families about the purpose of palliative care, and dealing with the emotional and psychological needs of the patient. When developing training programs, consider the goals of palliative care determined in Section 4.8.1, the definition of palliative care determined in Section 4.8.2, and the mechanisms for providing palliative care developed in this Section 4.8.3. Remember that this training may be different from the training provided in “normal” times.

Emotional and psychological support for palliative caregivers is crucial. Many of the palliative caregivers will be pulled from other units where they are used to providing curative care and doing everything they can to save their patients. They will now find themselves in a situation where all they can do is alleviate pain which may contribute to the caregiver’s feeling of helplessness. (See Section 4.7 for more information on providing psychological and emotional support to staff.)

Remember that the individuals providing palliative care may be experiencing the effects of the disaster or emergency outside of work as well. They may have family members who are ill or have died. When they are then asked to work in an environment where most patients will not recover, including children, their existing personal stress will only be exacerbated.
4.9. Develop a comprehensive communication plan related to the operational infrastructure that will support the use of the CRSRP during a CRSE.

Information about the activation of, content of, modifications to, and termination of the CRSRP and associated Protocols will have to be communicated to various audiences both before and during an event. As part of the comprehensive communication plan, the CRAG should memorialize decisions made about the operational infrastructure and communicate these decisions to other CRAGs involved in the critical resource shortage response planning process.

**What is the goal of this section?**
The goal of this section is to develop a communication plan to provide important information regarding the Critical Resource Shortage Response Plan (CRSRP) to the hospital(s) and healthcare providers in the Planning Unit during a critical resource shortage event (CRSE).

**How does this section fit into the overall planning process?**
Throughout Chapter 4, the Critical Resource Advisory Group (CRAG) developed a comprehensive operational infrastructure to facilitate the implementation of the CRSRP and its associated Protocols during a critical resource shortage event. This Section 4.9 encourages the CRAG to develop a plan to communicate information about the CRSRP to providers at the point of care during a CRSE. The communication plan developed in this section will become part of the larger communication plan developed in Chapter 10.

**Why is this section included in the Planning Guide?**
During a CRSE, the Planning Unit will find it difficult to invest the time to develop a process for communicating information regarding the CRSRP and the associated Protocols to providers. Development of such a mechanism during the planning process will be crucial for keeping the hospital(s) in the Planning Unit updated on the implementation of, modifications to, and termination of the CRSRP and associated Protocols during a CRSE. Without proper communication of the status of the CRSRP and Protocols, the Plan will be of little value. During this Section 4.9, the CRAG will develop mechanisms for this communication.

**ACTION ITEMS**

- Develop the key messages that will be delivered to providers to keep them updated and informed about implementation of, content of, modifications to, and termination of CRSRPs or specific Protocols.
- Determine specifically when each key message should be delivered.
Consider the following as key elements of the messages:

- What change is the message intended to communicate?
- What is the reason or justification for the change? What triggered the change?
- Where is the change occurring?
- What is the intent, objective(s) or goal(s) of the change?
- When will the change go into effect and how long is it expected to last?

Develop “template” messages during the planning process that can be adapted to the specifics of the actual disaster or emergency and that can be broadcast during the CRSE to alert providers to the implementation of, modification to and termination of the CRSRP and the associated Protocols.

Determine what information the public information officers (PIOs) will need to finalize these template messages during the CRSE. How will they obtain this information?

Identify the messaging platforms that will be used during an event to keep providers updated and informed about the implementation of, content of, modifications to, and termination of CRSRPs or specific Protocols.

Consider the following:

- Lecture style seminars
- Presentations to and interactive discussions with small groups
- Webinars and teleconferences
- Publications, pamphlets and newsletters
- Staff meetings
- Posters
- Postings on various web-sites and provider intranets

Determine who will be required to approve any key messages before they are communicated to providers.

Helpful Hints for Implementation

It may be unrealistic to rely on normal methods of staff communication during an emergency or disaster because of resource shortages or lack of communication infrastructure. For instance, wireless networks, information technology platforms and power may be interrupted during an emergency or disaster. Staff meetings may also not be appropriate during a pandemic because of social distancing concerns. Consider implementing other communication mechanisms specific to emergency and disaster situations.
During a CRSE, it is important to provide regular updates on the status of CRSRP and the Protocols to ensure that care is provided consistently throughout the Planning Unit. Refer to Section 10.1 for more ideas on communications with providers.
CHAPTER 5:
PROTOCOL DEVELOPMENT

5. Identify or develop resource-specific Protocols

Protocols are algorithms which describe how the Planning Unit will alter the “standard of care” for a specific critical resource to respond to a shortage of that resource during a disaster. Protocols include both a description of how care provided by or with the critical resource will be modified to “stretch” the resource and how the resource will be allocated after modifications have been made but demand still exceeds supply.

If no mandatory federal, state or local Protocols exist for the critical resource in question, the Planning Unit, through its CRAG, will have to develop its own Protocol for the resource. The CRAG is encouraged to develop Protocols for critical resources according to the prioritization established in the Critical Resource Vulnerability Analysis (see Chapter 2). Protocols should be based on an ethical framework (see Chapter 3) and should build upon a consistent operational infrastructure (see Chapter 4).

Introduction

The development of resource-specific Protocols is the “heart” of the Critical Resource Shortages Planning Guide (Planning Guide) process. These Protocols will provide Health and Medical Delivery Organizations (HMDOs) with specific instructions for modifying care and allocating scarce critical resources in response to a critical resource shortage event (CRSE). Some Protocols may have already been developed for specific critical resources by federal, state or local governments, whereas others will need to be developed by each Planning Unit. This Chapter provides the process for identifying and/or developing resource-specific Protocols for your Planning Unit.

Building upon the general operational infrastructure developed in Chapter 4 of the Planning Guide, this Chapter 5 also provides a process for developing the operational plan for implementation of each resource-specific Protocol. The hospital(s) in the Planning Unit need such an operational plan so that they can use the Protocols at the point of care regardless of who develops the Protocol, a governmental agency or the Planning Unit.

Responsibility

Critical Resource Advisory Group (CRAG) and Protocol Development Subcommittees

In this Chapter you will:

- Establish a subcommittee of the CRAG to develop the content of and the plan to implement a Protocol for a specific critical resource.
- Identify the existing surge plan for the critical resource and if one does not exist, create it.
✓ Identify any Governmental Protocols related to the specific critical resource.
✓ Develop a Protocol for a specific critical resource.
✓ Determine how the Protocol will be implemented.
✓ Establish parameters around the type of documentation needed to support the Protocol and the type of documentation that the member(s) of the Planning Unit will be expected to complete related to the Protocol.
✓ Coordinate the content and implementation of the Protocol with other Protocols being developed by other Protocol Development Subcommittees.
✓ Memorialize the Protocol in writing.
✓ Conduct training related to the content and implementation of the Protocol.
PROTOCOL DEVELOPMENT
SECTION 5.1

5.1. Establish a subcommittee of the CRAG to develop the content of and the plan to implement a Protocol for a specific critical resource.

The Planning Unit will likely want to develop multiple Protocols to address multiple resources if a governmental entity has not already done so. Because it would be too onerous for the entire CRAG to develop all Protocols, the CRAG should establish subcommittees, each of which will be tasked with developing a Protocol for a specific critical resource (Protocol Development Subcommittees or PDS). Regardless of the source of the Protocol – the Protocol Development Subcommittee or a governmental entity – the Subcommittee will need to develop the operational plan for implementation of the Protocol.

What is the goal of this section?
The goal of this section is to establish a subcommittee of the Critical Resource Advisory Group (CRAG) to develop the content of and an operational plan to implement a Protocol for a specific critical resource.

How does this section fit into the overall planning process?
In Chapter 2, your Planning Unit completed a Critical Resource Vulnerability Analysis (CRVA) and identified a list of critical resources that are most likely to become scarce and impact the operations of the hospital(s) in the Planning Unit during an emergency or disaster. Based on the analysis conducted during the CRVA, the CRAG recommended specific critical resources as being the highest priority for immediate Protocol development (Section 2.4). This Chapter 5 of the Critical Resource Shortages Planning Guide (Planning Guide) provides a process for drafting a Protocol to address the shortage of each of the prioritized critical resources on this list.

In Section 1.5 of the Planning Guide, the Implementation Team established a CRAG for each Planning Unit that was given responsibility for key activities in the planning process. Each CRAG is a diverse, multi-disciplinary body, composed of representatives of the hospital(s) in the Planning Unit. The CRAG is responsible for conducting the critical resource shortage response planning activities assigned to the Planning Unit. Due to the potentially large number of Protocols that need to be developed for your Planning Unit, it may be more effective and efficient to separate the CRAG for the Planning Unit responsible for this activity into subcommittees. This Section 5.1 provides information to consider when establishing these Protocol Development Subcommittees (PDSs). Each PDS will then complete the process outlined in the remainder of Chapter 5 to draft the Protocol for its assigned critical resource.

Why is this section included in the Planning Guide?
Healthcare today requires a large number of critical resources. Any one of these resources may become scarce during a disaster. Ideally, Planning Units will develop resource-specific Protocols to address the shortage of each of these resources. Because of the time and effort it
takes to develop a Protocol, it is unreasonable to think that Planning Units will be able to address all of these resources. It is also unreasonable to think that the same individuals will be able to devote time to developing each of these Protocols and still maintain their full-time jobs. Instead, small groups composed of healthcare providers who specialize in providing care using the resource should be convened to develop resource-specific Protocols. Using small groups, each with different members, will allow the Planning Unit to develop Protocols for more resources in a shorter amount of time without placing a large burden on any one individual.

**ACTION ITEMS**

☐ Review the prioritized list of critical resources developed through the CRVA completed in Section 2.2.

☐ Identify those critical resources for which Protocols will be developed based on the list of critical resources recommended for immediate Protocol development in Section 2.4.

☐ Identify members for each PDS that will be tasked with developing a resource specific Protocol. Consider including at least the following representatives on each PDS:
  ➢ Representative from your Planning Unit’s incident command (logistics, planning and/or operations);
  ➢ Physician(s) representing the relevant field/specialty related to the specific critical resource in question;
  ➢ Nurse(s) representing the relevant field/specialty related to the specific critical resource in question;
  ➢ Any other type of clinician whose practice will be significantly impacted by a shortage of the critical resource in question;
  ➢ Palliative care specialist (if available);
  ➢ Representative from hospital administration; and
  ➢ Representative of the ethics committee.

☐ Identify a facilitation resource for each PDS. This resource will be responsible for developing a general meeting schedule and time table for the PDS, scheduling meetings of the PDS, developing materials for each PDS meeting, leading the discussions during the meetings, and coordinating the documentation of the PDS’ decisions.

☐ Send formal invitations to each identified individual requesting their participation on the PDS.
Helpful Hints for Implementation

🧬 The membership of each PDS should include an appropriate mix of professionals, department representatives, and specialties so that all viewpoints are considered in the Protocol development process.

🧬 The size of your Planning Unit should be taken into consideration when identifying members for each PDS. Larger Planning Units may require a larger PDS to allow representation from all of the relevant stakeholder groups, whereas smaller Planning Units may have smaller PDSs. Consider the pros and cons of establishing smaller versus larger PDSs. A larger PDS allows for a more diverse membership, allows more individuals in the Planning Unit to be engaged in the Protocol development process, and may result in more “buy-in” to the final Protocols, which will facilitate implementation. On the other hand, smaller PDSs are easier to facilitate and may reach consensus more quickly.

🧬 Clinical members of the PDS should be selected based upon the critical resource being addressed. Thus, if the PDS is considering “ventilators” as the resource, you may wish to ensure that a respiratory therapist, an intensivist, and a critical care nurse are included as members of the PDS.

🧬 Consider including individuals that have been particularly engaged in any critical resource shortage response planning initiatives up to this point. To the extent that you can populate the PDSs with members who are already engaged, you will save a lot of time and energy that would be expended engaging new representatives.

🧬 Consider selecting a few individuals who may not have participated in any critical resource shortage response planning up to this point to provide fresh ideas and perspectives. In selecting such individuals, however, understand that you will have to spend some time orienting them to the planning process and explaining the concept of planning for critical resource shortages.

🧬 Consider an individual’s “bandwidth,” that is, the amount of time he or she has to devote to the planning process based on his or her other commitments, both within and outside of the critical resource shortage response planning process. This will be an especially important consideration for smaller Planning Units where one individual may fill multiple roles.

🧬 It is important to select a facilitation resource that has the skills to lead a diverse, multi-stakeholder PDS. This resource should have strong communication and leadership skills. Additionally, the resource should be able to effectively incorporate each of the diverse perspectives of the PDS members into the discussion and not allow a few members to dominate the process.

🧬 Consider the pros and cons of running multiple PDSs simultaneously. This will allow the planning process to be more efficient by completing Protocols for several critical resources at the same time. Smaller Planning Units, however, may find this unrealistic based on the availability of PDS members and their ability to participate in multiple PDSs at one time.
If your Planning Unit decides to run multiple PDSs simultaneously, consider that there may be some overlap in membership on the various PDSs, particularly in smaller Planning Units. Schedule PDS meetings to allow individuals to participate in multiple PDSs.
5.2. Identify the existing surge plan for the critical resource and if one does not exist, create it.

Many HMDOs already have surge plans in place to address basic resource shortages during a disaster. These surge plans provide mechanisms for increasing an HMDO’s capacity to provide care by augmenting existing resources. Many HMDOs, however, have not established a “post-surge” plan to address a CRSE. The Protocols that will be developed through the use of the Planning Guide are designed to address this post-surge gap. Because the altered standards of care described in the Protocols are a severe response, the Protocols should only be used post-surge. This means that it is important that the member(s) of the Planning Unit ensures it has adequate surge plans in place for each critical resource so that it can delay the need to implement a Protocol.

What is the goal of this section?
The goal of this section is to identify any existing surge plans to mitigate a shortage of the identified resource. If a surge plan does not exist for the critical resource, then one should be created.

How does this section fit into the overall planning process?
In this Section 5.2, the Protocol Development Subcommittee (PDS) will determine whether a surge plan exists for its assigned resource. Based on the fact that a Protocol is being developed for the resource, it is likely that such a plan does not exist and, if it does, it may not be adequate to address a sustained increase in demand for the resource (see Section 2.3). If such a plan does exist, the PDS can continue with the process in Chapter 5 to develop a Protocol for responding to a critical resource shortage event (CRSE) involving the resource. If such a plan does not exist, one should be created. Refer to the Critical Resource Shortages Planning Guide Implementation Toolkit (Implementation Toolkit) for this chapter for more information on developing a surge plan for the critical resource.

Why is this section included in the Planning Guide?
Generally, surge plans address how hospitals will create the capacity to provide services in the face of increased demand. While the Critical Resource Shortages Planning Guide (Planning Guide) is focused on creating a plan to address a post-surge critical resource shortage event, it is important to ensure that strong surge plans exist so that the Planning Unit is not forced to activate its Critical Resource Shortage Response Plan (CRSRP) and Protocols prematurely. It is also important for the PDS to identify existing surge plans to gain a better understanding of what measures will be taken to surge. This will allow the PDS to develop a more appropriate Protocol with tailored modifications and allocation algorithms.
**ACTION ITEMS**

- □ Determine if the Planning Unit (or the hospitals(s) in the Planning Unit) has a surge plan in place to address shortages of the critical resource. If a surge plan does not exist, develop one.

- □ If a surge plan(s) exists, verify that it is a formal written plan. If not, formalize the surge plan in writing.

- □ Review the surge plan(s) and determine whether it is generic or resource specific. If it is generic, consider whether there should be a specific surge plan for the critical resource. Develop this specific surge plan, if appropriate.

- □ Determine if the surge plan has ever been tested (i.e., through a tabletop exercise or drill) to assess its efficiency.

**Helpful Hints for Implementation**

💡 If you experience difficulty determining whether a surge plan currently exists for the resource your PDS is addressing, talk to administration and department heads about whether such a plan has been discussed and where it might be located. It may be that only informal discussions have occurred related to this subject. The individuals involved in these discussions should be consulted and may be invited to join the PDS.

💡 If you have consulted with appropriate individuals and no surge plan exists, then you should coordinate with appropriate individuals to develop a surge plan for your critical resource. Do not let the absence of a surge plan halt the development of the Protocol, however. If a Protocol is being developed for a critical resource, then it should be considered important enough to warrant a resource-specific surge plan.

💡 Note that when operating under a surge plan, the hospital(s) in the Planning Unit is still providing care to patients under the “normal” standards of care.

💡 The development of a surge plan is an involved process and is outside of the scope of this Planning Guide; however, several resources are included in the Implementation Toolkit which may be useful in developing or revising surge plans.
5.3. Identify any Governmental Protocols related to the specific critical resource.

Governmental Protocols – Protocols issued by federal, state, local or tribal governments – come in a variety of forms such as guidance, standards, allocation algorithms, and prioritization schemes. Some of the Governmental Protocols may be mandatory while others may remain voluntary. Before developing its own Protocol for a critical resource, the PDS should identify whether there are any existing Governmental Protocols that address the resource. If such Governmental Protocols do exist, the PDS should determine whether they are mandatory or voluntary. If they are mandatory, each member of the Planning Unit should create an infrastructure to implement the Governmental Protocol at the point of care (see Section 5.5). If they are voluntary or if Governmental Protocols do not exist, the PDS should continue developing a Protocol that the member(s) of the Planning Unit can use to address a critical shortage of the specific resource in question.

What is the goal of this section?
The goal of this section is to identify any Protocols issued by governmental agencies related to the specific critical resource.

How does this section fit into the overall planning process?
In Section 5.1, you established Protocol Development Subcommittees (PDSs) to address some of the critical resources identified and prioritized for Protocol development in Section 2.4. Before the PDS begins developing a Protocol for its assigned critical resource, the PDS should determine whether any government agencies with jurisdiction over the hospital(s) in the Planning Unit have issued Protocols related to the resource. If any applicable agency has developed a Protocol relevant to the critical resource and if the agency’s Protocol is mandatory, the PDS will not have to develop its own Protocol. If, however, the applicable Governmental Protocol is either voluntary or incomplete (i.e., the Protocol does not address both modification and allocation), the PDS will need to decide whether to adopt the Protocol or revise the Protocol to meet the specific needs of the Planning Unit. If no relevant Governmental Protocols exist, the Planning Unit should create its own Protocol by completing the remainder of the Protocol development process in Chapter 5. In any case, the PDS will also be required to create an operational plan to support the implementation of the Protocol by completing the tasks outlined in Section 5.5.
Why is this section included in the Planning Guide?
An increasing number of states have developed or are in the process of developing Protocols for specific resources. These Protocols come in many forms including guidance, standards, and algorithms and may be voluntary or mandatory. Since many of these Protocols are relatively new, those on the PDS and the hospital(s) in the Planning Unit may not be aware that they exist and may not be familiar with their content. Before the PDS begins developing a Protocol for a specific resource, it should first make sure that no relevant Governmental Protocol exists.

ACTION ITEMS

☐ Determine whether any Governmental Protocols for altering standards of care for or allocating the critical resource during a CRSE currently exist. Consider Protocols that may have been issued by the federal government, state government, and local or regional government.

☐ Investigate whether there any initiatives underway that will result in federal, state or local Protocols for altering standards of care for or allocating the critical resource during a CRSE.

☐ Determine whether the existing or imminent Protocol(s) is mandatory or voluntary.

☐ Determine whether the existing or imminent Protocol(s) addresses the complete spectrum of altered standards of care, including both modification and allocation components. If the Protocol only addresses one component, the PDS will have to fill the gap by completing the appropriate section of the Critical Resource Shortages Planning Guide (Planning Guide) (either 5.4.1 or 5.4.2).

☐ If mandatory Governmental Protocols do exist, determine whether and how they will be implemented by the hospital(s) in your Planning Unit. Refer to Section 5.5 for more detail on establishing an operational plan for implementation.

☐ If no Governmental Protocols exist or if they exist but are not mandatory, proceed with the remainder of the sections within Chapter 5 to develop both the Protocol and the operational plan required for successful implementation of the Protocol.

☐ Determine who within the incident command structure is responsible for:
  ➢ monitoring federal, state or local public health agencies to identify any Protocols that may be promulgated during a CRSE; and
obtaining and reviewing the state or local emergency declaration, if one is made, and determining whether the declaration impacts the standard of care or allocation of scarce critical resources.

**Helpful Hints for Implementation**

💡 To the extent the Planning Unit identifies Governmental Protocols for resources for which a PDS has not been established, the Planning Unit should make its member hospital(s) aware of this Protocol and encourage it to develop operational plans to support implementation in its facilities.

💡 If Governmental Protocols are voluntary, consider them as part of the PDS’ Protocol development process. Consider using the voluntary Governmental Protocol as a starting point for discussion and development for your Planning Unit’s Protocol.

💡 When considering a Governmental Protocol deemed “voluntary,” or for “guidance,” contact your State Health Officer to determine the precise definition of such labels. This will allow the content of the Protocols to be properly evaluated.

💡 Consider how the existence of Governmental Protocols impacts a healthcare provider’s potential liability for using an altered standard of care, modifying the way that care is provided, or allocating scarce critical resources. Consult with legal counsel when assessing these potential liabilities.
5.4. Develop a Protocol for a specific critical resource.

Protocols are algorithms which describe how the member(s) of the Planning Unit will alter the standard of care for a specific critical resource to respond to a shortage of that resource during a disaster. Protocols should include two basic components: (1) a description of how care provided by or with the critical resource will be modified to “stretch” the resource; and (2) a description of how the resource will be allocated after modifications have been made but demand still exceeds supply. The PDS identified in Section 5.1 will develop a Protocol to address the shortage of the specific critical resource in question. The Protocol should be grounded in the ethical framework established in Chapter 3 and the operational infrastructure created in Chapter 4.

Introduction to Protocol Development Process

Many hospitals have already developed surge plans to address initial shortages of resources during a disaster. During a severe, long duration event, such as an influenza pandemic, demand for the resources may continue to overwhelm supply even after implementing surge plans. At this point, the hospital will be “surged out” and will need to alter the standard of care to meet as much of the demand as possible. “Altered standards of care” is a term that is used often, but is not well understood. Altered standards of care is a progressive, graded response along a continuum that corresponds to the severity of the resource shortage. This continuum begins with modest modifications of practices that become progressively more dramatic as the severity of the shortage increases. Ultimately, if a hospital has made all of the modifications that it can and demand for the resource still exceeds supply, the hospital will be forced to allocate the critical resource.

A Planning Unit cannot develop and implement an “altered standard of care” in an ethically appropriate manner in the middle of a disaster by accident. Instead, it will require difficult, complex and intense planning efforts and participation by many stakeholders to ensure that Protocols capturing “altered standards of care” are ethically sound and can be implemented in an efficient and effective manner in the midst of a disaster.

This entire Planning Guide provides a process for responding to a CRSE. However, Chapter 5, and more specifically Section 5.4, captures the “heart” of the planning process. In this Section, the Protocol Development Subcommittee (PDS) will develop a resource-specific Protocol that will be implemented in response to a CRSE. The Protocol developed in this Section 5.4 will be activated after your Planning Unit and its member hospital(s) have implemented surge plans to respond to the CRSE and demand for the resource still exceeds supply. (For more information on Surge Planning, please refer to Section 5.2.)

Each Protocol will be based on the ethical framework and general operational infrastructure developed in Chapters 3 and 4, respectively. It should address the full continuum of altered
standards of care from identifying modifications of practices to providing an algorithm for allocating the critical resource. Section 5.4.1 provides a process for determining appropriate modifications of practices which will allow the hospital(s) in your Planning Unit to stretch the available critical resource to meet as much of the demand as possible and continue to meet the ethical goals established in Chapter 3 of the Planning Guide. Section 5.4.2 provides a process for developing an ethically acceptable algorithm to allocate the critical resource once all appropriate modifications of practices have been made and demand for the critical resource continues to exceed the supply.
Chapter 5
Protocol Development

5.4.1. Determine how care provided by or with the critical resource will be modified during a CRSE.

If an HMDO is unable to meet the demand for a resource even after instituting its surge plan, the HMDO will have to modify how care is provided by or with the critical resource. Modifications are necessary to (i) “stretch” the resource as much as possible to allow the HMDO to provide as much care as possible in a way that meets its ethical Goal, and (ii) delay the need to allocate the resource. The PDS will be responsible for looking at how care is provided by or with the critical resource in “normal” times and determining how that care can be modified during a CRSE.

What is the goal of this section?
The goal of this section is to determine how care provided by or with the critical resource will be modified during a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
As explained in Section 5.4 of this Hospital Implementation Guide, altered standards of care constitute a progressive, graded response along a continuum. This Section 5.4.1 provides a process for addressing the first “level” of an altered standard of care – modifications of practices. These modifications will stretch the available critical resource to provide as much care as possible while continuing to meet the ethical goals established in Chapter 3 of the Critical Resource Shortages Planning Guide (Planning Guide). The next section (Section 5.4.2) provides a process for developing an algorithm to allocate the critical resource once all appropriate modifications of practices have been made and demand for the critical resource continues to exceed the supply. Together, the modifications and the allocation algorithm constitute a complete Protocol.

Why is this section included in the Planning Guide?
Altered standards of care encompass a progressive, graded response along a continuum beginning with modifications of practices and ending with allocation of resources. Modifications of practices will allow the hospital(s) in the Planning Unit to continue to meet all of the demand for a critical resource by altering the way care is provided with the resource. In other words, every patient who requires the critical resource will receive it, but they will not necessarily receive it as they would in “normal” times. Successful modification of practices demands a fine balance between too little
modification, thus not providing significant relief to a facility in a CRSE, and too much modification, in which care given has been altered to the point of rendering it useless. Modifying practices will also allow the hospital(s) in the Planning Unit to stretch the resource as much as possible to delay the need to allocate the resource.

**ACTION ITEMS**

- Review recently published guidance, protocols, standards, and other literature on modifying care during a disaster to determine if any are applicable to the critical resource. If so, consider whether any of these can be adopted and adapted for use in your Planning Unit.

- Document the process for providing care with the critical resource during “normal” times.

- Determine the “rate-limiting factor(s)” of the critical resource in question (i.e., the point or points along the process that will be most affected by the critical resource shortage event). These should be considered for modification first.

- Determine an appropriate metric to measure the impact of the modifications of practices. It is important that the modifications make a significant difference in the ability of the hospital(s) in the Planning Unit to meet more of the demand for the critical resource. The metric should allow you to determine this impact.

- Develop specific modifications of practices based on the “normal” care processes, the rate-limiting factor(s), and the metric identified above.

- Identify the point at which you can make no further modifications without rendering the care useless. Beyond this point, you will need to implement the allocation algorithm developed in Section 5.4.2.

- Document the modifications of practices for easy dissemination to affected departments and personnel.

**Helpful Hints for Implementation**

*General Helpful Hints*

💡 There is an increasingly robust and growing body of guidance, protocols, standards, and other literature evaluating different methods for modifying care and allocating scarce
resources during a CRSE. (This body of work also includes the Governmental Protocols identified in Section 5.3.) Consider adopting and adapting these existing resources for use in your Planning Unit. This will simplify the planning process and allow you to focus on critical resources that have not been addressed in the published literature.

Distribute applicable literature prior to the Protocol Development Subcommittee (PDS) meeting at which it will be discussed. This will allow members time to review and digest the information, and come to the meeting prepared to discuss how the PDS can use the literature. The facilitator should be prepared, however, to provide an overview of the literature during the meeting in the event the PDS members did not review it.

It is important that modifications be consistent with the ethical framework, including the principles developed in Section 3.1 and the Goal identified in Section 3.2.

Identify an individual(s) on the PDS who interacts with the critical resource on a daily basis as your “Critical Resource Expert.” Each person on the PDS will have some level of knowledge of the critical resource and may even interact with it on a daily basis. Selecting one person as the Critical Resource Expert, however, provides a standard point of contact for questions regarding the workflow surrounding the critical resource.

Be very specific when drafting the “normal” care processes. The more specific the process, the more options that will present for modification.

It may be difficult for individuals who use the critical resource everyday to adequately describe the “normal” care process in sufficient detail because they are too familiar with the process to really think about all of the components that are involved. The facilitator should work with these individuals to illicit all of the details.

Consider developing multiple tiers of modifications which will be implemented based on the severity of the critical resource shortage. At the beginning of a CRSE, you may be able to modify care slightly and make enough of an impact to meet all of the demand for a resource. As the CRSE evolves and demand continues to increase while supply decreases, further modifications may need to be made to continue to meet the demand.

Modifying the normal standard of care may be a difficult concept for some of the PDS members to accept. Their medical training taught them the “appropriate” way to render care with a particular resource. It may be difficult for them to “think outside of the box” about ways to modify care to stretch available resources. The facilitator should be prepared to continually remind the PDS of how extreme a critical resource shortage event will be and the need for drastic response measures.

Consider the differences in developing modifications of practices for material resources, personnel, and space. Refer to the appropriate Helpful Hints section below for more hints on developing modifications for each type of resource.

Critical Shortage of Material Resources

Consider whether the rate limiting factor is the material resource itself or the specialized staff required to operate and/or deliver the material resource. For example, your Planning Unit may have a large supply of ventilators, but a limited number of Registered Respiratory Therapists to provide ventilator care. Consider whether the critical resource Protocol should be developed for ventilators, whether a separate critical resource Protocol should be developed for Registered Respiratory Therapists, or whether the critical resource Protocol should be developed for ventilator care and include modifications and allocation for both Registered Respiratory Therapists and ventilators.

Critical Shortage of Personnel

When developing modifications for a critical shortage of personnel, consider these options:

- Task: What activities are actually being done by the critical personnel? Determine if any tasks can be discontinued or modified from the way they are normally performed.
- Responsibility: Who completes the process? Determine if the task can be re-assigned to another individual.
- Frequency: How often is the process done? Determine if the task can be performed less often without significant detriment to the care provided by the critical resource.
- Duration: How long does it take to complete the process? The duration will likely be affected by modifications to the Task component of the process. Determine if there are any additional modifications that can be made to allow the process to be performed more quickly.
- Location: Where is the process completed? Determine if you can complete the process in an alternate location.

Consider any licensure, certification, or scope of practice concerns associated with delegating tasks to other individuals. Engage your Planning Unit’s legal counsel to evaluate any statutes or regulations which may limit the ability to delegate tasks to certain individuals. Additionally, consider whether your Planning Unit’s policies limit scope of practice more than required by statute. If so, determine whether these policies can be amended during a CRSE.

When thinking about re-assigning responsibilities to other individuals, consider their other responsibilities to determine if they are able to take on these additional responsibilities.

Consider whether volunteers or patient family members can assist with some tasks.

Critical Shortage of Space

The surge plans of the hospital(s) in the Planning Unit likely address methods for increasing inpatient bed capacity (please refer to Section 5.2 for more information on surge planning). Critical shortages of specialized space such as operating rooms or intensive care units,
however, may not be addressed through surge planning. Consider alternative locations in your Planning Unit that could help address issues created by shortages of these spaces.

💡 When considering alternative locations, consider the following issues. This list is not exhaustive, but only meant to provide examples of the types of issues the PDS may consider with respect to shortages of space.

- utility needs (e.g., medical gases, electricity, water, communication capabilities);
- support service needs (e.g., OR recovery space); and
- current use of the alternative location.

💡 Potential locations for alternative space may include administrative space, conference rooms, medical office buildings, or space where non-essential services have been discontinued for the duration of the emergency or disaster.
PROTOCOL DEVELOPMENT
SECTION 5.4.2

5.4.2. Determine how the critical resource will be allocated during a CRSE.

If an HMDO has implemented its surge plan and modified the way care is provided by or with the critical resource as much as possible, and demand for the resource still exceeds supply, the HMDO is going to have to allocate the resource. This type of allocation results in some patients receiving the critical resource and some patients not receiving the resource. Because allocation decisions are very difficult decisions for both HMDOs and patients, they must be made in an ethically sound manner. The PDS will be responsible for developing a mechanism (e.g., standard, algorithm) that supports ethical allocation decisions.

What is the goal of this section?
The goal of this section is to develop a method for allocating the critical resource during a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
As explained in Section 5.4 of this Hospital Implementation Guide, “altered standards of care” is a progressive, graded response along a continuum. In Section 5.4.1, the Protocol Development Subcommittee (PDS) identified modifications of practices that could be made to stretch the available critical resources to continue providing care to all patients in your Planning Unit. During a long duration critical resource shortage event, such as an influenza pandemic, the hospital(s) in the Planning Unit may reach a point where no further modifications of practices can be made and demand continues to exceed the available supply of a critical resource. At this point, your Planning Unit will need to consider implementing an algorithm for allocating the critical resource. This Section 5.4.2 provides a process for developing this algorithm to allocate the critical resource once all appropriate modifications of practices have been made and demand for the critical resource continues to exceed the supply.

Why is this section included in the Planning Guide?
Altered standards of care comprise a progressive, graded response along a continuum beginning with modifications to practices and ending with allocation of resources. Allocation is used when demand for a resource exceeds supply and the only way to address the shortage is to apportion the resource between patients by deciding who will receive the resource and who will not. Allocation is the most extreme version of an altered standard of care. Therefore, the decision to implement the allocation portion of a Protocol should not be taken lightly. It is critical that allocation of critical resources be done in an ethical, consistent, and equitable manner. The process presented in this Section 5.4.2 provides the PDS with a method for creating an allocation algorithm that will become part of the resource-specific Protocol.
ACTION ITEMS

☐ Review recently published guidance, protocols, standards, and other literature on allocating scarce resources during a disaster to determine if any are applicable to the critical resource. If so, consider whether any of these can be adopted and adapted for use in your Planning Unit.

☐ Identify whether the critical resource is a consumable or a durable resource. Consumable resources are single-use resources that can only be provided to one patient (e.g., syringe). Durable resources are multi-use resources that can be re-used for numerous patients (e.g., ventilator).

☐ Develop a list of inclusion criteria. Inclusion criteria are those patient characteristics that indicate the patient is a candidate for receiving the critical resource.

☐ Develop a list of exclusion criteria. Exclusion criteria are those patient characteristics that indicate the patient is not a suitable candidate for receiving the critical resource. Refer to decisions made in Section 3.3 regarding those criteria that should not be used to justify excluding a patient from consideration for receiving the critical resource.

☐ Determine criteria that will be used to prioritize patients for receipt of the critical resource. Consider the following options for prioritizing:
  ➢ Predictive Scoring System: The use of a system to assign a numerical value to each patient based on his or her physiological condition.
  ➢ First Come, First Served: Patients will be prioritized based on the time they arrived for care.
  ➢ Review by a Triage Committee: Patients will be reviewed by a multi-disciplinary triage committee who will determine which patients should receive the critical resource. This option may incorporate the use of a predictive scoring system for evaluating patients.

☐ Develop criteria for comparing patients to determine if the critical resource should be withdrawn from one patient to give to another patient for whom use of the critical resource is more appropriate. Refer to the ethical framework, including the decision about withdrawal and reallocation made in Section 3.3., to guide this decision.

☐ Identify alternative options for patients who are not prioritized to receive the critical resource.

☐ Document the allocation algorithm for easy dissemination to affected departments and personnel.
Helpful Hints for Implementation

General Helpful Hints

👍 There is an increasingly robust and growing body of guidance, protocols, standards, and other literature evaluating different methods for modifying care and allocating scarce resources during a CRSE. (This body of work also includes the Governmental Protocols identified in Section 5.3.) Consider adopting and adapting these existing resources for use in your Planning Unit. This will simplify the planning process and allow you to focus on critical resources that have not been addressed in the published literature. Refer to the Critical Resource Shortages Planning Guide Implementation Toolkit (Implementation Toolkit) for this chapter for a partial listing of this literature.

👍 Distribute applicable literature prior to the PDS meeting at which it will be discussed. This will allow members time to review and digest the information, and come to the meeting prepared to discuss how the PDS can use the literature. The facilitator should be prepared, however, to provide an overview of the literature during the meeting in the event the PDS members did not review it.

👍 It is important that modifications be consistent with the ethical framework, including the principles developed in Section 3.1 and the Goal identified in Section 3.2.

👍 If withdrawal and reallocation will be permitted (see Section 3.3.), consider whether criteria for allocating consumable resources should be more strict than criteria for allocating durable resources. Once a consumable resource is allocated to a patient, it cannot be re-allocated to another patient. Therefore, you want to ensure the allocation of consumable resources is made appropriately because you will not get a second chance to allocate them.

👍 It may not be necessary to develop both inclusion and exclusion criteria. Exclusion criteria may be more helpful, given that all patients who do not meet the exclusion criteria are “included” by default by simply presenting for care. While the PDS should consider both inclusion and exclusion criteria, the final Protocol does not necessarily need to include both.

Exclusion Criteria

👍 The following exclusion criteria, taken from current literature, may be considered by the PDS for use in the Protocol:

- Known “Do Not Resuscitate” (DNR) status;
- Severe and irreversible chronic neurologic condition, such as a persistent coma or vegetative state;
- Acute neurologic event with minimal change of functional neurologic recovery;
- Known severe dementia;
- Advanced untreatable neuromuscular disease;
- Incurable metastatic malignant disease;
End-state organ failure.\(^6\)

The use of age as an exclusion criterion may be controversial. If this is not a prohibited exclusion criteria (see Section 3.3), the PDS should debate the pros and cons of using age to exclude patients from receiving the critical resource.

**Withdrawal Criteria**

Consider the difference between consumable and durable resources when evaluating the use of withdrawal criteria. It may not be appropriate to develop withdrawal criteria for a consumable resource. For example, once a unit of blood is given to a patient, you cannot withdraw the resource to give it to another patient.

Some consumable resources, however, may be able to be withdrawn and re-allocated at a certain point. Consider, for example, a 10-day course of antibiotics. If the patient is not improving after 5 days of the antibiotic, would you consider discontinuing the antibiotic on days 6 through 10 in order to provide these doses to another patient?

Consider the following patient comparison criteria when determining which current patients are less likely to benefit from continued use of the resource:

- Organ system function (high potential for death according to predictive model utilized);
- Duration of benefit prognosis (poor prognosis based on epidemiology of specific disease/injury or severe underlying disease with poor prognosis);
- Duration of need (long duration relative to needs of others);
- Response to utilization of resource (worsening response over period of time);
- When the patient received the critical resource.\(^7\)

You may determine that “withdrawal” criteria for the specific resource is not appropriate, and simply decide to utilize a “first-come, first-served” construct after the initial allocation decision is made.

**Predictive Scoring Systems**

Using a predictive scoring system to prioritize patients may provide more objectivity in determining which patients will derive the most benefit from receiving the critical resource.

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\(^7\) Vawter DE, et al. (Jan 2009) “For the Good of Us All: Ethically Rationing Health Resources in Minnesota in a Severe Influenza Pandemic.” Minnesota Pandemic Ethics Project. Available online at: [http://www.ahc.umn.edu/mpfanflu/prod/groups/Ahc/@pub/@ahc/@ethicsmpep/documents/content/ahc_content_090503.pdf](http://www.ahc.umn.edu/mpfanflu/prod/groups/Ahc/@pub/@ahc/@ethicsmpep/documents/content/ahc_content_090503.pdf) (last visited March 9, 2009).
Consider whether (and to what extent) laboratory results are required to calculate the score for each patient. During a CRSE, laboratories will likely be short-staffed and may have shortages of critical resources as well; therefore, it may be difficult to obtain these lab values.

Consider that the more complex the scoring system is (i.e., evaluates more factors), the more difficult it will be to implement at the time of an emergency or disaster. Weigh this consideration against the fact that the more complex scoring systems often provide greater patient stratification, allowing for prioritization decisions to be made more easily.

Predictive scoring systems can also be used to compare patients when making withdrawal decisions. In this instance, the trending of a patient’s score over time will be more beneficial than an individual score. A trend which demonstrates the patient is improving may argue for not withdrawing the critical resource, whereas a trend which demonstrates the patient is getting worse may argue in favor of withdrawing and re-allocating the critical resource to another patient who will derive greater benefit.
5.5. Determine how the Protocol will be implemented.

Once the PDS has developed the Protocol, it will need to determine how the Protocol will be implemented during a CRSE. The implementation of the Protocol can be just as difficult and complex as developing the Protocol. As a result, the PDS is encouraged to “drill down” on the basic implementation infrastructure created in Chapter 4 to create an operational plan, which describes exactly how the Protocol will be implemented and operationalized.

Introduction to Protocol Implementation Infrastructure

Developing an operational plan that will allow the hospital(s) in the Planning Unit to actually use the Protocol during a critical resource shortage event (CRSE) is just as important as developing the Protocol itself. The Protocol probably cannot be easily implemented without significant planning. Implementation will require that many people make many difficult and complex decisions from the decision to activate the Protocol, to modifying care and allocating the resource based on the Protocol, to finally terminating the Protocol. In the majority of hospitals today, this type of infrastructure does not exist. As a result, the infrastructure will either be created during a CRSE in the midst of chaos and confusion or the Protocol will not be used. Neither of these options is ideal. Instead, the hospital(s) in the Planning Unit must create an operational plan that will support the implementation and use of the Protocol.

In Chapter 4, a Critical Resource Advisory Group (CRAG) created a common infrastructure for Protocol implementation and operationalization. The components of this common infrastructure include general processes for:

- Activating the Critical Resource Shortage Response Plan (CRSRP) and associated Protocols;
- Making resource allocation decisions pursuant to Protocols;
- Reviewing and revising Protocols; and
- Terminating Protocols at the end of the CRSE.

In this Chapter 5, the Protocol Development Subcommittee (PDS) either identified a mandatory Governmental Protocol for the resource in question or developed a Protocol of its own which governs the modification of care provided by or with the resource and allocation of the resource. Regardless of the source of the Protocol (government or PDS), the PDS will have to determine how the Protocol will be implemented by the hospital(s) in the Planning Unit. In this Section 5.5, the PDS will build upon the general implementation infrastructure from Chapter 4 and create a specific operational plan for implementation of the Protocol.
5.5.1. Decide who will be the “triage officer(s)” and/or “triage committee” members for the Protocol, if applicable.

In Section 4.3, the CRAG identified a basic implementation infrastructure likely consisting of a triage officer(s) and/or triage committee(s). If the CRAG decided that there will be officer(s) and/or committee(s) for each critical resource, identify which types of individuals should serve as the triage officer(s) and/or triage committee(s) for the Protocol.

What is the goal of this section?
The goal of this section is to identify the types of providers who will serve as triage officer(s) and/or triage committee(s) members for the Protocol, if applicable.

How does this section fit into the overall planning process?
As part of the establishment of the common operational infrastructure, the Critical Resource Advisory Group (CRAG) developed a general infrastructure that will support making resource allocation decisions for individual patients using a Protocol (see Section 4.3). In this Section 5.5.1, the Protocol Development Subcommittee (PDS) will build upon this general infrastructure by actually identifying the individuals who will serve in these roles for the implementation of a specific Protocol, if applicable.

Why is this section included in the Planning Guide?
As part of the establishment of the common operational infrastructure in Chapter 4, the CRAG developed a general infrastructure that will support making resource allocation decisions for individual patients using a Protocol. It is likely that this infrastructure involves the use of a triage officer(s) and/or triage committee(s), as this tends to be the general infrastructure recommended most often in the literature. If the general infrastructure does use triage officer(s) and triage committee(s), recognize that the individuals who are asked to serve in these roles will have enormous responsibilities. They will be making incredibly difficult decisions that may mean the difference between life and death. They will also be making decisions that will need the support of staff throughout the facility. As a result, it is very important that these individuals be carefully and thoughtfully selected to serve in these roles.

Real World Example
If the PDS is developing an operational plan to support a ventilator Protocol, it will likely want respiratory therapists to be part of the “triage committee.” If the PDS is developing an operational plan to support a blood product Protocol, it will likely want hematologists to be part of the “triage committee” but not respiratory therapists.
ACTION ITEMS

□ Review and understand the CRAG’s decision in Section 4.3 regarding the infrastructure that will support making resource allocation decisions for individual patients using a Protocol.
  ➢ Did the CRAG decide to use a triage officer(s) and/or triage committee(s)?
  ➢ If so, are the triage officer(s) and/or triage committee(s) resource-specific or will they be the same regardless of the resource?
  ➢ If they are resource-specific, continue with this Section 5.5.1. If they are the same regardless of the resource, proceed to Section 5.5.2.
  ➢ If the CRAG decided not to use a triage officer(s) and/or triage committee(s), who will be responsible for making resource allocation decisions using the Protocol? Consider the remainder of the Action Items provided in this Section 5.5.1 to the extent they apply to the individuals who were given this responsibility.

□ Based on the CRAG’s decision in Section 4.3, understand the general role and powers of the triage officer(s) and the triage committee(s). Determine the exact role and powers of the triage officer(s) and the triage committee(s) for this Protocol.

□ Consider these important characteristics of the triage officer(s) based on his or her role and powers:
  ➢ Specialty
  ➢ Skills
  ➢ Relationship to the patient
  ➢ Prior knowledge of the patient
  ➢ Neutrality and impartiality
  ➢ Reputation

□ Identify the types of providers who will serve as the triage officer(s).

□ Identify specific individuals who will serve as the triage officer(s). Consider identifying alternates to step in if these individuals are not available during the critical resource shortage event (CRSE).

□ Consider these important characteristics of the triage committee based on its role and powers:
  ➢ Representative of impacted specialties
  ➢ Buy-in from medical staff
  ➢ Cooperative and consensus building skills

- Previous experience with and knowledge of triage in general and the Protocol in particular
- Ability to devote time to committee
- Reputation

☐ Identify the types of providers who will serve on the triage committee(s).

☐ Identify specific individuals who will serve on the triage committee(s). Consider identifying alternates to step in if these individuals are not available during the CRSE.

☐ Establish a rotation schedule for the triage officer(s) and triage committee(s).
  - Will the triage officer(s) or members of the triage committee(s) be dedicated to these positions or will they fill these roles and continue their traditional clinical duties?
  - Consider for how many consecutive hours individuals can serve as a triage officer or member of a triage committee.
  - Identify how many individuals will be needed to serve as triage officers and triage committee members to allow for adequate rest between shifts.
  - Consider whether individuals will serve as both a triage officer and a member of the triage committee on alternating shifts, if your operational plan includes a combination of these roles.
  - Consider the duration of the event and the need to avoid “burn-out.”

Helpful Hints for Implementation

💡 Determine whether there are any members of the CRAG that determined the basic operational infrastructure serving on the PDS. If there are not, invite a CRAG member to brief the PDS on the general infrastructure that will support making resource allocation decisions for individual patients using a Protocol.

💡 Triage officer and committee rotations will be critical in a long duration event, like a pandemic. These roles will be very stressful and the same people cannot be expected to bear the burden of these responsibilities for the duration of such an event. In addition, if the position will be “full-time,” these individuals cannot be pulled away from their clinical duties for this amount of time.

💡 The decision to have dedicated triage officers and committees will be driven by the Protocol. For certain resources, allocation decisions may be “batched” for a determination at the end of a specified time period. For other resources, allocation decisions will have to be made on a continuous basis so batching will not be possible. For these resources, dedicated triage officer(s) and triage committee(s) may be desirable.
💡 Consider the need to develop a “bench” for the triage officer(s) and triage committee(s). During an event, your facility may experience significant absenteeism. It will be important to have multiple alternates who can fill these
5.5.2. Identify any additional information that will be needed during an event to finalize, revise, modify or enhance the Protocol.

It is likely that in developing the Protocol, the PDS will identify certain types of information that are needed to validate or refine the Protocol. Much of this information will not be available until the event occurs. The PDS should create a list of the information needed during an event to finalize, revise, modify, or enhance the Protocol and a mechanism for obtaining and analyzing this information.

What is the goal of this section?
The goal of this section is to identify any additional information that will be needed during a critical resource shortage event (CRSE) to finalize, revise, modify, or enhance the Protocol and to create a mechanism for obtaining this data.

How does this section fit into the overall planning process?
In Section 5.4, the Protocol Development Subcommittee (PDS) developed a Protocol to address the shortage of a specific resource. It is likely that the PDS could have benefited from additional information that will not become available until the event occurs. This Section 5.5.2 encourages the PDS to create a list of all additional information that it will need during the event to finalize, revise, modify, or enhance the Protocol. The next section (Section 5.5.3) will help the PDS create a mechanism for revising the Protocol based on this new information obtained during the event.

Why is this section included in the Planning Guide?
The PDS likely built the Protocol on the best planning assumptions and clinical information available regarding the effective use of the critical resource. The planning assumptions, however, can only be validated during the event. Moreover, some necessary clinical information may only become available as the event unfolds. This is particularly true in a public health emergency. The PDS should identify the types of information it will need during the event to finalize, revise, modify, and enhance the Protocol. By identifying the types of information that will be needed, the PDS can create a mechanism for quickly and efficiently obtaining this information during the event.
ACTION ITEMS

Clinical Data

☐ Determine the types of clinical data that will become available during an event which may help inform the further development and refinement of the Protocol.

➢ For a public health emergency, consider the following:
  ▪ What is the morbidity rate from the disease in this event?
  ▪ What is the death rate from the disease in this event?
  ▪ What is the disease process in this event?
  ▪ How is the disease contracted?
  ▪ What age group or demographic is most affected by the disease? Does the disease affect all ages/demographics equally?
  ▪ How quickly does the disease progress?
  ▪ Does the disease respond to medications (anti-virals, antibiotics)?
  ▪ If applicable, what outcomes have been experienced by other providers? Are there any lessons learned that may be incorporated into the Protocol?

➢ For other emergencies or disasters, consider the following:
  ▪ What treatments are needed to heal the patients affected?
  ▪ How quickly do patients recover after receiving the treatment?
  ▪ What is the range of severity and symptoms presented by patients affected by the disaster or emergency?

☐ Identify the potential sources for the needed clinical data. Consider the following:
  ➢ World Health Organization
  ➢ Centers for Disease Control and Prevention
  ➢ State Health Department
  ➢ State Hospital Association
  ➢ Professional societies
  ➢ Internal facility data

☐ Determine who will be responsible for obtaining this data and how often.

☐ Determine who will be responsible for reviewing this data and presenting it to the group that will revise the Protocol (see Section 5.5.3).
Non-Clinical Data

☐ Determine the types of non-clinical data that will become available during an event, which may help to inform the further development and refinement of the Protocol. Consider the following examples:

- How severe/widespread is the disaster?
- What percentage of staff have been affected by the disaster? What is the level of absenteeism?
- Have any utilities been disrupted that will affect the Protocol’s implementation?

☐ Identify the potential sources for the needed non-clinical data. Consider the following:

- Federal agencies, if it is a national event
- State agencies
- News media
- State Hospital Association
- Professional societies
- Internal facility data

☐ Determine who will be responsible for obtaining this data and how often.

☐ Determine who will be responsible for reviewing this data and presenting it to the group that will revise the Protocol (see Section 5.5.3).

**Helpful Hints for Implementation**

🎉 Realize that no matter how exhaustive the list of needed information may seem, there will always be unforeseen types of information that are needed during an event.

🦵 During an event, especially a public health emergency, you should expect that the information, data and guidance coming from various sources may conflict and cause confusion. Whoever is responsible for reviewing new data and information must be prepared to sort through conflicting information to identify the elements that are important for Protocol refinement.

🛡️ At certain times during the CRSE, gathering and reviewing new information may be time consuming. Consider this as you identify individuals to serve in these roles.
PROTOCOL DEVELOPMENT
SECTION 5.5.3

5.5.3. Develop a mechanism for revising the Protocol during a CRSE.

No matter how good a Protocol is, it will have to be refined during a CRSE based on new information as it becomes available. The PDS should develop a mechanism for making these revisions during a CRSE.

What is the goal of this section?
The goal of this section is to develop a mechanism for revising the Protocol during a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
In Section 4.4, the Critical Resource Advisory Group (CRAG) created a general, common infrastructure for intra-event Protocol revisions. In Section 5.5.2, the Protocol Development Subcommittee (PDS) identified the specific types of information that may be useful during an event to inform these revisions. In this Section 5.5.3, the PDS will specifically define a mechanism for revising the Protocol during an event. By establishing these intra-event revision mechanisms as part of the planning process, the Planning Unit will be more equipped to refine the Protocol during an event.

Why is this section included in the Planning Guide?
The PDS will spend a significant amount of time developing a Protocol. No matter how much time it spends, there will likely be new information that becomes available during an event that should cause the re-evaluation and possible revision of the Protocol. Intra-event Protocol revision will be a critical component of ensuring that the Protocol remains effective and useful as circumstances change. To help promote confidence in intra-event Protocol revisions, there needs to be a clear, accepted process for making these revisions.

ACTION ITEMS

☐ Review and understand the CRAG’s decision in Section 4.4 regarding the general infrastructure for intra-event Protocol revisions.

➢ Who did the CRAG determine would be responsible for revising Protocols during an event?

➢ Are these people chosen based on the specific resource addressed by the Protocol or will they be the same regardless of the resource?

➢ If they are resource-specific, continue with this Section 5.5.3. If they are the same regardless of the resource, proceed to Section 5.5.4.
□ Identify the types of individuals who will be responsible for intra-event Protocol revisions. Consider the following:
  ➢ Members of the PDS that created the Protocol
  ➢ Specialists who use the resource in everyday practice

□ Identify the specific individuals who will be responsible for intra-event Protocol revisions. Consider identifying alternates to step in if these individuals are not available during the CRSE.

□ Consider how often the Protocol should be evaluated for revision (see Section 4.4).

□ Determine how, if at all, revisions to Protocols will be approved.

□ Develop a strategy for communicating intra-event Protocol revisions to affected staff (see Section 4.9).

□ Determine whether any “just-in-time” training curricula developed to support use of the Protocol need to be revised consistent with revisions to the Protocol. If so, determine who will be responsible for making these revisions?

**Helpful Hints for Implementation**

💡 The PDS will present its initial Protocol to the CRAG for approval. After the CRAG approves the Protocol, it will likely be socialized throughout various segments of the Planning Unit to obtain the necessary approvals and buy-in before being incorporated into a Critical Resource Shortage Response Plan (CRSRP) (see Chapter 9). All of these steps require a great deal of work by many people. After all of this work occurs some may be hesitant to revise the Protocol during an event. Furthermore, others may push back on intra-event revisions because they will not be part of the revision process. Be prepared to justify the revision process.

💡 Consider the size of the group that will be responsible for intra-event Protocol revisions. This group needs to be large enough to make everyone comfortable that appropriate input was obtained but small enough to be flexible and efficient.

💡 Incident command will likely be involved in the approval of intra-event Protocol revisions. Make sure that the group revising the Protocol provides incident command with enough information for approval.
💡 Consider the need to develop a “bench” for those involved with intra-event Protocol revision. During an event, the hospital(s) in your Planning Unit may experience significant absenteeism. It will be important to have multiple alternates who can fill these roles.
5.5.4. Determine when the Protocol will be activated, if applicable.

In Section 4.2, the CRAG determined whether activation of the CRSRP will activate all Protocols or whether each Protocol will be activated separately based on specific resource levels. If the CRAG concluded that each Protocol will be activated separately, the PDS should establish a process for activating the Protocol which includes the identification of triggering events. This process should reflect that activating the Protocol is likely a drastic change in the way that care is provided and is a serious decision that cannot be made hastily.

What is the goal of this section?
The goal of this section is to determine when the Protocol will be activated, if applicable.

How does this section fit into the overall planning process?
In Sections 4.1 and 4.2, the Critical Resource Advisory Group (CRAG) created a general, common infrastructure for activation of the Critical Resource Shortage Response Plan (CRSRP) and associated Protocols, respectively. If the CRAG concluded that each Protocol will be activated separately, then in this Section 5.5.4, the Protocol Development Subcommittee (PDS) will establish a process for activating the Protocol it developed. If the CRAG concluded that each Protocol will be activated simultaneously with the activation of the CRSRP, the PDS should proceed to Section 5.5.5.

Why is this section included in the Planning Guide?
Activation of Protocols will drastically alter the way that care is provided. In some cases, it will result in patients not receiving a resource that they would have received in “normal” times. As a result, the decision to activate and implement a Protocol is one that must be made deliberately at the appropriate time. Determining the appropriate time to activate a Protocol will likely be a difficult decision during an event. To the extent that a Planning Unit can identify triggers for activation in the planning phases, the Planning Unit will be better prepared to identify a critical resource shortage event (CRSE) in the midst of a disaster and activate a Protocol accordingly.

ACTION ITEMS

☐ Review and understand the decisions made in Sections 4.1 and 4.2 regarding the general infrastructure for CRSRP and Protocol activation.
  ➢ Who will activate the CRSRP?
  ➢ Who will activate the Protocol(s)?
Will all Protocols be activated when the CRSRP is activated? If so, proceed to Section 5.5.5 since a specific activation plan for the Protocol is not needed. If not, then continue addressing the Action Items in this Section 5.5.4 to develop a specific activation plan for the Protocol.

Identify the point at which the surge plan for the critical resource will be implemented. (See Section 5.2 for a discussion of the surge plan for the critical resource.)

After implementing the surge plan, determine who is likely to first notice that the shortage of the critical resource continues to exist despite the surge.

Determine the point at which, after surging, the Protocol must necessarily be activated to address the CRSE.

What type of metrics can be used to objectively quantify the shortage?

What other criteria and circumstances should be examined to determine whether the Protocol should be activated? Consider the following:

- How long is the CRSE expected to last?
- How severe is the CRSE expected to be?
- How long can the hospital(s) in the Planning Unit continue providing care under traditional standards of care given the remaining amount of the critical resource?

Identify to whom the CRSE should be reported.

Identify who will declare that an actual CRSE exists for this resource and activate the Protocol.

Determine how the activation of the Protocol will be communicated to the hospital(s) in the Planning Unit and its employees and the medical staff. Consider whether all employees and medical staff will be informed of the activation or only those who will be impacted by the Protocol.

**Helpful Hints for Implementation**

Once a Protocol is activated, it will result in significant changes to the way care is provided by or with the critical resource. It will take employees and medical staff members some time to adjust to providing care pursuant to the Protocol. Once they become adjusted, it may be difficult to return to providing care as “normal.” As a result, it is undesirable to repeatedly activate and de-activate a Protocol. Instead, a Protocol should be activated only when it appears that the Protocol is necessary to address a CRSE for a significant period of time.
To the extent that a Protocol relies on quantitative metrics to measure the success of modifications to care (see Section 5.4.1), consider using these same metrics to identify the time at which the Protocol should be activated.

In many cases, the Incident Commander will likely be the person who officially activates a Protocol. Even if the Incident Commander will not fill this responsibility in the Planning Unit or in the hospital(s) in your Planning Unit, it is important to coordinate decisions in this Section 5.5.4 with incident command for the Planning Unit and the hospital(s) in the Planning Unit.
**5.5.5. Determine when and how the Planning Unit will move between tiers of the Protocol, if applicable.**

If the Protocol has multiple tiers, the PDS should determine when and how the Planning Unit will move between tiers. Like activation of the Protocol itself, the decision to move between tiers should not be taken lightly because moving to a “higher” tier will further alter the standard of care and eventually result in allocation. The PDS should establish mechanisms for moving between tiers of the Protocol.

What is the goal of this section?
The goal of this section is to determine when and how the Planning Unit will move between tiers of the Protocol, if applicable.

How does this section fit into the overall planning process?
In Section 5.4, the Protocol Development Subcommittee (PDS) developed a Protocol for addressing a critical resource shortage event (CRSE). If this Protocol includes different tiers to respond to varying degrees of CRSE severity, the PDS needs to identify when to activate these different tiers. Like the initial decision to activate the Protocol (see Section 5.5.4), the decision to move between tiers is a difficult decision. This Section 5.5.5 outlines the considerations the PDS should address when developing criteria for moving between tiers of a Protocol. If the Protocol does not have tiers, then the PDS should proceed to Section 5.5.6.

Why is this section included in the Planning Guide?
If the PDS developed a Protocol that contains multiple tiers, the PDS should address issues relating to when and how the Planning Unit will move between the tiers during a CRSE. Similar to the primary decision to activate the Protocol, the intra-event decision to move between tiers of the Protocol should not be taken lightly. Frequent movement between tiers during an event may cause confusion and place undue stress on employees and the medical staff. To minimize the movement between tiers, as part of the planning process, the PDS should identify the events and criteria that will trigger such movement and establish mechanisms to make the transition as easy as possible.

**ACTION ITEMS**

☐ Review the Protocol. If the Protocol does not have multiple tiers, proceed to Section 5.5.6. If the Protocol does have multiple tiers, continue with this Section 5.5.5.
Identify the point at which the next tier of the Protocol will need to be activated. In other words, after activating each tier, how will the Planning Unit determine that demand still exceeds supply such that the next tier should be activated to address the shortage?

- If the Planning Unit will use metrics to identify when to activate the Protocol (see Section 5.5.4), can these same metrics be used to objectively quantify the need to activate the next tier?

- What other criteria and circumstances should be examined to determine whether to move to the next tier in the Protocol? Consider the following:
  - How long is the CRSE expected to last?
  - How severe is the CRSE expected to be?
  - How long can the hospital(s) in the Planning Unit continue providing care at the current tier given the remaining amount of the critical resource?

Identify the point at which after activating one tier of the Protocol the previous tier will need to be re-activated. In other words, after activating each tier, how will the Planning Unit determine that the shortage is not as severe, and so a previous, less drastic tier should be activated?

- If the Planning Unit will use metrics to identify when to activate the Protocol (see Section 5.5.4), can these same metrics be used to objectively quantify an improvement in the supply of the resource?

- What other criteria and circumstances should be examined to determine whether to move to a previous tier in the Protocol? Consider the following:
  - How long is the CRSE expected to last?
  - How severe is the CRSE expected to be?
  - How long will the hospital(s) in the Planning Unit be able to provide care at the previous tier given the remaining amount of the critical resource?

Determine who will identify that movement between tiers is necessary.

Determine who will approve a movement between tiers.

Determine how the activation of another tier in the Protocol will be communicated to the hospital(s) in the Planning Unit and its employees and medical staff. Consider whether all employees and medical staff will be informed of the activation or only those who will be impacted by the Protocol.
**Helpful Hints for Implementation**

🎉 Most Protocols will have multiple tiers. At the very least, the Protocol should have an initial tier that addresses modification of care related to the critical resource and a secondary tier that addresses allocation of the critical resource. (See Section 5.4 related to Protocol development for an explanation of the differences between modification and allocation.)

🎉 When considering the trigger and criteria for moving to a tier requiring allocation, consider the drastic nature of this move. Make sure that the trigger and criteria only allow for the move to this tier when it is absolutely necessary to address demand for the critical resource.

🎉 Try to minimize movement between tiers because such movement is likely to confuse staff and cause undue stress.

🎉 In many cases, the Incident Commander will likely be the person who officially activates each subsequent tier of the Protocol. Even if the Incident Commander will not fill this responsibility in the Planning Unit or in the hospital(s) in your Planning Unit, it is important to coordinate decisions in this Section 5.5.5 with incident command for the Planning Unit and the hospital(s) in the Planning Unit.
5.5.6. Determine when the Protocol will be terminated and the Planning Unit will return to a “normal” standard of care, if applicable.

In Section 4.2, the CRAG determined whether the Planning Unit will terminate all Protocols simultaneously or whether each Protocol will be terminated separately based on specific resource levels. If the CRAG concluded that each Protocol will be terminated separately, the PDS should establish a process for terminating the Protocol which includes the identification of triggering events. This process should reflect that terminating the Protocol will likely be a difficult decision to make. There will be a delicate balance between terminating the Protocol too early, which may lead to a re-activation of the Protocol, and too late, which will lead to the use of “altered” standards of care past the time that they were necessary to address the CRSE.

How does this section fit into the overall planning process?
In Sections 4.1 and 4.2, the Critical Resource Advisory Group (CRAG) created a general infrastructure for terminating the Critical Resource Shortage Response Plan (CRSRP) and associated Protocols, respectively. If the CRAG concluded that each Protocol will be terminated separately, then in this Section 5.5.6, the Protocol Development Subcommittee (PDS) will establish a process for terminating the Protocol it developed. If the CRAG concluded that each Protocol will be terminated simultaneously with the termination of the CRSRP, the PDS should proceed to Section 5.6.

Why is this section included in the Planning Guide?
Once a Planning Unit has activated a Protocol, the time will come where the critical resource shortage event (CRSE) begins to dissipate and events begin to return to “normal.” De-activation of a Protocol will signal that for the foreseeable future the CRSE is over – there is sufficient supply of the critical resource to meet demand. As a result, the hospital(s) in the Planning Unit is returning to “normal” standards of care. Identifying this point when supply is sufficient to meet demand and the CRSE has ended will be difficult. Identifying this point too early may lead to re-activation of the Protocol if the CRSE is not truly over. Identifying this point too late may lead to the use of “altered” standards of care past the time that they are necessary to address the CRSE. Giving thoughtful consideration to the triggers and criteria that will signal the end of a CRSE during the planning phase will hopefully make for a better informed decision during an actual event. This Section 5.5.6 encourages the PDS to identify criteria for determining that a CRSE has ended and develop mechanisms for terminating the Protocol it developed.
ACTION ITEMS

□ Review and understand the CRAG’s decision in Section 4.2 regarding the general infrastructure for terminating Protocols.
  ➢ Who will declare that a CRSE has ended?
  ➢ Who will terminate the appropriate Protocol?
  ➢ Will all Protocols be terminated when the CRSRP is terminated? If so, proceed to Section 5.6 since a specific termination plan for the Protocol is not needed. If not, then continue addressing the Action Items in this Section 5.5.6 to develop a specific termination plan for the Protocol.

□ Identify the point at which the CRSE has ended and the Protocol should be terminated.
  ➢ What type of metrics can be used to objectively quantify the end of the shortage?
  ➢ What other criteria and circumstances should be examined to determine whether the Protocol should be de-activated?

□ Determine to whom the end of the CRSE should be reported.

□ Determine who will declare that the CRSE has ended and terminate the Protocol.

□ Determine how the termination of the Protocol will be communicated to hospital(s) in the Planning Unit and its employees and the medical staff. Consider whether all employees and medical staff will be informed of the termination or only those who will be impacted by the Protocol.

Helpful Hints for Implementation

🎉 Once a Protocol is activated, it will result in significant changes to the way care is provided by or with the critical resource. It will take employees and medical staff members some time to adjust to providing care pursuant to the Protocol. Once they become adjusted, it may be difficult to return to providing care as “normal.” As a result, it is undesirable to repeatedly activate and terminate a Protocol. Instead, a Protocol should be terminated only when it appears that the CRSE has ended for the foreseeable future.

🎉 To the extent that a Protocol relies on quantitative metrics to measure the success of modifications to care (see Section 5.4.1), consider using these same metrics to identify the end of a CRSE.

🎉 In many cases, the Incident Commander will likely be the person who officially terminates the Protocol. Even if the Incident Commander will not fill this responsibility in the Planning Unit or in the hospital(s) in your Planning Unit, it is important to coordinate decisions in this
Section 5.5.6 with incident command for the Planning Unit and the hospital(s) in the Planning Unit.
5.6. Establish parameters around the type of documentation needed to support the Protocol and the type of documentation that the member(s) of the Planning Unit will be expected to complete related to the Protocol.

As in normal times, documentation will be essential during a CRSE. What “essential documentation” is, however, will likely change during the event. Based on the definition of “essential documentation” created in Section 4.5, the PDS should identify the specific type of information that is essential for the care and safety of the patients to whom the Protocol is applied, the proper operation of the Protocol, quality assessment of the Protocol, and reimbursement for care provided pursuant to the Protocol.

What is the goal of this section?
The goal of this section is to identify “essential documentation” related to the Protocol developed by the Protocol Development Subcommittee (PDS).

How does this section fit into the overall planning process?
In Section 4.5, a Critical Resource Advisory Group (CRAG) developed a standard definition of “essential documentation” – that documentation which is necessary during a critical resource shortage event (CRSE) for the care and safety of the patient, the proper operation of Protocols, quality assessment, and reimbursement for care provided. In this Section 5.6, the PDS will further define the elements of “essential documentation” related to the specific Protocol that it has developed.

Why is this section included in the Planning Guide?
In hospitals, proper documentation can prove problematic in the best of times. During a CRSE, staff shortages, influxes of patients, and other disaster circumstances will conspire to make proper documentation nearly impossible. Nonetheless, documentation is important for the safety and care of the patient, quality assessment, and reimbursement for care provided. In a CRSE, documentation will also be important for the proper operation of Protocols. As a result, it cannot be abandoned entirely. Instead, expectations for documentation should be modified to be more realistic in a CRSE. In this Section 5.6, the PDS will identify the type of documentation that will be essential for the care and safety of the patient, the proper operation of the Protocol, quality assessment, and reimbursement for care provided pursuant to the Protocol.

Real World Example
If a Protocol prioritizes patients for a critical resource on the basis of a predictive scoring system (e.g., Sequential Organ Failure Assessment score), it will be essential to document the components of this score for each patient in need of or receiving the critical resource. Without this information, a score cannot be calculated and the utility of the Protocol will be diminished.
ACTION ITEMS

☐ Review and understand the CRAG’s decision in Section 4.5 regarding the general components of “essential documentation.”

☐ Based on the Protocol, identify the type of documentation that is necessary for the care and safety of the patient.
  ➢ What type of information is collected today for the care and safety of the patient?
  ➢ Is all of this information necessary during a CRSE?
  ➢ What is the minimum amount of information about the patient the next provider will need to care for the patient?
  ➢ Who should collect and document this information? Can the documentation responsibility be delegated?
  ➢ Consider whether the Protocol itself modifies “normal” documentation related to the care of the patient. For instance, if a Protocol modifies practices so that nursing checks vital signs every four hours instead of every two hours, this will decrease the number of times that nursing documents vital signs.

☐ Based on the Protocol, identify the type of documentation that is necessary for quality assessment of the Protocol.
  ➢ What information about each patient will need to be collected to evaluate outcomes from the Protocol?
  ➢ Will information need to be collected from both patients who receive the resource and those who do not receive the resource?
  ➢ Is this type of information normally collected? If not, consider the implications of requiring it to be collected during a CRSE.
  ➢ Can this information be readily aggregated for further evaluation in quality assessment activities?

☐ Based on the Protocol, identify the type of documentation that is necessary for the proper operation of the Protocol.
  ➢ What information about the patient will the triage officer or triage committee need to evaluate the patient in accordance with the Protocol?
  ➢ Is this type of information normally collected? If not, consider the implications of requiring it to be collected during a CRSE.
  ➢ Who should collect and document this information?
Based on the Protocol, identify the type of documentation that is necessary to obtain reimbursement for the care provided.

- Consult with billing staff to understand what type of documentation is normally required for the type of care in question for reimbursement purposes.
- Identify the types of “normal” documentation that may prove difficult to obtain during a CRSE and explain why it will be difficult.
- Talk with the billing staff about these concerns and suggested modifications.
- Encourage the Chief Financial Officer (CFO) to begin discussions with insurers about the suggested modifications and the impact on reimbursement.

Consider how the medical records system(s) of the hospital(s) in the Planning Unit will impact use of “essential documentation.”

- If the hospital(s) has an electronic medical records (EMR) system, consider how all of the suggested modifications will interact with the EMR.
  - How can the EMR help support “essential documentation”?
  - How might the EMR hinder the use of “essential documentation”?
  - Involve health information technology staff in these discussions since they are most knowledgeable on the architecture of the EMR.
- If the hospital(s) has a paper records system, consider how all of the suggested modifications will interact with this system.
  - How can the paper records help support “essential documentation”?
  - How might the paper records hinder the use of “essential documentation”?

Document decisions made with respect to “essential documentation” related to the Protocol.

**Helpful Hints for Implementation**

💡 When thinking about delegation of documentation responsibilities, consider whether the delegation will actually increase staff’s capacity for providing care or whether it is just as efficient for the “normal” person assigned to this role to complete this documentation.

⚠️ It will be difficult to get insurers to agree to reimburse for care provided based on “essential documentation.” It is very important, however, for these discussions to take place during the planning phase because they will be nearly impossible during an actual CRSE.
If the hospital(s) in the Planning Unit has an EMR, you may be able to use the EMR to gain some efficiencies in the documentation process. For instance, if a Protocol uses a predictive scoring system (e.g., Sequential Organ Failure Assessment score), you may be able to program the EMR to automatically produce the score based on the information in the patient’s chart. If there is a set of standard information that the triage officer or triage committee will use to evaluate patients in accordance with the Protocol, you may be able to program the EMR to produce a report that contains all of the relevant information. These programs may result in considerable time savings in collecting and evaluating essential documentation.

If the hospital(s) in the Planning Unit has an EMR, you should also consider the possible obstacles that the system could pose to implementing the Protocol. For instance, some EMRs are designed to “force” providers to enter certain information. If a patient normally requires vitals every two hours, the EMR may lock-out if the vitals are not recorded every two hours. If a Protocol modifies practices so that vitals are recorded every four hours instead of every two hours, the EMR settings will have to be modified; otherwise, the lock-out function could impair the ability to complete any documentation. Consider whether there is a need to create “disaster settings” for the EMR system that can be “switched on” in the event of a CRSE.

If the hospital(s) in the Planning Unit uses an EMR, consider how it will address interruptions in power during a CRSE.
PROTOCOL DEVELOPMENT
SECTION 5.7

5.7. Coordinate the content and implementation of the Protocol with other Protocols being developed by other Protocol Development Subcommittees.

While the Protocol is resource specific, the resource does not exist in isolation. It likely interacts with numerous other resources to provide comprehensive care. As the PDS is conducting its activities, it should coordinate with other Subcommittees working on Protocols that may interact with its specific Protocol. This coordination is important to ensuring a comprehensive and cohesive response to critical resource shortage events.

What is the goal of this section?
The goal of this section is to coordinate all of the Protocols being developed by a Planning Unit.

How does this section fit into the overall planning process?
As the Planning Unit discovered through the Critical Resource Vulnerability Analysis (CRVA) in Chapter 2, there are many critical resources that may become scarce during a disaster. The Critical Resource Advisory Group (CRAG) prioritized these resources and determined for which ones it would develop Protocols. For each selected resource, the CRAG identified a Protocol Development Subcommittee (PDS) to create a Protocol that addresses modification and allocation of the resource. In many cases, these various PDSs will operate simultaneous, parallel processes and may not have the opportunity to collaborate with each other. Moreover, while the PDSs are working, governmental authorities may be developing or promulgating other resource-specific Protocols (see Section 5.3). It will be important for each PDS to examine all Protocols being developed for the hospital(s) in the Planning Unit to ensure there are no egregious conflicts.

Why is this section included in the Planning Guide?
Your Planning Unit will most likely have multiple Protocols. While each Protocol is resource-specific, coordination of these Protocols is important so that they are mutually supportive. There are two dimensions to this issue. First, it is possible that governmental entities will develop Protocols for certain resources. If so, your Planning Unit will need to determine if these Governmental Protocols are mandatory or voluntary. If mandatory, the Planning Unit will need to assure that its Protocols are consistent with these Governmental Protocols. If voluntary, the Planning Unit will need to evaluate how the Governmental Protocols may interact with whatever Protocols the Planning Unit is developing. The second dimension to this issue is that the delivery of medical care does not involve just one resource; it requires multiple resources including staff, equipment, supplies, and physical space. Shortages in any one, or a combination, of these resources can make it impossible to provide a service. As a result, each PDS will need to coordinate its Protocol development efforts to ensure that each resource-specific Protocol it develops does not conflict with another Protocol being developed by another PDS. This will not happen without deliberate effort.
ACTION ITEMS

☐ Identify all Governmental Protocols.

☐ Identify all of the PDSs and the critical resource that each PDS is addressing.

☐ Identify all Protocols being developed either by a PDS or a governmental agency and all areas in which they might overlap or conflict. Consider the following areas:
  ➢ Triggering events for implementation of the Protocol;
  ➢ The use of different tiers among Protocols as the resource shortage gets more severe;
  ➢ Competing demands for the same resource;
  ➢ Different conditions for termination of a Protocol.

☐ After reviewing the Protocols for possible inconsistencies, evaluate the Protocols and determine whether inconsistencies actually exist. Consider assembling a meeting composed of at least one representative of each PDS to conduct this evaluation of any potential inconsistencies and determine ways to eliminate these inconsistencies.

☐ Convene a meeting of the PDS originally responsible for developing the Protocol to discuss all identified inconsistencies and necessary revisions to the Protocol to resolve the inconsistencies.

☐ Once the Protocol has been revised, provide a copy of the revised Protocol to each member of the PDS that created the Protocol for review and approval.

Helpful Hints for Implementation

💡 It may be very difficult to identify inconsistencies, given that the PDSs will not have intentionally created inconsistencies. One way to identify inconsistencies is to test the Protocols using simulations and table top exercises. While simulations require a lot of planning in order to be as realistic as possible, they often can yield very helpful results. Refer to Chapter 8 of the Critical Resource Shortages Planning Guide (Planning Guide) for more information on simulations and exercises.

💡 To the extent that Protocols may overlap, consider coordinated efforts related to training and future Protocols revisions.
5.8. Memorialize the Protocol in writing.

The PDS should reduce its Protocol to writing and submit it to the CRAG overseeing the work of the Protocol Development Subcommittees. The CRAG can then submit the Protocols for approval and integration (see Chapter 9). In written format, the Protocols can be more readily shared with others and implemented during an event.

**What is the goal of this section?**
The goal of this section is to ensure that all Protocols are in a uniform, written format.

**How does this section fit into the overall planning process?**
In Sections 5.4–5.5, the Protocol Development Subcommittee (PDS) made a series of very important decisions regarding the modification and allocation of a specific critical resource in a critical resource shortage event (CRSE) and the specifics for implementation of this Protocol. These decisions form the basis of the Protocol for the critical resource. This Section 5.8 encourages the PDS to record these decisions in a formal written document.

**Why is this section included in the Planning Guide?**
Like other policies and procedures, the Protocols developed by the PDS should be in writing. They should use a common format or template so that they can be easily read and understood. Written Protocols will allow easier implementation by those who were not part of the Protocol development process and may provide the hospital(s) in the Planning Unit with some degree of liability protection when altering standards of care during a disaster or emergency.

**ACTION ITEMS**

- ☐ Develop a uniform template or format for all Protocols. Representatives from each PDS should meet to develop this uniform format.

- ☐ Provide a copy of the uniform format to each PDS and require that all Protocols follow the approved format.

- ☐ Reduce the Protocol to writing using the approved format and incorporate the Protocol into the Critical Resource Shortage Response Plan (CRSRP).

- ☐ Submit the written Protocol to the Critical Resource Advisory Group (CRAG) so that the CRAG can incorporate it into the CRSRP that will be submitted for approval in

**Helpful Hints for Implementation**

 créer le protocole en tenant compte des critères définis lors des réunions PDS.

Si le travail semble trop lourd pour un individu, il est possible de le diviser entre plusieurs personnes. Il est important de convenir de réunions informelles régulières pour s’assurer que les différentes parties du protocole s’accordent et forment un ensemble cohérent.

Une fois le protocole rédigé, vous devriez sélectionner plusieurs personnes pour obtenir leurs suggestions informelles sur le protocole. Vous pourriez constater que le processus de rédaction du protocole permet d’identifier les différences d’opinions des membres du PDS travaillant sur le protocole. Ces différences d’opinions ne sont pas toujours évidentes avant que les membres PDS ne voient le protocole en écrit.

Rappelez-vous que plus le nombre de personnes consultées pour des suggestions sur le protocole est élevé, plus la probabilité que le protocole final, lorsqu’il est présenté pour avis et approbation, soit accepté.

Vous pourriez rencontrer de la résistance à rédiger un protocole qui spécifie “normes de soins modifiées.” Cette résistance peut être due à des préoccupations concernant la responsabilité potentielle pour la création d’une politique écrite stipulant des critères pour fournir quelque chose d’autre que “normes de soins normaux.” En outre, il peut y avoir des objections concernant la responsabilité éventuelle de ne pas suivre le protocole écrit. De plus, certains membres du PDS pourraient trouver le débat sur les normes modifiées, les critères d’exclusion et d’inclusion acceptables, mais que la mise en écriture des normes adoptées présente un engagement trop important pour le protocole. Consultez un avocat pour aborder les préoccupations des personnes résistant à écrire ces protocoles. Rappelez-vous aussi que sans écrire ces protocoles, leur mise en œuvre manquerait de cohérence généralisée, et une rupture des protocoles expose les hôpitaux dans l’unité de programmation à des préoccupations de responsabilité encore plus graves.
5.9. Conduct training related to the content and implementation of the Protocol.

Once the Protocol is finalized and approved, the member(s) of the Planning Unit will need to conduct significant training on its content and implementation. The PDS should identify the categories of individuals who need to be trained and the type of training that they should undergo and, together with trainers, develop content for these sessions.

What is the goal of this section?
The goal of this section is to conduct training on the use of the Protocol developed by the Protocol Development Subcommittee (PDS).

How does this section fit into the overall planning process?
Once the Protocol developed in Chapter 5 is finalized and approved, the PDS will need to identify and develop a process for training those individuals impacted by implementation of the Protocol. As part of this process, the PDS will need to identify the individuals who will require training and the type of training they should undergo. These Protocol-specific education and training materials will then be incorporated into the overall Critical Resource Shortage Response Plan (CRSRP) education and training initiative that the Critical Resource Advisory Group (CRAG) will develop in Chapter 8.

Why is this section included in the Planning Guide?
Without providing education and training for physicians and staff from the hospital(s) in the Planning Unit, the Protocols are of little value. Physicians and staff should be familiar with the procedures of each of the Protocols before a disaster or emergency strikes in order to efficiently and effectively implement the modifications and allocation algorithms contained in these Protocols. Training initiatives should include both pre-event training and just-in-time training. While some training will be required at the time of the emergency or disaster (just-in-time training), attempts at wholesale training of physicians and staff after an emergency or disaster has occurred will not be effective.

ACTION ITEMS

☐ Identify the types of individuals who require training on the content of the Protocol.

☐ Determine the best way to train each type of individual on the use of the Protocol. Consider the following types of training:
  ➢ Simulations
Drills

Table-top exercises

Traditional classroom/lecture-style

Webinars

Self-training

Design training modules for each type of individual who will be a part of implementing the Protocol and those who will be impacted by the Protocol. Consider that different types of training may be appropriate to different categories of physicians and staff.

Conduct pre-critical resource shortage event (CRSE) training, as appropriate.

Document the training of each individual.

Evaluate any potential revisions to the Protocol identified through the training modules, as needed. If any necessary revisions are identified, reconvene the PDS to discuss the revisions and to incorporate the revisions into the Protocol.

Helpful Hints for Implementation

Consider whether training all individuals of a certain type (e.g., physicians, nurses, respiratory therapists, staff) would be most beneficial in implementing the Protocol that the PDS developed or whether training of all individuals generally located in certain hospital units (e.g., ICU, ER, administration, nursing groups) would be more beneficial. Is this decision different for pre-event training versus just-in-time training? Should different types of training be given to different types of staff?

Consider whether training should occur regarding the entire CRSRP at once or whether only specific Protocols will be addressed by separately-scheduled training modules. In making this decision, consider the Protocols that interact with the Protocol that the PDS has developed (as determined in Section 5.7).

In considering individuals who will be trained on the modification algorithms of the Protocol, consider who will be asked to perform tasks based upon the modifications to care. These may not be individuals that you normally associate with use of the critical resource.

In addition, consider the individuals who will be implementing the allocation and modification algorithms of the Protocol. These individuals may require specific training on the difficult decisions that will be required.

Training at regular intervals (as opposed to one-time training) will generally result in greater familiarity with the Protocol and better outcomes in implementing the Protocol during an
emergency or disaster. It will also require less “just-in-time” training, which will be important when resources and staff are in great demand.

💡 Probably the most effective type of training is the use of “table top” exercises and simulations (i.e., role play of a disaster event).

💡 Training accomplished through live in-person presentations (as opposed to simply requiring facility employees to read the Protocol and acknowledge that they have done so) is more likely to result in greater training success.

💡 If attendance at live training does not meet expectations, consider whether alternative training options (e.g., a video-taped program or one accessible through the internet) may be viable. While the employees utilizing such training will not have the benefit of asking questions during the training, it is important that all employees receive training. Options such as this will allow for the greatest number of employees to receive training.

💡 Consider the most important points of the Protocols to highlight during any “just-in-time” training. At the time of any disaster or emergency, staff will be in high demand and shortages may exist, so just-in-time training will need to be very focused.

💡 Consider social distancing concerns when conducting just-in-time training. During an infectious disease outbreak, it will be counterproductive to congregate a large group in one area. Consider other options to conduct training in light of this concern.

💡 If you experience difficulty securing attendance of some employees at training sessions, consider having executive level staff communicate the importance of such training to invitees.
CHAPTER 6:  
AD HOC INFRASTRUCTURE

6. Create an infrastructure to support the development, implementation and operationalization of Ad Hoc Protocols during a critical resource shortage event

Given the vast number of critical resources used in healthcare today, the Planning Unit will not be able to develop Protocols to address the scarcity of all the resources identified in and prioritized by the Critical Resource Vulnerability Analysis (see Chapter 2). Moreover, the Planning Unit cannot anticipate all of the potential critical resources that may become scarce during a disaster or emergency. These unplanned or unforeseen CRSEs will cause the Planning Unit to have to develop Protocols to address the scarcity in the midst of an event. These Protocols developed in the midst of an event are called “Ad Hoc Protocols.” The Planning Unit should prepare for this situation by creating an infrastructure that will support the development, implementation and operationalization of Ad Hoc Protocols during a CRSE.

Introduction

During a disaster or emergency, resources will become scarce for which the Planning Unit has no Protocol or response plan. This is inevitable and does not mean that the Planning Unit failed to properly do its job. These may be critical resources which were not considered during the Critical Resource Vulnerability Analysis (CRVA) performed in Chapter 2; they might have been identified during the CRVA, but were not prioritized for Protocol development; or they might have been identified during the CRVA, and were prioritized for Protocol development, but have not yet been addressed by a Protocol Development Subcommittee (see Chapter 5). Regardless, when such critical resources begin to become scarce during a disaster, the Planning Unit will need to respond quickly to develop Ad Hoc Protocols to effectively respond to the impending shortages. Having an infrastructure in place will allow for a more streamlined and coordinated approach for intra-event Ad Hoc Protocol development. Without such an infrastructure, it is highly likely that the Planning Unit will not develop Protocols, which means that providers will be forced to make their own individual decisions about how to modify the use of or allocate the resources available. These decisions will certainly be based on good intent but will occur with incomplete, and maybe inaccurate, information about the disaster and the resulting critical resource shortage.

Real World Example

During an influenza pandemic, it is determined that many patients are dying from pneumonia secondary to the influenza and that a particular family of antibiotics administered intravenously is very effective in treating these patients. The CRAG has developed Protocols for ventilators and respiratory therapists but not for these antibiotics, which immediately become scarce. How will the Planning Unit modify the use of or allocate its limited supply of these antibiotics?
event (CRSE). Such an outcome is far from ideal for both providers and patients. In this Chapter 6, the Critical Resource Advisory Group (CRAG) for the Planning Unit that is responsible for this activity will create the infrastructure to support the development, implementation and operationalization of Ad Hoc Protocols during a CRSE.

**Responsibility**
Critical Resource Advisory Group (CRAG)

**In this Chapter you will:**
- Determine how the Planning Unit will decide that, in the midst of a disaster, development of an Ad Hoc Protocol is required.
- Develop the process by which an Ad Hoc Protocol will be created in the midst of a disaster.
- Develop a standard mechanism for communicating the creation, implementation and operationalization of Ad Hoc Protocols.
AD HOC INFRASTRUCTURE
SECTION 6.1

6.1. Determine how the Planning Unit will decide that, in the midst of a disaster, development of an Ad Hoc Protocol is required.

To help ensure an effective response to a disaster and any resulting CRSEs, it is important for the CRAG to determine who will decide that development of an Ad Hoc Protocol is required. The person(s) charged with the responsibility for identifying the need for an Ad Hoc Protocol and activating the process for developing this Protocol will also likely be in charge of many other aspects of the disaster response. It is also highly likely that this person(s) will not have experience with identifying a CRSE. To help this person(s) discharge his duties effectively, the CRAG should determine the types of information that will suggest that a CRSE exists or is about to exist and that development of an Ad Hoc Protocol is necessary to respond to the CRSE.

What is the goal of this section?
The goal of this section is to determine how the Planning Unit will decide that, in the midst of a disaster, development of an Ad Hoc Protocol is required.

How does this section fit into the overall planning process?
In Chapter 5, the Critical Resource Advisory Group (CRAG) established Protocol Development Subcommittees to create Protocols for specific resources identified through the Critical Resource Vulnerability Analysis (CRVA) in Chapter 2. Despite these planning efforts, during a disaster or emergency, shortages of critical resources for which Protocols were not developed will likely occur. In this Section 6.1, the CRAG will determine who within the Planning Unit will make the decision that an Ad Hoc Protocol is needed. The CRAG will develop the other elements of the Ad Hoc Protocol infrastructure in Sections 6.2 and 6.3.

Why is this section included in the Planning Guide?
The Ad Hoc Protocol development process should only be initiated when there is an actual or imminent critical resource shortage event (CRSE). The development process will involve various providers who are subject matter experts on the use of the resource in question. During an event, these providers should only be taken away from their other responsibilities to develop an Ad Hoc Protocol when such a Protocol is or will be necessary to effectively respond to a CRSE. The CRAG should identify the individual(s) who will be responsible for authorizing the development of an Ad Hoc Protocol during a disaster based on an existing or

Real World Example
If your Planning Unit is confronted with the "Real World Example" presented in the Introduction to this Chapter 6, how will it decide when, if ever, to authorize the development of an Ad Hoc Protocol to address the imminent shortage of the relevant family of antibiotics?
imminent CRSE. This individual may not be familiar with the concept of a CRSE or the development of Ad Hoc Protocols. To help him do his job most effectively, the CRAG should provide him with a workable framework that will allow him to make decisions regarding the development of Ad Hoc Protocols quickly and correctly. Creating this framework during the planning process is crucial to an effective response during an event.

**ACTION ITEMS**

☐ Develop a mechanism for identifying an existing or imminent CRSE during a disaster.
  ➢ How will an existing or imminent CRSE be identified during an event?
  ➢ Who is the most appropriate person to identify current or foreseeable shortages of critical resources? Does this answer depend on the resource in question?
  ➢ To whom within Incident Command should this finding be reported?
  ➢ Will someone be in charge of validating the reports of an existing or imminent CRSE?

☐ Develop a mechanism for determining that development of an Ad Hoc Protocol is necessary to address the existing or imminent CRSE.
  ➢ What information will be needed to determine whether to activate the development of an Ad Hoc Protocol?
  ➢ Who will make the decision to activate an Ad Hoc Protocol once it has been created?
    ▪ Will it be someone within Incident Command?
    ▪ If it is not someone within Incident Command, how will this decision be coordinated with Incident Command?

**Helpful Hints for Implementation**

💡 As a general rule, a CRSE will exist when the remaining resources will not allow providers to treat patients in accordance with the traditional standard of care.

💡 When deciding whether to develop an Ad Hoc Protocol, consider that the Protocol should probably be developed when the CRSE is imminent but not yet upon the Planning Unit. This will give the Planning Unit at least some time to both develop an appropriate Ad Hoc Protocol and implement it before the CRSE is so severe that the Planning Unit’s only option is to allocate the resource. Remember, however, that if the hospital(s) in the Planning Unit is expecting sufficient additional supplies of a resource in the near future, it may not want to invest the time to develop a Protocol for that resource because this will pull critical personnel away from other important activities.
When determining whether development of an Ad Hoc Protocol is necessary, consider the following:

- **Status**: Status involves a determination of current resource levels and whether demand exceeds, or is about to exceed, supply. If the Planning Unit or the hospital(s) in the Planning Unit has already instituted its surge plan and still cannot meet demand, an Ad Hoc Protocol may need to be developed.

- **Forecast**: Identify the future anticipated supply and demand for the resource. Determine whether the hospital(s) in the Planning Unit will be getting more of the resource in the near future or whether it will likely exhaust its supply of the resource, if it has not already, based upon current and predicted demand and usage levels. If the hospital(s) in the Planning Unit is not expecting to receive additional quantities of the resource, an Ad Hoc Protocol may need to be developed.

- **Duration**: The duration of the shortage involves a consideration of how long demand will exceed supply. Based on the duration, a determination must be made as to whether this “gap” is one that is “acceptable” to the hospital(s) in the Planning Unit (i.e., either patients may be treated without the resource or there may be alternatives available to the resource) or “unacceptable” (i.e., a Protocol is needed to address it).

- **Magnitude**: The magnitude of the shortage is essentially the extent to which the demand currently does or will exceed supply. Factors to consider include the “burn rate” for the resource (i.e., the rate at which the hospital(s) in the Planning Unit is consuming the resource) and the level of demand for the resource. Determine whether there is a characteristic of the disaster or emergency that might be causing a higher demand for the resource. The greater the magnitude of the shortage, the more likely an Ad Hoc Protocol will be needed.

- **Mitigation**: The Planning Unit may consider identifying whether it or the hospital(s) within it has implemented any surge plans or responses to increase its supply of the resource and whether there are any other ways to quickly increase the supply of the resource. If there are ways to surge the supply of the resource so that the supply will meet the demand, an Ad Hoc Protocol may not be necessary.

Remember that there will likely be numerous CRSEs during a disaster, all of which may require development of resource-specific Ad Hoc Protocols. Given the potential absenteeism during a disaster and the high demand for services, it may not be possible to devote the human resources needed to develop an Ad Hoc Protocol for every critical resource that becomes scarce. The individual responsible for authorizing the development of Ad Hoc Protocols may have to prioritize scarce resources for Protocol development.
6.2. Develop the process by which an Ad Hoc Protocol will be created in the midst of a disaster.

Development of a Protocol takes a significant amount of time and resources. Prior to an event, it is appropriate to dedicate resources to Protocol development. During an event, however, time and resources will be scarce but Ad Hoc Protocols will still need to be developed. To help facilitate efficient development of Ad Hoc Protocols during an event, the CRAG should create an Ad Hoc Protocol development process. The process will likely be similar to the one used by the Protocol Development Subcommittees prior to the event (see Chapter 5) but reduced to its essential elements.

What is the goal of this section?
The goal of this section is to develop the process by which an Ad Hoc Protocol will be created in the midst of a disaster.

How does this section fit into the overall planning process?
In Section 6.1, the Critical Resource Advisory Group (CRAG) developed the infrastructure which will allow the Planning Unit to decide that, in the midst of a disaster, development of an Ad Hoc Protocol is required to respond to the shortage of a particular resource. In this Section 6.2, the CRAG will develop a process for an Ad Hoc Protocol Development Subcommittee to use to create an Ad Hoc Protocol once such creation has been authorized. The framework for this process will be similar to the process used by the Protocol Development Subcommittees to develop Protocols prior to a critical resource shortage event (CRSE) (see Chapter 5), but streamlined to allow for quicker development. In the next Section 6.3, the CRAG will develop a mechanism that will be used to communicate the creation, implementation and operationalization of Ad Hoc Protocols.

Why is this section included in the Planning Guide?
Development of Protocols to address shortages of critical resources is a difficult and time-consuming process. This process becomes even more difficult in the midst of a disaster when impending or actual shortages are present. Those tasked with developing Ad Hoc Protocols will have to be taken out of their normal clinical duties during the development process, which will make the development of Ad Hoc Protocols particularly challenging if there are staff shortages. The process will be even more challenging if individuals involved in the development process do not have the necessary expertise. Therefore, it is essential to have a clear and efficient process in place to ensure that Ad Hoc Protocols can be developed quickly and effectively in the midst of a disaster.

Real World Example
Building upon the "Real World Example" in the Introduction, if your Planning Unit authorizes the development of an Ad Hoc Protocol to address the shortage of the particular family of antibiotics, which clinicians will be appointed to the Ad Hoc Protocol Development Subcommittee responsible for developing this?

not have prior experience with developing Protocols. Accordingly, the CRAG must consider and develop a general method for creating Ad Hoc Protocols that contains clear guidelines and a straightforward, streamlined development process. Creating this method during the planning process will allow Ad Hoc Protocols to be developed in the midst of a disaster in the most orderly, consistent and expeditious fashion.

ACTION ITEMS

☐ Determine the composition of the Ad Hoc Protocol Development Subcommittees that will be responsible for developing Ad Hoc Protocols.

➢ Consider the size of the group tasked with developing the Ad Hoc Protocol. A larger group will provide broader input but a smaller group will have greater flexibility and availability during an event.

➢ Identify the types of individuals who will be members of the Subcommittees. Consider the following:

  ▪ Representative or liaison from your Planning Unit’s incident command (logistics, planning and/or operations);
  ▪ Physician(s) representing the relevant field/specialty related to the specific critical resource in question;
  ▪ Nurse(s) representing the relevant field/specialty related to the specific critical resource in question;
  ▪ Any other type of clinician whose practice will be significantly impacted by a shortage of the critical resource in question;
  ▪ An ethics representative to ensure that the ethical implications of decisions made are taken into account;
  ▪ Facilitator; and
  ▪ At least one “pre-trained” member who has participated in developing a Protocol for the Planning Unit.

☐ Provide the Ad Hoc Protocol Development Subcommittee with a general framework and instructions for developing the Ad Hoc Protocol. Consider the following:

➢ If modification or allocation algorithms will be included in the Ad Hoc Protocol, the CRAG should consider ways in which the processes outlined in Sections 5.4.1 and 5.4.2, respectively, can be streamlined for use in the midst of a disaster.

➢ Set a timeframe for the development of the Ad Hoc Protocol to limit the number of hours that will be spent developing the Protocol.

➢ The Ad Hoc Protocol Development Subcommittee should be reminded about the existence and importance of using the Planning Unit’s ethical and operational frameworks (see Chapters 3 and 4, respectively).
Consider the definition of “essential documentation” created by the CRAG in Section 4.5. Based on this definition, establish parameters regarding the type of “essential documentation” needed to implement and support the Ad Hoc Protocol.

Identify any just-in-time training that may be required to implement the Ad Hoc Protocol.

Once the Ad Hoc Protocol is developed, modifications to the Ad Hoc Protocol may be required. Develop a general framework for this revision process.

Consider how to communicate the final Ad Hoc Protocol to the staff (see Section 6.3).

☐ Fully document the Protocol development process so that you have a clear record of how the Ad Hoc Protocol Development Subcommittee actually developed the specific Protocol.

**Helpful Hints for Implementation**

😊 Understand that developing an Ad Hoc Protocol during a disaster will be quite different than developing a Protocol during the traditional planning process. While the essential elements of an Ad Hoc Protocol will be the same as a Protocol developed pre-event (modification and allocation algorithms), the process for developing an Ad Hoc Protocol will be substantially streamlined. Protocols developed prior to a disaster may be the product of several lengthy meetings over a period of weeks or even months. Ad Hoc Protocols will need to be developed within a matter of days or hours depending on the disaster circumstances.

😢 Consider that as a result of staff shortages and the increased demand for care, the number of individuals involved in the Ad Hoc Protocol development process will likely be far fewer than the number of individuals assembled to develop Protocols prior to the disaster.

🤔 The group that will be selected to develop the Ad Hoc Protocols should consider using a previously-developed Protocol for a similar resource to assist and guide it in the Protocol development process.

💡 For more specifics on the development of Protocols generally, consider reviewing the Action Items and Helpful Hints in Sections 5.4.1 and 5.4.2.
6.3. Develop a standard mechanism for communicating the creation, implementation and operationalization of Ad Hoc Protocols.

During the event, it will be important to communicate the creation, implementation and operationalization of Ad Hoc Protocols with various audiences. While the precise messages surrounding a specific Ad Hoc Protocol cannot be developed until the CRSE occurs and the Ad Hoc Protocol is developed, a general structure and communication plan surrounding Ad Hoc Protocols should be developed as part of the Planning Unit’s preparedness activities and comprehensive communication plan (see Chapter 10).

What is the goal of this section?
The goal of this section is to develop a standard mechanism for communicating the creation, implementation and operationalization of the Ad Hoc Protocols.

How does this section fit into the overall planning process?
Chapter 6 encourages the Critical Resource Advisory Group (CRAG) to create a comprehensive operational infrastructure to facilitate the development and implementation of Ad Hoc Protocols during a critical resource shortage event (CRSE). In Section 6.1, the CRAG developed a mechanism that the Planning Unit will use to help it decide whether, in the midst of a disaster, the development of an Ad Hoc Protocol is required. In Section 6.2, the CRAG developed the infrastructure which will allow a selected group to develop the actual content of an Ad Hoc Protocol. In this Section 6.3, the CRAG will develop a standard mechanism for communicating important information about the Ad Hoc Protocols to a variety of audiences. This will become part of the overarching communication strategy developed in Chapter 10.

Why is this section included in the Planning Guide?
During a CRSE, the Planning Unit will find it difficult to invest the time to develop a process for communicating information regarding Ad Hoc Protocols to appropriate organizations and individuals. Development of such a mechanism during the planning process will be crucial for keeping hospital(s) and other providers in the Planning Unit updated on the creation, implementation, content, and operationalization of Ad Hoc Protocols during a CRSE. Without proper communication of the status and content of these newly developed Protocols, they will be of little value in addressing the CRSE. Thus, during this Section 6.3, the CRAG will develop mechanisms that will support the communication of
important information regarding the Ad Hoc Protocols to relevant audiences during a disaster.

**ACTION ITEMS**

- Identify the various audiences that will need to be informed about the creation, implementation, content, and operationalization of Ad Hoc Protocols.

- Identify the mechanisms that will be used to keep each identified audience updated and informed about the creation, implementation, content, and operationalization of Ad Hoc Protocols.

- Determine how the decision to create an Ad Hoc Protocol will be communicated to each identified audience, if at all, and who will be responsible for these communications.

- Determine how the content of an Ad Hoc Protocol will be communicated to each identified audience, if at all, and who will be responsible for these communications.

- Develop “template” messages that can be adapted to each identified audience, the specifics of the actual disaster or emergency, and the content of the Ad Hoc Protocol(s).

- Determine what information the public information officers will need to develop or finalize messages regarding the Ad Hoc Protocol(s) and how they will obtain this information.

**Helpful Hints for Implementation**

💡 In determining the type of information to be communicated, consider that different information will be disseminated to different groups. The public, for instance, may be given less detailed information regarding the Ad Hoc Protocol than that provided to clinicians providing care. Further, certain healthcare providers, especially those involved in allocation and modification decision-making, will be provided the most detailed information regarding creation, implementation, content, and operationalization of the Ad Hoc Protocols.

💡 It may be unrealistic to rely on normal methods of communication during a disaster because of resource shortages or lack of communication infrastructure. For instance, wireless networks, information technology platforms and power may be interrupted during a disaster. Staff meetings may not be appropriate during a pandemic because of social distancing concerns. Consider implementing other communications mechanisms specific to disaster situations.
Because Ad Hoc Protocols will be developed and implemented quickly in the midst of the disaster, there will not be time to develop lengthy messages regarding their creation, implementation, content, and operationalization. This makes the development of comprehensive template messages as part of the planning process especially important.

Consider that during a CRSE, messages to the public regarding the necessity of Ad Hoc Protocols will need to emphasize that clinicians and staff are doing everything possible to maximize available resources. Such notification will help establish the expectation that standards of care have been altered in accordance with planned algorithms and procedures.

See Chapter 10 for more detailed information about creating communication plans tailored to each specific audience – providers, patient, partners, the public, the press, and politicians.
CHAPTER 7:  
COORDINATION WITH HMDOs

7. Engage in collaborative planning and coordination with other Health and Medical Delivery Organizations

The complete healthcare delivery model will vary from community to community but usually includes a complex combination of pre-hospital, hospital, post-hospital, outpatient, home care, retail, safety net, and other community providers (collectively, “Health and Medical Delivery Organizations” or “HMDOs”). Any disaster or other emergency that is disruptive enough to create a CRSE for one HMDO is also going to significantly impact other HMDOs. While each event is unique, the ability of all HMDOs to render care is likely to be affected.

During “normal” times, all HMDOs have varying degrees of interaction. Based on the type of HMDO, these interactions may be more or less extensive and may be the result of varying degrees of planned clinical and managerial integration. During a disaster which places stress on the healthcare system, each HMDO may need to rely more heavily on other types of HMDOs to care for patients.

The member(s) of the Planning Unit must recognize its interdependencies during a disaster and collaboratively plan with other HMDOs to ensure a coordinated response to CRSEs. This chapter addresses the planning considerations the Planning Unit should consider in conjunction with other HMDOs.

Introduction

What we call the “healthcare delivery system” is a complex mosaic of distinct individuals and organizations. There is staggering diversity in the composition of this mosaic across communities, regions, states, and the nation. Regardless of whether one looks at the healthcare delivery system “vertically” (i.e., from pre-hospital EMS care through hospital to post-hospital long term care or home care) or “horizontally” (e.g., inpatient vs. outpatient, “for profit” vs. “not for profit”) the diversity and complexity of the delivery system is apparent. The Critical Resource Shortages Planning Guide (Planning Guide) and Hospital Implementation Guide refer to the complete array of every person or organization that is involved in the delivery of healthcare services as Health and Medical Delivery Organizations (HMDOs).

Today, the level of interaction related to patient care among HMDOs varies greatly from no interaction at all to daily interaction. Regardless of their relationships today, during a critical resource shortage event (CRSE), all HMDOs will need to interact and rely on each other more heavily to produce an effective response to the event and provide the best care possible under the circumstances. Because of the wide range of relationships today, this interaction and reliance will not happen by accident. It will only occur as a result of dedicated planning efforts. This
Chapter outlines several steps to help the hospital(s) in the Planning Unit engage and coordinate with other HMDOs.

**Responsibility**
Critical Resource Advisory Group (CRAG) or its assigned delegates

**In this Chapter you will:**
- Identify with which HMDOs the Planning Unit will engage in coordinated critical resource shortage response planning.
- Create a communication strategy with other HMDOs about the Planning Unit’s CRSRP and associated Protocols.
- Understand how other HMDOs’ responses to a CRSE may impact the member(s) of the Planning Unit.
- Engage in discussions with other HMDOs about how they might change their scope of services during a disaster based on the Planning Unit’s CRSRP and associated Protocols.
- Determine whether the member(s) of the Planning Unit will participate in any cooperative initiatives with other HMDOs.
- Establish parameters around the type of documentation needed to support the relationship between the member(s) of the Planning Unit and other HMDOs.
COORDINATION WITH HMDOs
SECTION 7.1

7.1. Identify with which HMDOs the Planning Unit will engage in coordinated critical resource shortage response planning.

There are various types of providers that are included under the title of HMDOs. Recognize that collaboration with each type of HMDO may be slightly different based on the HMDO’s role in the healthcare system. Given the sheer number of HMDOs, however, it will be difficult for the CRAG to establish a collaborative planning relationship with all HMDOs. Instead, the CRAG should engage those types of HMDOs that will have the most significant impact on the ability of the member(s) of the Planning Unit to effectively implement the CRSRP.

What is the goal of this section?
The goal of this section is to identify all Health and Medical Delivery Organizations (HMDOs) that operate within the Planning Unit.

How does this section fit into the overall planning process?
Before the hospital(s) in the Planning Unit can collaborate and coordinate with HMDOs, they must identify and determine with which HMDOs they are going to work. Once identified, the hospital(s) in the Planning Unit will create a communication strategy (Section 7.2), begin discussing how the Planning Unit’s and the other HMDOs’ Critical Resource Shortage Response Plans (CRSRPs) will impact each other (Sections 7.3 and 7.4), identify any collaborative relationships that can support an effective response to a critical resource shortage event (CRSE) (Section 7.5), and make decisions about obtaining “essential documentation” during the CRSE (Section 7.6).

Why is this section included in the Planning Guide?
While the hospital(s) in the Planning Unit may work with HMDOs everyday, they may not have thought about engaging in collaborative critical resource shortage response planning efforts with them. Given the sheer number of HMDOs, however, it will be difficult for the hospital(s) in the Planning Unit to establish a collaborative planning relationship with every individual HMDO. Instead, the hospital(s) in the Planning Unit should engage those types of HMDOs that will have the most significant impact on the ability of the Planning Unit to effectively implement its CRSRP.

Real World Example
An Implementation Team has decided that coordination with other HMDOs should be undertaken by each region in the state. The northwest region (i.e., the Planning Unit) is composed of five acute care hospitals. These five acute care hospitals are served by four EMS agencies, two private EMS companies, 17 nursing homes, one rehabilitation hospital, 14 hour agencies, 245 primary care physicians, and many other types of HMDOs. The Planning Unit determines that EMS’ and the nursing homes’ CRSRPs will have the greatest potential impact on the operations of the five hospitals during a CRSE so these two types of HMDOs are prioritized for collaboration.
ACTION ITEMS

☐ Identify all of the types of HMDOs with which the hospital(s) in the Planning Unit interact. Consider all types of HMDOs including, but not limited to:

- EMS providers
- Hospitals that are not included or do not already participate in the Planning Unit
- Non-hospital providers like long term care facilities, clinical laboratories, and imaging centers
- Federally Qualified Health Centers, Critical Access Hospitals and other specialized centers of care
- Community providers like primary care physicians, home health providers and free clinics

☐ If there are too many HMDOs to coordinate with, prioritize them to ensure the Planning Unit collaborates with those that will have the greatest impact on the operations of the hospital(s) in the Planning Unit during a CRSE.

- Give high priority to HMDOs that fall into the following categories:
  - HMDOs that may be able to help protect the hospital(s) in the Planning Unit during a CRSE by providing certain types of care or early triage
  - HMDOs that may pose a threat to the hospital(s) in the Planning Unit during a CRSE because they have the potential to transfer large numbers of patients to the hospital(s) in the Planning Unit

☐ Identify any government initiatives that are in place to assist HMDOs from different sectors in cooperation with each other and determine whether your Planning Unit, as well as the HMDOs you are coordinating with, are eligible for assistance related to such initiatives.

Helpful Hints for Implementation

💡 If your Planning Unit does not include at least all of the hospitals in a community, consider that other hospitals may be the Planning Unit’s first target for collaboration.

💡 When prioritizing HMDOs, consult the Planning Unit’s hazard vulnerability analysis. To the extent certain threats will have a disproportionate impact on a single type of HMDO, consider the need to prioritize this type of HMDO for collaboration. (Information regarding the hazard vulnerability analysis is available in Chapter 2.)
7.2. Create a communication strategy with other HMDOs about the Planning Unit’s CRSRP and associated Protocols.

There will likely be numerous HMDOs identified in Section 7.1. It is probably not realistic to expect the CRAG to communicate with each HMDO individually. Instead, it may be more appropriate and efficient for the CRAG to communicate with a central point of contact or some representative body of each type of HMDO. Regardless, the CRAG needs to create a strategy for communicating with all HMDOs before, during and after a CRSE.

What is the goal of this section?
The goal of this section is to create an effective means of communication between the hospital(s) in the Planning Unit and other Health and Medical Delivery Organizations (HMDOs).

How does this section fit into the overall planning process?
Once the Critical Resource Advisory Group (CRAG) has identified all types of HMDOs and, if necessary, prioritized them for collaboration, it must create an effective communication strategy. The communication strategy developed in this Section 7.2 will form the foundation upon which the collaborative relationship between the hospitals(s) in the Planning Unit and the HMDOs is built. This foundation will be used to discuss issues raised in the remainder of this Chapter 7.

Why is this section included in the Planning Guide?
Without a strategy for communicating with all HMDOs, the Planning Unit’s attempts to collaborate will likely fail. The hospital(s) in the Planning Unit must establish lines of communication that can be used to build relationships. Because these lines of communication may be different depending on whether the message is about pre-event preparedness, intra-event response, or post-event recovery, the Planning Unit needs to establish contacts for all three phases.

Real World Example
A county-wide group of hospitals is creating a CRSRP and has identified ten separate EMS providers in their area. They decide that it is unrealistic to attempt to collaborate with each individual EMS provider. They determine, however, that there is a regional organization of EMS providers that would be a good point of contact to begin collaborative discussions.

The CRAG also needs to recognize that it may be difficult to coordinate and collaborate with each HMDO on an individual basis. Instead, it may be more efficient for the Planning Unit to collaborate with a central body representing all of the HMDOs of a certain type. In other words, just like the hospitals within a certain area may have developed a Planning Unit to pursue coordination with other types of HMDOs, these other types of HMDOs may have a similar coordinating group that would make a good point of contact.
**ACTION ITEMS**

☐ Determine whether the hospital(s) in the Planning Unit should communicate with each individual HMDO or whether there are coordinating bodies that represent specific types of HMDOs with which it would be more appropriate or efficient to communicate.

- If such a coordinating body exists, can this body serve as the point of contact for collaboration prior to, during and after the critical resource shortage event (CRSE)? If not, the Planning Unit will need to identify different contacts for each phase of the event. For example, the Planning Unit may coordinate with a regional organization of EMS providers during pre-event planning, but it will need to communicate with each individual EMS provider during the actual event.

- If the Planning Unit will communicate with each individual provider, identify all of the HMDOs within each type of HMDO that is prioritized for collaboration.

☐ Identify who in the Planning Unit will be primarily responsible for collaborating with HMDOs.

- Determine whether the CRAG will engage in the collaborative discussions with other HMDOs or whether the CRAG will appoint an individual(s) to participate in these discussions.

- If the CRAG appoints an individual(s), consider the following.
  - It is better to identify positions and roles within the Planning Unit instead of individuals because individuals in these roles may change over time.
  - Will the individual position tasked with this responsibility be different prior to, during and after a CRSE?
  - Will the individual position tasked with this responsibility vary based on the type of HMDO with which the Planning Unit is collaborating?

☐ Identify a point of contact for the HMDOs or coordinating body of HMDOs with whom the Planning Unit will collaborate.

- It is better to identify positions and roles within these HMDOs or coordinating bodies instead of individuals because individuals in these roles may change over time.

- Consider whether the individual position tasked with this responsibility will be different prior to, during and after a CRSE. For example, the Planning Unit may be coordinating with an emergency planner in a nursing home during the planning phase, but it may be more appropriate to communicate with Incident Command during the actual event.

☐ Develop methods of communication for pre-event, intra-event, and post-event messaging.

- Consider e-mail, fax, teleconference, video-conference, and in-person meetings.
When selecting a communication method, consider confidentiality of the information being shared, efficiency in terms of time and resources, the nature of the event, and the nature of the information being shared.

Consider also that some traditional forms of communication (e.g., telephone) may not be available during a CRSE.

Helpful Hints for Implementation

💡 Recognize that HMDOs are all structured differently. Some are non-profit, others for-profit, and still others governmental. Some are private, unaffiliated HMDOs; others are affiliated with or owned by private health systems. Recognize these differences as they may impact how the HMDO will respond in a disaster.

💡 To the extent that all of the HMDOs of one type are structured differently, it may be difficult for one body to represent them and facilitate collaboration.

💡 Do not assume that traditional “trade associations” are the best point of contact for groups of HMDOs.
7.3. Understand how other HMDOs’ responses to a CRSE may impact member(s) of the Planning Unit.

It is important for the member(s) of the Planning Unit to understand that, just like them, all other HMDOs may face shortages of critical resources during a disaster. This could involve personnel, supplies, equipment, or critical support commodities. Shortages in some or all of these critical resources will require that these other HMDOs alter their operations during a disaster. If these other HMDOs do alter their operations, like the member(s) of the Planning Unit, they will likely do so in response to governmental emergency orders or to support their own continuity of operations. The member(s) of the Planning Unit needs to understand how these other HMDOs’ responses to a CRSE may impact them so that they can plan and respond accordingly.

What is the goal of this section?
The goal of this section is to understand how other Health and Medical Delivery Organizations’ (HMDOs) responses to a critical resource shortage event (CRSE) may impact the hospital(s) in the Planning Unit.

How does this section fit into the overall planning process?
In Sections 7.1 and 7.2, the Critical Resource Advisory Group (CRAG) identified the other HMDOs with which it will collaborate and established lines of communication with them. In this Section 7.3, the CRAG will use the lines of communication to obtain information about the other HMDOs’ plans to respond to a CRSE and the impact that such plans may have on the hospital(s) in the Planning Unit.

Why is this section included in the Planning Guide?
During a large-scale disaster or emergency, all HMDOs will feel the effects of a lack of critical resources. How certain HMDOs respond to the lack of critical resources may have a profound effect on the hospital(s) in the Planning Unit. For this reason, the hospital(s) in your Planning Unit must know and understand how all other HMDOs’ responses will impact them. With this knowledge, the hospital(s) in your Planning Unit can incorporate assumptions about this type of impact into their plans and prepare accordingly.

Real World Example
During a large scale event in which EMS providers experience a high demand for services and a high degree of absenteeism, it will be difficult for EMS providers to stay with patients that they bring to the ED until the patient can be seen by an ED physician. As a result, Longbridge EMS has decided that they will not stay with patients until they are seen. They will just deliver them to the ED and then leave to attend to other patients in need of emergency medical services. Hospitals in the Planning Unit need to know that this is Longbridge EMS’ plan so that the hospitals can plan accordingly.
ACTION ITEMS

☐ Discuss with other HMDOs whether they have created a Critical Resource Shortage Response Plan (CRSRP) in anticipation of shortages of critical resources.
  ➢ If not, are they planning to do so?
  ➢ Do or will such plans include specific Protocols?
  ➢ If they are doing such planning, who is responsible for it? Have the HMDOs engaged in any type of centralized planning or is each HMDO undertaking its own planning initiative?

☐ Determine whether these HMDOs are planning to expand or reduce the scope of services they provide during a CRSE. For example, do some HMDOs plan to close their operations during a CRSE?

☐ Determine whether other HMDOs plan to modify, reduce or limit the type of documentation they keep related to care provided to patients during a CRSE. If so, how will such modifications impact other HMDOs who are caring for the patient?

☐ Determine if the other HMDOs’ response plans are based on any assumptions about the way the hospital(s) in the Planning Unit will operate during a disaster or emergency. If so, be aware of these assumptions and discuss them with the other HMDOs to either validate or modify the assumptions.

☐ Understand how the other HMDOs’ response plans will impact the hospital(s) in the Planning Unit.

☐ Identify any information that your Planning Unit can collect and provide to HMDOs during a CRSE to help these HMDOs evaluate, re-assess, and revise their response plans.

Helpful Hints for Implementation

🎉 Members of the CRAG may be surprised and concerned by some of the other HMDOs’ response plans. Remind them that if HMDOs do alter their operations, they will likely do so in response to governmental emergency orders or to support the HMDO’s continuity of operations. This “continuity of operations” concept is important for the CRAG to understand. It means that other HMDOs will be making modifications to the way they operate in order to continue operations during a CRSE. Without these modifications, the other HMDOs may have to close altogether. With this context, the CRAG members may not be as critical of the other HMDOs’ response plans.
COORDINATION WITH HMDOs
SECTION 7.4

7.4. Engage in discussions with other HMDOs about how they might change their scope of services during a disaster based on the Planning Unit’s CRSRP and associated Protocols.

To use the CRSRP and associated Protocols most effectively, the member(s) of the Planning Unit may ask other types of HMDOs to change their scope of services during a CRSE. This change can be either an expansion or a reduction in the services they normally provide.

Introduction to Change in Scope of Services
The Planning Unit’s Critical Resource Shortage Response Plan (CRSRP) and associated Protocols will be designed to enable the hospital(s) in the Planning Unit to appropriately modify the way they provide care by or with a critical resource and, in extreme situations, allocate the critical resource. Even though these Protocols will be focused on the hospital(s) in the Planning Unit, they may have implications for other Health and Medical Delivery Organizations (HMDOs) with whom the hospital(s) in the Planning Unit interact. To use the Protocols most effectively, the hospital(s) in the Planning Unit may ask other types of HMDOs to change their scope of services during a critical resource shortage event (CRSE). This change can be either an expansion or a reduction in the services that the other HMDOs normally provide. Asking other HMDOs to change their scope of practice is a complex, difficult and time-consuming task in the best of circumstances. There are numerous legal, regulatory and operational issues that must be considered and resolved. During a CRSE, the hospital(s) in your Planning Unit and the other HMDOs that you are approaching with this request will not have the time or the resources to dedicate to these types of discussions. Recognizing this, the hospital(s) in your Planning Unit should talk with HMDOs now, in the planning phase, about changes to their scope of service, before a CRSE occurs. Sections 7.4.1 and 7.4.2 provide an outline of the questions and issues to raise when talking with HMDOs about how they might change their scope of

Real World Example
Plainview General Hospital, along with the other hospitals in its region, has developed a CRSRP which includes a Protocol for ventilator allocation. The Protocol clearly states that when demand for ventilators exceeds supply, no patient over 85 years of age will receive ventilator support. These patients will receive nasal cannula oxygen instead. During a CRSE where demand for ventilators exceeds supply, an EMS provider is called to the residence of a 93 year old Plainview resident who experiencing grave difficulties breathing. Should EMS intubate the patient in the field and transport him to Plainview General? If the EMS provider intubates the 93 year old patient in the field, how will this impact care provided to the patient upon arrival at Plainview General? Should or will EMS providers consider withholding this service based on the Plainview Protocol?
practice to support the Planning Unit’s use of its CRSRP and associated Protocols during a CRSE.
COORDINATION WITH HMDOs
SECTION 7.4.1

7.4.1. Determine whether other HMDOs will expand their scope of services.

In a CRSE, it is possible that a component of your Planning Unit’s CRSRP or associated Protocols will be to ask other HMDOs to expand the scope of services they provide in an effort to decompress the member(s) of the Planning Unit. In some cases, this will mean that some HMDOs are asked to provide services that they do not normally provide and that they may even be prohibited from providing under state law or regulation. Obviously, these regulatory issues must be addressed by the other HMDOs, the member(s) of the Planning Unit and the relevant governmental agencies.

What is the goal of this section?
The goal of this section is to determine whether other types of Health and Medical Delivery Organizations (HMDOs) will expand their scope of services based on the Planning Unit’s Critical Resource Shortage Response Plan (CRSRP).

How does this section fit into the overall planning process?
In Section 7.3, the hospital(s) in the Planning Unit collaborated with other types of HMDOs to understand how these other HMDOs’ responses to a critical resource shortage event (CRSE) may impact the hospital(s) in the Planning Unit. In Section 7.4, the hospital(s) in the Planning Unit will help the other types of HMDOs understand how the Planning Unit’s CRSRP may impact them. This Section 7.4.1 encourages the CRAG to talk to other HMDOs about ways these other HMDOs can expand their scope of services in support of the Planning Unit’s CRSRP. Section 7.4.2 encourages the CRAG to talk to other HMDOs about ways they can reduce their scope of services in support of the Planning Unit’s CRSRP.

Why is this section included in the Planning Guide?
The Planning Unit will implement the CRSRP and associated Protocols in response to a disaster that has caused a CRSE. By definition, if the Planning Unit implements a Protocol, the hospital(s) in the Planning Unit do not have enough resources to continue care as “normal.” They must change the way that they provide care by or with a critical resource and, in some cases, allocate it. It is possible that the hospital(s) in your Planning Unit may ask other types of HMDOs to expand their scope of practice to help your members respond effectively to the CRSE. This expansion in

Real World Example
Plainview General Hospital, along with the other hospitals in its Planning Unit, has developed a CRSRP which includes a Protocol for ventilator allocation. The Protocol clearly states that when demand for ventilators exceeds supply, no patient over 85 years of age will receive ventilator support. These patients will receive nasal cannula oxygen instead. The hospital(s) in the Planning Unit want to ask EMS providers to expand their scope of services by transporting all patients in need of mechanical ventilation who are over age 85 to an alternate care facility that is 10 miles outside of the Planning Unit.
scope could take many forms depending on the type of HMDOs with which the Planning Unit coordinates. It may involve asking long term care providers to expand their scope to limit the number of transfers to the hospital(s) in the Planning Unit. It may involve asking EMS to provide additional services in the field to either “treat and street” or to continue providing services to the patient once the patient reaches a hospital emergency department. These are complex and important discussions that should occur as part of the Planning Unit’s critical resource shortage response preparedness efforts.

**ACTION ITEMS**

- Determine if there are any services that other HMDOs can provide that will offer relief to the hospital(s) in the Planning Unit.
  - Consider the following types of services:
    - Clinical laboratory testing
    - Diagnostic imaging
    - Pre-natal care and delivery services for non-complicated deliveries
    - Palliative or comfort care
    - Sub-acute care
    - Triage
  - Consider individually how each type of HMDO identified in Section 7.1 could expand its scope of services.

- Determine who from the Planning Unit should be engaged in discussions with other HMDOs regarding expansion of services during a CRSE.
  - Will this person(s) be the same person(s) tasked with general responsibility for the Planning Unit’s coordination efforts in Section 7.2?
  - If not, will this person(s) change based on the type of HMDO involved in the discussions?
  - If not, will this person(s) change based on the type of expansion that is being requested?
  - If not, how will this person(s) interact with the person(s) tasked with general responsibility for the Planning Unit’s coordination efforts in Section 7.2?

- Begin discussions with other HMDOs regarding expansion.
  - Is such an expansion feasible given the legal structure and operational capabilities of the other HMDO, the type of expansion identified, and the resources required to provide this care?
➢ If the other HMDOs are willing to expand their scope of services, is there anything that the hospital(s) in the Planning Unit can do to support these efforts (e.g., stockpile necessary supplies, provide training)?

☐ Consult legal counsel for advice on any legal or regulatory issues presented by the proposed expansion in services.

**Helpful Hints for Implementation**

小心 If the other HMDOs have not yet started planning to respond to CRSEs, talking to them about expanding their scope of service will be even more difficult. It will require education about not only the Planning Unit’s CRSRP and associated Protocols, but the concepts of a CRSE in general.

小心 Anticipate that some of the other types of HMDOs who are approached about expanding their scope of practice to support the hospital(s) in the Planning Unit during a CRSE may have concerns and be unwilling to commit to any expansion. While not ideal for the Planning Unit hospital(s), this is an understandable reaction and does not mean that the process has failed. The hospital(s) in the Planning Unit will need to incorporate these results into the assumptions that support its CRSRP and other disaster preparedness plans and revise the plans accordingly.

小心 Since these discussions will likely involve sensitive issues for both the hospital(s) in the Planning Unit and the other HMDOs, having a strong facilitation resource will be particularly important.

小心 The legal and regulatory issues involved in expanding an HMDO’s scope of practice can be significant. If they can be resolved, it will likely take a lot of time and discussions with state agencies to obtain approval for such expansions. You should account for this in your timeline for this activity.
7.4.2. Determine whether other HMDOs will reduce their scope of services.

In a CRSE, it is possible that one component of your Planning Unit’s CRSRP or associated Protocols will be to ask other HMDOs to reduce the scope of services they provide in an effort to allow the member(s) of the Planning Unit to most effectively and efficiently apply the CRSRP and associated Protocols. The CRAG should engage other HMDOs in these discussions now to avoid conflict and confusion during an event.

What is the goal of this section?
The goal of this section is to determine whether other types of Health and Medical Delivery Organizations (HMDOs) will reduce their scope of services based on the Planning Unit’s Critical Resource Shortage Response Plan (CRSRP).

How does this section fit into the overall planning process?
In Section 7.4.1, the CRAG were encouraged to talk to other HMDOs about ways they can expand their scope of services in support of the Planning Unit’s CRSRP. This Section 7.4.2 encourages the CRAG to talk to other HMDOs about ways they can reduce their scope of services in support of the Planning Unit’s CRSRP.

Why is this section included in the Planning Guide?
During “normal” times, the care provided to patients prior to coming to the hospital can impact the type of services that the hospital provides. This will be just as true during a critical resource shortage event (CRSE). A Protocol will require the hospital(s) in a Planning Unit to modify the way that they provide care by or with a resource or allocate the resource. If care provided to a patient by other types of HMDOs prior to reaching the hospital will impact the ability of the hospital(s) in the Planning Unit to comply with the CRSRP, the Planning Unit should discuss with these other HMDOs whether they can limit the provision of such care. These discussions will be just as difficult as discussions about expanding the scope of practice.

Real World Example
Plainview General Hospital, along with the other hospitals in its Planning Unit, has developed a CRSRP which includes a Protocol for ventilator allocation. The Protocol clearly states that when demand for ventilators exceeds supply, no patient over 85 years of age will receive mechanical ventilation. These patients will receive nasal cannula oxygen instead. A nursing home has a 95 year old patient experiencing grave difficulties breathing. The nursing home has already given the patient nasal cannula oxygen, but since the patient is still experiencing difficulties breathing, the nursing home wants to transfer the patient to Plainview General for mechanical ventilation. Knowing that the patient will not receive a ventilator at Plainview, should the nursing home transfer him? If the nursing home does transfer the patient and Plainview does not admit him, will the nursing home allow the patient to return?
and probably even more so.

**ACTION ITEMS**

- Determine if there are any services that other HMDOs may provide that will negatively impact the ability of the hospital(s) in the Planning Unit to comply with Protocols.
  - Consider individually the care provided by each type of HMDO identified in Section 7.1.

- Determine who from the Planning Unit should be engaged in discussions with other HMDOs regarding expansion of services during a CRSE.
  - Will this person(s) be the same person(s) tasked with general responsibility for the Planning Unit’s coordination efforts in Section 7.2?
  - If not, will this person(s) change based on the type of HMDO involved in the discussions?
  - If not, will this person(s) change based on the type of expansion that is being requested?
  - If not, how will this person(s) interact with the person(s) tasked with general responsibility for the Planning Unit’s coordination efforts in Section 7.2?

- Begin discussions with other HMDOs regarding reduction in scope of services.

- Consult legal counsel for advice on any legal or regulatory issues presented by the proposed reduction in services.

**Helpful Hints for Implementation**

💡 If the HMDOs have not yet started planning to respond to CRSEs, talking to them about reducing their scope of service will be even more difficult. It will require education about not only the Planning Unit’s CRSRP and associated Protocols, but the concepts of a CRSE in general.

⚠️ Anticipate that some of the HMDOs who are approached about reducing their scope of practice during a CRSE may have concerns and be unwilling to commit to any reduction. While not ideal for the hospital(s) in the Planning Unit, this is an acceptable result and should not be seen as a failure of the planning process. The hospital(s) in the Planning Unit will need to incorporate these results into the assumptions that support its CRSRP and other disaster preparedness plans and revise the plans accordingly.
Since these discussions will likely involve sensitive issues for both the hospital(s) in the Planning Unit and the other HMDOs, having a strong facilitation resource will be particularly important.

The HMDOs who are approached about reduction in services may have significant concerns about liability for reducing services. These concerns must be taken seriously and addressed by legal counsel.
COORDINATION WITH HMDOs
SECTION 7.5

7.5. Determine whether the member(s) of the Planning Unit will participate in any cooperative initiatives with other HMDOs.

In addition to collaborating with other HMDOs, the member(s) of the Planning Unit may actually want to enter into cooperative initiatives with these other HMDOs to support a response to a CRSE. These initiatives can take many forms including, but not limited to, cooperative stockpiling agreements, ambulance re-stocking agreements or transfer agreements. The CRAG should explore such initiatives to determine whether they are feasible and desirable.

What is the goal of this section?
The goal of this section is to identify and pursue any desirable cooperative initiatives with Health and Medical Delivery Organizations (HMDOs).

How does this section fit into the overall planning process?
Chapter 7 addresses collaboration and coordination among the hospital(s) in the Planning Unit and other types of HMDOs. During the course of your communication and collaboration with these HMDOs, certain cooperative initiatives that would enhance the overall response to a critical resource shortage event (CRSE) may present themselves. This Section 7.5 will help the Critical Resource Advisory Group (CRAG) identify and evaluate these initiatives.

Why is this section included in the Planning Guide?
An effective response to a CRSE will require that all HMDOs work together. When building these collaborative relationships as part of planning activities, certain cooperative initiatives that would benefit all parties and enhance the overall response to a CRSE may present themselves. The hospital(s) in the Planning Unit and the other HMDOs with whom they are collaborating are encouraged to take advantage of these cooperative initiatives and even seek them out. Some examples of these initiatives include, but are not limited to, cooperative stockpiling initiatives, ambulance re-stocking agreements, or modified transfer agreements. Investigate these opportunities, determine whether they will be beneficial, and, if so, pursue them as part of your preparedness activities.

ACTION ITEMS

☐ Determine whether any cooperative relationships already exist between the hospital(s) in your Planning Unit and other HMDOs.

➢ Are these relationships still applicable or valuable during a CRSE?
Do these relationships need to be modified in any way to meet the unique demands of a CRSE?

☐ Are there any cooperative initiatives that do not currently exist but could be beneficial?

☐ Engage counsel to address the legal issues involved in modifying or creating a cooperative initiative.

**Helpful Hints for Implementation**

💡 Existing cooperative relationships may be at the individual HMDO level. If you are using a Planning Unit that is larger than a single HMDO, you will have to consider how to address this. You can ask the HMDOs involved in the existing relationship if they are interested in expanding it to the Planning Unit level. If they are not interested, then they will be responsible for modifying their relationship, if necessary. This should not impede the work of the Planning Unit.

💡 Some hospitals have entered into cooperative purchasing agreements with other HMDOs for critical supplies. Because cooperative purchasing can entitle the participants to better prices on supplies, these arrangements may be attractive. If the hospital(s) in the Planning Unit will pursue a cooperative purchasing or stockpiling initiative with other HMDOs, there are a host of issues that the parties must consider. These issues include management and distribution of the stockpile, the impact of any distributions from the Strategic National Stockpile (SNS), and the impact of statutes and regulations on the structure of the initiative.

💡 To the extent possible, try to use existing communication channels to begin discussions about cooperative initiatives. For example, if your Planning Unit is communicating with EMS providers at a regional level, then perhaps ambulance re-stocking initiatives should be implemented at a regional level as well.

💡 Any cooperative initiative should probably be memorialized in a formal legal document (e.g., memorandum of understanding, contract). Expect counsel to be heavily involved in developing these documents. It will probably be helpful to engage counsel who has general experience with healthcare issues and specific expertise in emergency preparedness issues.
COORDINATION WITH HMDOs
SECTION 7.6

7.6. Establish parameters around the type of documentation needed to support the relationship between the member(s) of the Planning Unit and other HMDOs.

As in “normal” times, documentation will be essential during a CRSE. What “essential documentation” is, however, will likely change during the event. Based on the definition of “essential documentation” created in Section 4.5, the CRAG should work with other HMDOs to collectively determine how “essential documentation” will be collected and shared during a CRSE.

What is the goal of this section?
The goal of this section is to determine how “essential documentation” will be collected and shared among the hospital(s) in the Planning Unit and other Health and Medical Delivery Organizations (HMDOs) during a critical resource shortage event (CRSE).

How does this section fit into the overall planning process?
In Section 4.5, the Critical Resource Advisory Group (CRAG) defined “essential documentation” for purposes of a CRSE. In this Section 7.6, the CRAG is encouraged to share that definition with the other HMDOs with whom it is coordinating and develop mechanisms for exchanging “essential documentation” with these other HMDOs during a CRSE.

Why is this section included in the Planning Guide?
In “normal” times, documentation is an essential part of the healthcare process regardless of the site of service. Documentation enables the proper care of patients and provides information necessary for reimbursement and quality assessment activities. During a CRSE, documentation will still be of critical importance, but it will not be realistic to demand extensive documentation for each patient. In light of the anticipated surge in patients and staffing shortages, the hospital(s) in the Planning Unit should expect that documentation of care will be degraded across the board for all HMDOs. There is benefit in having all HMDOs operating consistently during a CRSE in terms of modified documentation. For this reason, the Planning Unit should talk with the other HMDOs with whom it is collaborating about the concept of “essential documentation” and how to share such documentation among HMDOs during a CRSE.
ACTION ITEMS

☐ Determine whether other HMDOs will be able to continue providing the same amount of documentation during a CRSE as they do during “normal” times. If the assumption is that they will, this assumption should be thoroughly tested.

☐ Share the definition of “essential documentation” developed by the CRAG in Section 4.5 with other HMDOs.

☐ To the extent that the hospital(s) in your Planning Unit or the other HMDOs will not be able to continue documenting as they do during “normal” times, identify the types of documentation that the hospital(s) in your Planning Unit will need from other HMDOs for the care and safety of the patient.
   ➢ What type of information is collected today for the care and safety of the patient?
   ➢ What is the minimum amount of information about the patient that the hospital(s) in your Planning Unit will need from other HMDOs to care for the patient?

☐ Identify general types of documentation that the hospital(s) in your Planning Unit will need from other HMDOs to support the Planning Unit’s Protocols (see Chapter 5).

☐ Identify the types of documentation that the hospital(s) in your Planning Unit will need from other HMDOs to obtain reimbursement for care provided.
   ➢ Consult with billing staff to understand what type of documentation is normally required for reimbursement purposes.
   ➢ Identify the types of “normal” documentation that may prove difficult to obtain during a CRSE and explain why it will be difficult.
   ➢ Talk with the billing staff about these concerns and suggested modifications.
   ➢ Encourage the Chief Financial Officer to begin discussions with insurers about the suggested modifications and the impact on reimbursement.

☐ Create mechanisms for efficiently sharing “essential documentation” among the hospital(s) in your Planning Unit and other HMDOs during a CRSE.

Helpful Hints for Implementation

🎉 When creating mechanisms for efficiently sharing “essential documentation,” consider whether the hospital(s) in the Planning Unit and other HMDOs can take advantage of any electronic health information exchange mechanisms.

🎉 See Section 4.5 for additional Helpful Hints regarding “essential documentation.”
CHAPTER 8: EVALUATION AND MAINTENANCE

8. Determine how the Critical Resource Shortage Response Plan will be evaluated and maintained

Once the basic components of a CRSRP are developed, the CRAG will need to determine how to evaluate and maintain the Plan over time. The evaluation and maintenance elements of the CRSRP are no less crucial than the operational and ethical frameworks and the Protocols themselves. Without proper evaluation and maintenance what appears to be a good plan on paper may not work in the midst of an event.

Introduction

It is difficult for many of us to imagine the critical resource shortage events (CRSE) that will require implementation of the Critical Resource Shortage Response Plan (CRSRP) and its associated Protocols. While CRAG members will certainly develop an appreciation for these events over the course of the planning process, without having experienced one, it may be hard from them to understand how the CRSRP will be implemented during an actual CRSE. To help them gain this understanding and improve the CRSRP and associated Protocols, the CRAG should conduct activities designed to test and evaluate the CRSRP and Protocols. Participating in these activities helps to make “real” the specifics of critical resource shortage response planning. These activities also will highlight both the strengths and weaknesses of the CRSRP. The strengths can be replicated in other parts of the CRSRP, Protocols or other disaster plans and the weaknesses can be addressed through a revision. In addition to testing and evaluation of the CRSRP, the CRAG should develop mechanisms to ensure that the CRSRP is reviewed periodically and kept as up to date as possible. Having a stringent evaluation and revision process for the CRSRP will ensure that it remains a living document that can be effectively implemented during a CRSE.

Responsibility

Critical Resource Advisory Group (CRAG)

In this Chapter you will:

✓ Conduct activities to evaluate the CRSRP.
✓ Revise the CRSRP as necessary.
✓ Create a mechanism for periodically reviewing and updating the CRSRP.
EVALUATION AND MAINTENANCE
SECTION 8.1

8.1. Conduct activities to evaluate the CRSRP.

Once the full content of the CRSRP is created, it must be evaluated to determine whether it can be implemented to accomplish its intended purposes. This evaluation can take many different forms including a simulation, a tabletop exercise or a drill. Whatever form it takes, the evaluation should be designed to determine whether the CRSRP will work in the event of a critical resource shortage event. Like all other emergency and disaster response plans, evaluations of the CRSRP should be conducted on a routine basis.

What is the goal of this section?
The goal of this section is to conduct activities to evaluate and test the Critical Resource Shortage Response Plan (CRSRP).

How does this section fit into the overall planning process?
Developing a comprehensive plan to deal with shortages of critical resources is certainly the centerpiece of the Critical Resource Shortages Planning Guide (Planning Guide). It is vitally important that the CRAG develop mechanisms to evaluate the effectiveness of this CRSRP. The primary evaluation mechanisms will likely be testing in some form or another. This will help the CRAG identify any weaknesses in the CRSRP or CRSRP components, like Protocols. Once identified, the CRAG can address these weaknesses (see Section 8.2).

Why is this section included in the Planning Guide?
Emergency planners know that all disaster plans should be tested to evaluate their effectiveness. The CRSRP is no different. The CRAG should test the CRSRP components during their development and then test the overall effectiveness of the CRSRP upon completion. Such testing can take various forms including simulations, tabletop exercises and drills. Each type of testing tool offers various advantages or disadvantages and can be used at different stages of the development process. If designed properly, testing activities can uncover weaknesses in the CRSRP which the CRAG can then address and remedy. Testing must not be avoided for fear of discovering that the Plan, over which many qualified individuals have labored, is not sufficient. It is far better to identify any weaknesses in the Plan during

Real World Example
A Protocol Development Subcommittee at Greenfield General Hospital has been charged with creating a Protocol to allocate inpatient beds during a CRSE. After spending time developing an initial draft of the Protocol, the Subcommittee participates in a small simulation to test the Protocol. The simulation involves the use of 25 test patients. By using the Protocol to allocate inpatient beds among these 25 test patients, the Subcommittee discovers that the predictive scoring system used in the Protocol is not as useful as the Subcommittee had thought it would be. The Subcommittee should now revise the Protocol accordingly.
testing instead of during an event.

Testing can also help those who will be responsible for implementing the Plan practice their roles. When those charged with carrying out the Plan can participate in a well designed exercise, they quickly grasp the challenge of dealing with a resource scarce environment. Such practice is invaluable when the time comes to actually activate and use the CRSRP during a critical resource shortage event (CRSE).

**ACTION ITEMS**

☐ Determine at what point(s) during and after the planning process the CRSRP components or CRSRP itself will be tested. What are the logical milestones at which the CRAG or Protocol Development Subcommittees should invest the time to design and execute a testing activity?

☐ Determine the goal of the testing at these points in the process. Is the primary goal to identify weaknesses in the CRSRP, to allow those involved in its implementation to practice, or some other goal?

☐ Identify testing methods. Consider the following:

- Tabletop exercises: These exercises – usually conducted around a conference table – involve the discussion of issues and “what-if” situations, and the development of response options.  
- Drills: These are relatively simple, narrowly-focused, performance-related exercises.
- Field training exercises: These are more complex exercises that stress a “hands-on,” performance-oriented approach. Such exercises involve the actual deployment of people and equipment to the site of a simulated disaster. Since these exercises may require the construction of fairly elaborate mock-ups or the use of actual facilities, they can be very expensive and time consuming.

☐ Based on the goal of the testing, select the proper testing method.

☐ Develop the test activity.

- Use realistic assumptions and scenarios.
- To the extent that providers will be asked to make clinical decisions, provide them with real clinical data.

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9 Ibid.
10 Ibid.
Make sure that those who will use the CRSRP participate in the testing activity.

Only make the testing activity as long as it needs to be to accomplish the intended purpose. For instance, if the CRAG is evaluating a first draft of a Protocol, it will probably want to participate in a smaller scale activity than if it was evaluating a final Protocol.

Immediately following the test activity, conduct a “hotwash.” A “hotwash” is an immediate “after-action” discussion with the participants to capture their impressions and evaluate the test activity.

Create a summary of the findings of the test activity that can be distributed to all involved and reviewed promptly after the conclusion of the testing activity. Any identified weaknesses should be addressed as quickly as possible and fully documented (see Section 8.2.).

Helpful Hints for Implementation

Testing can serve to kick-off, revitalize or galvanize planning efforts. If done properly, the testing activity can make “real” the types of decisions that providers will confront during a CRSE. This can be a very energizing process that will improve the level of engagement in the planning process.

To make the testing activity as realistic as possible, use real patient data. Make sure to redact any identifying information from the data. Remember, however, that using inaccurate data or unrealistic scenarios can be a distraction for the participants in the testing activities.

If you created scenarios in Section 2.3 to test the surge plans of critical resources, consider expanding on these to test the CRSRP. Not only may they be familiar to participants, but they should reflect a “worst case” scenario.

To gauge the effectiveness of the CRSRP or its components, try conducting the testing activity with various groups. If you are testing the effectiveness of the CRSRP, consider using both CRAG members and those who have not been involved in the planning process. Comparing the results of the testing activities in these two groups will likely provide helpful insights.

Make sure that your testing activities ask the participants to make concrete decisions or take definitive actions. This will help the participants to be more engaged.

Evaluation activities should be conducted fairly regularly during and after the CRSRP development process. The finalized CRSRP should be tested at least annually along with the Planning Unit or the Planning Unit hospitals’ other emergency operations plans.
8.2. Revise the CRSRP as necessary.

The CRSRP should be revised based on the results of, and lessons learned from, the evaluation activities conducted pursuant to Section 8.1, changed circumstances in the Planning Unit, or after an actual critical resource shortage event. These revisions are a critical step in developing and maintaining a successful CRSRP.

What is the goal of this section?
The goal of this section is to revise the Critical Resource Shortage Response Plan (CRSRP) as necessary based on the evaluation activities conducted in Section 8.1.

How does this section fit into the overall planning process?
In Section 8.1, the Critical Resource Advisory Group (CRAG) created and conducted various activities to test the effectiveness of the CRSRP, noting any weaknesses that need to be addressed. In this Section 8.2, the CRAG will make revisions to the CRSRP to address these weaknesses. These revisions, which will take place during the planning process, will be in addition to any revisions that are made to the CRSRP during a critical resource shortage event (CRSE) in accordance with the infrastructure developed for intra-event revisions in Section 4.4.

Why is this section included in the Planning Guide?
During the evaluation process, the CRAG will inevitably identify certain weaknesses in the CRSRP. These weaknesses should be addressed and remedied so that they will not impair your Planning Unit’s response to a CRSE. The way in which these issues are addressed will depend on where your Planning Unit is in the planning process. If the CRAG is still developing the component of the CRSRP that it tested, the revision process will likely be less formal. It will become just another part of the development process. If the component or CRSRP has been finalized, the revision process may be more formal and require that the CRAG be reconvened and that the revised component or CRSRP be re-approved (see Chapter 9).

ACTION ITEMS

☐ Review the summary of the evaluation activity to identify weaknesses in the CRSRP.

☐ Determine how to approach revisions to the CRSRP to correct the weakness. Consider where the CRSRP is in the development process.

☐ If necessary, identify an individual(s) who will be responsible for ensuring that appropriate revisions are made to address the weaknesses.
☐ If the CRAG is no longer meeting regularly, reconvene the CRAG to address the identified weaknesses.

☐ Make the proper revisions to the CRSRP.

☐ Fully document this review and revision process.

Helpful Hints for Implementation

💡 Not every weakness that is recognized during the evaluation process may lend itself to correction. This should not be viewed as a sign of failure. Some weaknesses may just be inherent to the CRSRP. These weaknesses should be acknowledged so that the hospital(s) in the Planning Unit can appropriately compensate for them during its response to a CRSE.

💡 If you are going to ask the CRAG to revise the CRSRP to address weaknesses identified in the evaluation process, be sure that you are fully prepared to explain the weakness and present suggested solutions. Remember that the CRAG members are incredibly busy.

💡 Keep in mind that changes made to one component of the CRSRP may require adjustments to other components.
8.3. Create a mechanism for periodically reviewing and updating the CRSRP.

In addition to revising the CRSRP after an evaluation or an actual critical resource shortage event, the CRSRP should be reviewed at set intervals to make sure that it still reflects the most current thinking on critical resource shortage preparedness and response. This review could coincide with other scheduled reviews of the Planning Unit’s emergency preparedness and response plans. Based on the results of the review, the CRSRP may need to be updated.

What is the goal of this section?
The goal of this section is to create a mechanism for periodically reviewing and updating the Critical Resource Shortage Response Plan (CRSRP).

How does this section fit into the overall planning process?
In Section 8.1 and Section 8.2, the Critical Resource Advisory Group (CRAG) evaluated the CRSRP and revised it to correct any identified weaknesses in the Plan. The CRAG should also create a mechanism by which the entire CRSRP can be periodically reviewed and updated as appropriate. This may coincide with the regularly scheduled review of Protocols (see Section 5.9) or the Critical Resource Vulnerability Analysis (CRVA) (see Section 2.5).

Why is this section included in the Planning Guide?
Critical resource shortage response planning is an evolving field, with new approaches and schools of thought arising often. It is important that the Planning Unit’s CRSRP be updated regularly so that it reflects the most current thinking on critical resource shortage preparedness and response. It should also be updated regularly to make sure that it is based on accurate assumptions of the composition, population and services available in the Planning Unit. Just like the Protocols and CRVA will be periodically reviewed, the CRSRP in its entirety must be reviewed at scheduled intervals or immediately following a critical resource shortage event (CRSE) to make sure that it remains current.

ACTION ITEMS

☐ Determine the frequency of reassessment, including the timing of any periodic reviews to re-evaluate the CRSRP.

☐ Determine the triggers for review and reassessment of the CRSRP. Consider the following:
  ➢ Request from the hospital(s) in the Planning Unit to implement certain revisions;
The presence of factors within the Planning Unit that have changed since the initial development of the CRSRP and that necessitate a revision of the CRSRP;
The creation or revision of any relevant surge plans;
Change in applicable laws and regulations;
Reports from governmental agencies setting forth new standard preparedness practices;
New literature from the medical community describing best practices;
Information learned from other Planning Units after their implementation of a CRSRP during a disaster or emergency; or
Periodic updates only.

☐ Determine who will be responsible for coordinating periodic review and reassessment of the CRSRP.
  ➢ Identify at least one alternate who can take on this responsibility.
  ➢ Consider that the person(s) charged with this responsibility will need to access and assimilate all applicable information from the relevant literature, governmental agencies, and healthcare community.

☐ Determine the process for reviewing and revising the CRSRP.
  ➢ Who will be included in the group assembled to review and revise the CRSRP?
  ➢ How will the revisions made to the CRSRP be documented?
  ➢ How will the revisions be communicated to the relevant audiences?

Helpful Hints for Implementation

🎉 If multiple Planning Units were assigned primary responsibility for different key activities (see Section 1.4), consider having the CRAG for each Planning Unit reconvene to review the CRSRP component(s) that it developed. Once this review has occurred, the entire CRSRP should be reviewed.

🛠 Changed circumstances within the Planning Unit include the introduction of new Health and Medical Delivery Organizations (HMDOs) in the area, a change in the patient population, or new threats to the Planning Unit. All of these factors should be considered when reviewing and revising the CRSRP.

👏 If your facility already has an established mechanism in place to periodically re-assess its Emergency Operations Plan, consider including reassessment of the CRSRP as part of this overall process.
The Joint Commission requires that accredited facilities review their hazard vulnerability analysis annually. Consider reviewing and making any necessary revision to your Planning Unit’s CRSRP at the same time.
CHAPTER 9:
APPROVAL AND INTEGRATION

9. **Obtain approval of the Critical Resource Shortage Response Plan and integrate it into all relevant emergency operations plans**

Once all of the elements of the Critical Resource Shortage Response Plan have been compiled or developed, the Plan will have to be approved by the relevant stakeholders and integrated into the appropriate emergency operations plans. Without this approval and integration, the Plan will have little chance of being used effectively during an event.

**Introduction**

Depending on the size and composition of the Planning Unit(s) involved in the Critical Resource Shortage Response Plan (CRSRP) development process, key stakeholders and decision-makers will have varying degrees of familiarity with the CRSRP. Before they will feel comfortable implementing the CRSRP at the point of care, the hospital(s) in the Planning Unit will want to review and approve the CRSRP. Such approval will not only allow the hospital(s) in the Planning Unit to implement the CRSRP during a critical resource shortage event (CRSE), it will also lend a certain amount of credibility to the Plan. Once the CRSRP is approved, it should be integrated into the appropriate emergency operations plans. This approval and integration will help ensure that the CRSRP is used effectively during a CRSE.

**Responsibility**

Critical Resource Advisory Group (CRAG)

**In this Chapter you will:**

- Obtain approval for the CRSRP from the relevant stakeholders.
- Integrate the CRSRP into all applicable emergency operations plans.
9.1. Obtain approval for the CRSRP from the relevant stakeholders.

Obtaining approval of the CRSRP from all relevant stakeholders is a crucial step to ensuring the effectiveness of the Plan. By seeking and obtaining approval, the Planning Unit is building buy-in to the CRSRP, which will hopefully enhance compliance with the Plan during an event. The type of approval required and the process for obtaining it will vary according to the number and types of members of the Planning Unit. CRSRPs that are developed by a Planning Unit with multiple members may need to be approved by both the Planning Unit and each individual member of the Planning Unit. This multi-level approval can take a significant amount of time and effort, but it is a necessary step in the process.

What is the goal of this section?
The goal of this section is to obtain approval for the Critical Resource Shortage Response Plan (CRSRP) from the relevant stakeholders.

How does this section fit into the overall planning process?
At this point, the Planning Unit(s) has created all of the necessary components of the CRSRP – a Critical Resource Vulnerability Analysis (Chapter 2), an ethical framework (Chapter 3), an operational infrastructure (Chapter 4), resource-specific Protocols (Chapter 5), a process for developing Ad Hoc Protocols (Chapter 6), a process for coordinating with other Health and Medical Delivery Organizations (HDMOs) (Chapter 7), and a mechanism for evaluating and maintaining the CRSRP when necessary (Chapter 8). Now that the CRSRP development process is essentially complete, relevant stakeholders should approve the CRSRP. After approving the CRSRP, the Planning Unit and the hospital(s) in the Planning Unit should incorporate the CRSRP into their respective emergency operations plans (see Section 9.2).

Why is this section included in the Planning Guide?
The Critical Resource Advisory Group (CRAG) – a diverse, multi-stakeholder group – will have been responsible for creating the components of the CRSRP. In some cases, where different Planning Units were assigned primary responsibility for different key activities in the Critical Resource Shortages Planning Guide (Planning Guide), multiple CRAGs will have been involved in the creation of various CRSRP components. While members of the Implementation Team and the CRAG are expected to keep their constituents informed about the CRSRP development process and results, this will not always happen. To ensure that key stakeholders and decision-makers are informed about the content of the CRSRP and ready to implement it when necessary, they should be asked to approve the final CRSRP. Each stakeholder will need to decide what the approval process includes. This could include formal review by the stakeholder governing body or something less formal.
ACTION ITEMS

☐ Identify the objective(s) of obtaining approval of the CRSRP. Consider the following examples:
  ➢ Ensuring awareness of the CRSRP content
  ➢ Endorsing the CRSRP
  ➢ Promoting compliance with the CRSRP at the hospital(s) in the Planning Unit
  ➢ Mandating compliance with the CRSRP at the hospital(s) in the Planning Unit

☐ Based on the objective(s) of obtaining approval of the CRSRP, identify the key stakeholders and decision-makers who need to approve the Plan. Consider the following examples:
  ➢ Community members
  ➢ Individual providers, including physicians
  ➢ Administrators of the hospital(s) within the Planning Unit
  ➢ Governing boards of the hospital(s) within the Planning Unit
  ➢ Governmental agencies

☐ Develop a strategy for seeking the necessary approval(s).
  ➢ What is the approval timeline?
  ➢ How will those asked to approve the CRSRP be educated on its contents? (See Chapter 10 regarding education and communication.)
  ➢ Who will be responsible for pursuing the necessary approval(s)? When making this decision, consider individual(s) who are appropriate for the various audiences.

Helpful Hints for Implementation

を持っている場合は、それを利用してください。

Many of those asked to approve the CRSRP will not be familiar with the concept of a CRSE. You may need to do some preliminary education on this topic before presenting the content of the CRSRP.

Be prepared to discuss not only the content of the CRSRP but the process that was used to develop the content. If there are specific questions about certain sections of the CRSRP, discuss any alternatives that were considered and why each alternative was either accepted or
rejected. The more the stakeholders understand about the decision-making process and the thorough analyses that were conducted by the CRAG(s), the more likely they are to have confidence in and approve the CRSRP.

💡 Use the “champions” on the Implementation Team to engage and seek approval from specific groups of stakeholders. For instance, the “Physician Champion” should interact with the medical staff(s) of the hospital(s) within the Planning Unit to obtain its buy-in and approval of the CRSRP.

💡 You should expect some debate and push-back when seeking approval because you are asking people to approve modifications to care and, in some cases, allocation of scarce resources. These are very difficult decisions to make, much less commit to paper and approve.

💡 Some stakeholders or key-decision makers may suggest revisions to the CRSRP before they will approve it. Record these requests and communicate them to the CRAG for the Planning Unit that was primarily responsible for developing that component of the CRSRP. If the CRSRP is revised, distribute a revised version along with an explanation of the revision to all stakeholders.

💡 There may be concerns expressed about legal consequences of approving or implementing the CRSRP. Consider asking legal counsel to address these concerns.
9.2. Integrate the CRSRP into all applicable emergency operations plans.

Once the CRSRP has been approved, the Planning Unit and each of its members should review its respective emergency operations plans and revise them to incorporate and integrate each element of the CRSRP: the Critical Resource Vulnerability Analysis, the ethical framework, the operational infrastructure, resource-specific Protocols, the process for developing Ad Hoc Protocols, and the mechanism for evaluating and maintaining the Plan. This integration is critical for a coordinated, effective response to a critical resource shortage event.

What is the goal of this section?
The goal of this section is to ensure that the Planning Unit and each of the hospitals in the Planning Unit integrate the Critical Resource Shortage Response Plan (CRSRP) into its respective emergency operations plans.

How does this section fit into the overall planning process?
In Section 9.1, key stakeholders and decision-makers approved the CRSRP. In this Section 9.2, the Critical Resource Advisory Group (CRAG) will encourage the Planning Unit and each of the hospitals in the Planning Unit to integrate the CRSRP in its respective emergency operations plans.

Why is this section included in the Planning Guide?
The CRSRP is essential to the Planning Unit’s appropriate, effective and efficient response to a critical resource shortage event (CRSE). Since a CRSE will likely be caused by a large-scale emergency or disaster, the CRSRP should be integrated into the existing emergency operations plans of the Planning Unit and each hospital within the Planning Unit. This integration will help ensure that the CRSRP is accessible during an event, available for all who need to refer to it, and does not conflict with the existing disaster response infrastructure.

ACTION ITEMS

☐ Consider the portions of the emergency operations plans that will need to be revised to integrate the CRSRP. Particular areas of the emergency operations plans that should be considered for modification include:

- The incident command function responsible for declaring a CRSE;
- The incident command function responsible for activating the CRSRP and the Protocols contained therein;
The incident command function responsible for authorizing the development of Ad Hoc Protocols to address shortages of resources for which a Protocol has not been developed;

The incident command function responsible for terminating Protocols and the CRSRP; and

Emergency communications plans.

Consider whether any part of the emergency operations plans should be revised in light of the following specific areas addressed by the CRSRP:

- Ethical principles
- Operational infrastructure
- Protocols
- Mechanisms for the creation of Ad Hoc Protocol(s)
- Processes for coordinating with other Health and Medical Delivery Organizations (HDMOs) in the Planning Unit

Obtain all necessary approvals for the revised emergency operations plans.

Ensure that the revised emergency operations plans are appropriately disseminated and that all previously existing copies of the plans are either removed or clearly identified as outdated versions.

Consider whether any other existing policies of the Planning Unit or the hospital(s) in the Planning Unit should be updated in light of the procedures contained in the CRSRP and the associated Protocols. Examples include policies governing:

- Inpatient admission, including the proper placement of patients among hospital units
- Inpatient discharge
- Equipment sharing among facilities
- Inpatient visitation
- Use of resources addressed by a Protocol
- Addressing employee non-compliance with policies, including the CRSRP
- Medical Staff issues
- Employee policies related to absenteeism, scope of duties, and personal protective equipment.
Helpful Hints for Implementation

💡 When meeting to discuss revisions to emergency operations plans, ensure that individuals involved with incident command are included in the meetings. In addition, at least one individual who has been significantly involved in the CRSRP development process should be included (e.g., Implementation Team member, CRAG member, Protocol Development Subcommittee member).

💡 If there are multiple hospitals in the Planning Unit, this activity will likely have to be undertaken by each hospital individually.
CHAPTER 10: COMMUNICATION PLANS

10. Develop comprehensive communication plans with strategies addressing communications to key audiences

To many, the concept of modifying or allocating care in response to a critical resource shortage event is something that they have not thought much about. Those who have thought about it are usually troubled by the types of life and death decisions that HMDOs will be forced to make. Part of the Planning Unit’s CRSE preparedness, response and recovery activities must include communication with various audiences about CRSEs in general and the Planning Unit’s CRSRP in particular. The main audiences for these types of communication will be the “5 Ps” – providers, patients, the public, the press, and politicians. Each message must be carefully tailored for the intended audience to accomplish a defined objective and have the greatest impact. This chapter provides a framework for Planning Units to use when developing these communication plans.

Introduction

An effective communications plan is a vital part of any Planning Unit’s overall disaster preparedness strategy. The development of a clear and effective phased communications plan that targets the relevant audiences is essential to keep key stakeholders informed regarding the status of the Planning Unit’s preparedness plans, the Planning Unit’s response to a critical resource shortage event (CRSE), the results of the implementation of the Critical Resource Shortage Response Plan (CRSRP), and the Planning Unit’s eventual recovery. Without an effective communications plan, all of the Planning Unit’s preparedness efforts could be rendered moot by misinformation and confusion about the Planning Unit’s CRSRP.

The Planning Unit is encouraged to develop communications plans tailored to each of the key stakeholder groups – providers, patients, partners, the public, the press, and politicians – a.k.a. the “6 Ps.” While the communications plans will likely serve to educate each of these groups on issues related to a CRSE and the Planning Unit’s CRSRP, the content, delivery and timing of the messages will be very different depending on the target audience. Planning to undertake these communications before, during and after a CRSE is vitally important to helping to ensure that communication occurs even if normal methods of communication are unavailable.

Every Planning Unit that participates in the critical resource shortage response planning process should be responsible for creating a comprehensive communication strategy to share the results of its activities with the “6 Ps.” Each hospital in the Planning Unit may also develop its own, more targeted communication plans to address certain audiences. For instance, if a statewide Critical Resource Advisory Group (CRAG) develops the ethical framework (see Chapter 3), the
state should develop a plan to communicate the existence and content of the ethical framework to each of the “6 Ps.” Regions or individual Health and Medical Delivery Organizations (HMDOs) within the state may develop more targeted communication plans to reach specific audiences, like the medical staff of a particular facility. With numerous Planning Units and the hospital(s) in the Planning Unit developing communication plans, coordination will be key to avoiding conflicting messages, disruptive overlap, and other unintended negative consequences.

**Responsibility**

As assigned by the Planning Unit’s CRAG.

**In this Chapter you will:**

- Develop a communication strategy tailored to providers.
- Develop a communication strategy tailored to patients.
- Develop a communication strategy tailored to partners of the member(s) of the Planning Unit.
- Develop a communication strategy tailored to the public.
- Develop a communication strategy tailored to the press.
- Develop a communication strategy tailored to politicians.
10.1. Develop a communication strategy tailored to providers.

The Planning Unit will need to communicate with HMDOs and their staffs as part of the Planning Unit’s planning, response and recovery activities. This communication is essential to ensure that those at the point of care understand the consequences of a CRSE, the Planning Unit’s response plan and what is expected of them as providers of care.

What is the goal of this section?

The goal of this section is to develop a communication strategy tailored to providers.

How does this section fit into the overall planning process?

This Section 10.1 encourages the Planning Unit to develop a communication strategy tailored to “providers” including the hospital(s) of the Planning Unit, other Health and Medical Delivery Organizations (HMDOs) that operate within the Planning Unit (see Chapter 7) and all of their clinical staffs. The remaining sections of this chapter will address communication plans for the five other key audiences (patients, partners, the public, the press and politicians). Part of the communication strategy for providers will include the communication plan developed in Section 4.9.

Why is this section included in the Planning Guide?

The Planning Unit has, until this point, developed the infrastructure and the operational elements that comprise the Critical Resource Shortage Response Plan (CRSRP), including resource-specific Protocols. For the CRSRP to be used effectively, prior to an event, the hospital(s) in the Planning Unit, other HMDOs that operate in the Planning Unit, and individual clinicians at the point of care (collectively “providers”) must understand the reasons for the CRSRP development, the process by which it was created, its content, and its use. While the same general information will likely be relayed to all provider audiences, the level of detail included in the messaging, the messaging platform and the timing of the messaging may vary based on type of provider that is the intended audience.

Messaging to providers cannot stop once a critical resource shortage event (CRSE) occurs. The messaging must continue and, if anything, increase during an event to provide updates on the constantly evolving situation. In Section 4.9, the Planning Unit developed a plan for communicating information about the activation and revision of the CRSRP and associated Protocols during an event. This plan should become a component of the Planning Unit’s overall comprehensive communications plan for providers. The comprehensive plan should also address post-event communications to providers regarding recovery efforts.
ACTION ITEMS

☐ Identify the objective(s) of communications with providers.
  ➢ Will the objective(s) be different for different phases of the communications (e.g., pre-event, intra-event and post-event)? If so, identify the objectives of communications during each phase.
  ➢ Consider the following as possible objectives:
    ▪ Education
    ▪ Obtaining buy-in from providers on the CRSRP and associated Protocols
    ▪ Obtaining endorsement
    ▪ Seeking input on the content of the CRSRP
    ▪ Distribution of information for awareness

☐ Develop the key messages that will be delivered to providers.
  ➢ The key messages should further the identified objectives.
  ➢ Develop key messages for each phase of the communication plan (pre-event, intra-event and post-event).
  ➢ Determine specifically when each key message should be delivered.
  ➢ Consider the following as key elements of the messages:
    ▪ What is the message intended to communicate? A change in operations? A change in the CRSRP? A change in the CRSE situation?
    ▪ What is the reason or justification for the change? What triggered the change?
    ▪ Where is the change occurring?
    ▪ What is the intent, objective(s) or goal(s) of the change?
    ▪ When will the change go into effect and how long is it expected to last?

☐ Determine what messaging platforms will be used to communicate with providers.
  ➢ Consider the following:
    ▪ Lecture style seminars
    ▪ Presentations to and interactive discussions with small groups
    ▪ Webinars and teleconferences
    ▪ Publications, pamphlets and newsletters
    ▪ Staff meetings
    ▪ Posters
    ▪ Postings on various web-sites and provider intranets
Will the messaging platform be different for the different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the platforms for communications during each phase.

Determine who will be responsible for ensuring that this communication plan is implemented by the Planning Unit.

- Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
- Will the responsible party be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the responsible parties for communications during each phase.

Determine who will be the “spokesperson” for the messages – the person responsible for actually communicating messages to providers.

- Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
- Will the spokesperson be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the spokesperson responsible for communications during each phase.

Determine who will be required to approve any communication plans before they are implemented.

- Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for the communication plans for each phase.

Determine who will be required to approve each message before it is delivered to providers.

- Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for each message during each phase.

Develop a process for evaluating any feedback received in response to the communication plans and whether such feedback should be used as a basis to revise the messages that are communicated.

- Will the evaluation process be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various evaluation processes for feedback received during each phase.
Incorporate the communication plan developed by the Critical Resource Advisory Group (CRAG) in Section 4.9.

Ensure coordination of communications plans targeting providers with any relevant Planning Units, including individual hospitals, so that providers are receiving a consistent message.

**Helpful Hints for Implementation**

⚠️ The timing of the delivery of each key message is very important. The message must have some relevance to providers at the time it is rendered otherwise it will not receive the attention it deserves. Try to find a “hook” that will make the message interesting and pertinent for providers.

⚠️ When considering the messaging platform, remember that certain platforms may not be available during a large scale public health emergency. For instance, during a pandemic, social distancing will be important. As a result, many hospitals may cancel all in-person staff meetings.

⚠️ The party responsible for seeing that the communication plan is implemented does not necessarily have to be same as the spokesperson.

⚠️ The type of information conveyed to providers may change based on the provider’s role in the CRSE response. For instance, different types of information may need to be provided to emergency room physicians, hospitalists and community physicians.

⚠️ The spokesperson should be an individual that is well-respected by providers in the Planning Unit. It is likely to be a high ranking healthcare executive or a public health official.
COMMUNICATION PLANS
SECTION 10.2

10.2. Develop a communication strategy tailored to patients.

The Planning Unit will need to communicate with patients as part of the Planning Unit's planning, response and recovery activities. This communication is essential to ensure that those who are receiving or will receive care during a CRSE understand the consequences of a CRSE and the impact the Planning Unit’s CRSRP will have on the way HMDOs provide care.

What is the goal of this section?
The goal of this section is to develop a communication plan tailored to patients and their families.

How does this section fit into the overall planning process?
This Section 10.2 encourages the Planning Unit to develop a communication strategy tailored to patients and their families. The other sections of this chapter address communication plans for the five other key audiences (providers, partners, the public, the press, and politicians).

Why is this section included in the Planning Guide?
Ultimately, during a critical resource shortage event (CRSE), those who need care provided by or with scarce critical resources will be most affected by the CRSE. These patients and their families need to understand the nature of the shortage, the Planning Unit’s response to it and the impact that this response will have on the care that is provided to the patient. Without this understanding, patients and their families may protest decisions made pursuant to the Critical Resource Shortage Response Plan (CRSRP) and make it impossible for providers to comply with its provisions. The level of detail provided, the way in which it is conveyed, and the timing of the messages provided to patients about the CRSE and the Planning Unit’s CRSRP may vary based on numerous factors. During a CRSE, the Planning Unit will not have time to decide how much information to give to patients or develop materials containing such information. They must make these decisions and develop these materials as part of their preparedness efforts. Failing to do this will jeopardize the Planning Unit’s ability to effectively implement its CRSRP.

ACTION ITEMS

☐ Identify the objective(s) of communications with patients.

➢ Will the objective(s) be different for different phases of the communications (e.g., pre-event, intra-event and post-event)? If so, identify the objectives of communications during each phase.

➢ Consider the following as possible objectives:
• Education
• Ensuring understanding of the CRSRP and the impact that it will have on patient care
• Distribution of information for awareness
• Redefining patient expectations

☐ Develop the key messages that will be delivered to patients.
  ➢ The key messages should further the identified objectives.
  ➢ Develop key messages for use pre-event, intra-event and post-event.
  ➢ Determine specifically when each key message should be delivered.
  ➢ Consider the following as key elements of the messages:
    ▪ What is the message intended to communicate? A change in operations? A change in the CRSRP? A change in the CRSE situation?
    ▪ What is the reason or justification for the change? What triggered the change?
    ▪ Where is the change occurring?
    ▪ What is the intent, objective(s) or goal(s) of the change?
    ▪ When will the change go into effect and how long is it expected to last?

☐ Determine what messaging platforms will be used to communicate with patients.
  ➢ Consider the following:
    ▪ Publications, pamphlets and newsletters
    ▪ Posters
    ▪ Postings on various web-sites
    ▪ Individual communications from a member of the patient’s care team
    ▪ Media and press coverage
  ➢ Will the messaging platform be different for the different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the platforms for communications during each phase.

☐ Determine who will be responsible for ensuring that this communication plan is implemented by the Planning Unit.
  ➢ Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
  ➢ Will the responsible party be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the responsible parties for communications during each phase.
☐ If any media coverage is used as a vehicle to communication with patients, determine who will be the “spokesperson” for the messages – the person responsible for actually communicating messages to patients.
  ➢ Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
  ➢ Will the spokesperson be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the spokesperson responsible for communications during each phase.

☐ Determine who will be required to approve any communication plans before they are implemented.
  ➢ Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for the communication plans for each phase.

☐ Determine who will be required to approve each message before it is delivered to patients.
  ➢ Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for each message during each phase.

☐ Develop a process for evaluating any feedback received in response to the communication plans and whether such feedback should be used as a basis to revise the messages that are communicated.
  ➢ Will the evaluation process be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various evaluation processes for feedback received during each phase.

☐ Ensure coordination of communications plans targeting patients and their families with any relevant Planning Units so that patients are receiving a consistent message.

Helpful Hints for Implementation

💡 Consider consulting federal, state, and local governmental agencies to determine whether they have any educational literature on critical resource shortage events that may be adapted for your specific Planning Unit’s needs.

💡 Consider that several routes of communication may be needed to ensure that your message reaches a majority of patients.
There may be very few, if any, key messages to share with patients prior to a CSRE. Such messaging may be done through general communications with the public. Messaging to patients directly may be limited to intra and post-event communications.

Understand that patients will be very stressed and may not believe messages that convey that a critical resource shortage event is driving the need for the hospital(s) in the Planning Unit to alter the way that care is provided.
10.3. Develop a communication strategy tailored to partners of member(s) of the Planning Unit.

The Planning Unit will need to communicate with the partners of the member(s) of the Planning Unit including, but not limited to, vendors, volunteers and other organizations or individuals who are integral to the operations of the member(s) of the Planning Unit. This communication is essential to ensure that those partners that support the member(s) of the Planning Unit are aware of the threat of, planned response to, eventual existence of, and impact of critical resource shortage events. Such knowledge will help these partners to better support the Planning Unit’s CRSRP.

What is the goal of this section?
The goal of this section is to develop a communication strategy tailored to partners of the hospital(s) in the Planning Unit.

How does this section fit into the overall planning process?
This Section 10.3 encourages the Planning Unit to develop a communication strategy tailored to “partners” of the hospital(s) in the Planning Unit. These partners include, but are not limited to, vendors, volunteers and other organizations or individuals who support the operations of the hospital(s). The other sections of this chapter address communication plans for the five other key audiences (providers, patients, the public, the press and politicians).

Why is this section included in the Planning Guide?
Each hospital in the Planning Unit has many partners upon which it relies on a daily basis. These partners include vendors, volunteers, clergymen, employee assistance programs, medical transport providers, and security providers to name a few. Many of these partners will become even more important during a critical resource shortage event (CRSE). Communicating with these partners will be essential to ensuring that they understand the impact of a CRSE on the hospital(s) in the Planning Unit and the impact of such an event on their role as a partner of the hospital(s) in the Planning Unit.

ACTION ITEMS

☐ Identify the objective(s) of communications with partners of the hospital(s) in the Planning Unit.

➢ Will the objective(s) be different for different phases of the communications (e.g., pre-event, intra-event and post-event)? If so, identify the objectives of communications during each phase.
Consider the following as possible objectives:

- Education
- Obtaining buy-in from partners on the Critical Resource Shortage Response Plan (CRSRP) and associated Protocols
- Obtaining endorsement
- Seeking input on the content of the CRSRP
- Distribution of information for awareness
- Reinforcing the need for partners to continue providing support and services during a CRSE

□ Develop the key messages that will be delivered to partners.

- The key messages should further the identified objectives.
- Develop key messages for each phase of the communication plan (pre-event, intra-event and post-event).
- Determine specifically when each key message should be delivered.
- Consider the following as key elements of the messages:
  - What is the message intended to communicate? A change in operations? A change in the CRSRP? A change in the CSRE situation?
  - What is the reason or justification for the change? What triggered the change?
  - Where is the change occurring?
  - What is the intent, objective(s) or goal(s) of the change?
  - When will the change go into effect and how long is it expected to last?

□ Determine what messaging platforms will be used to communicate with providers.

- Consider the following:
  - Lecture style seminars
  - Presentations to and interactive discussions with small groups
  - Webinars and teleconferences
  - Publications, pamphlets and newsletters
  - Staff meetings
  - Posters
  - Postings on various web-sites and provider intranets

- Will the messaging platform be different for the different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the platforms for communications during each phase.
Determine who will be responsible for ensuring that this communication plan is implemented by the Planning Unit.

- Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
- Will the responsible party be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the responsible parties for communications during each phase.

Determine who will be the “spokesperson” for the messages – the person responsible for actually communicating messages to providers.

- Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
- Will the spokesperson be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the spokesperson responsible for communications during each phase.

Determine who will be required to approve any communication plans before they are implemented.

- Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for the communication plans for each phase.

Determine who will be required to approve each message before it is delivered to partners.

- Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for each message during each phase.

Develop a process for evaluating any feedback received in response to the communication plans and whether such feedback should be used as a basis to revise the messages that are communicated.

- Will the evaluation process be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various evaluation processes for feedback received during each phase.

Ensure coordination of communications plans targeting partners with any relevant Planning Units, including individual hospitals, so that partners are receiving a consistent message.
Helpful Hints for Implementation

“Partners” can include a wide variety of organizations and individuals. Communication plans may include different messages tailored to each type of “partner” based on the role that the partner will play in the critical resource shortage response or the impact that the critical resource shortage event will have on the partner.

The partners of one hospital in the Planning Unit may be different from the partners of other hospitals in the Planning Unit. Even though the partners may be different, there may be some commonalities among partner types. For instance, even though each hospital in the Planning Unit uses a different vendor for a certain supply, each hospital has vendors with whom it will need to coordinate regarding CRSEs. Try to develop messages for general types of partners that the hospital(s) in the Planning Unit can then customize for its specific partners.
COMMUNICATION PLANS
SECTION 10.4

10.4. Develop a communication strategy tailored to the public.

The Planning Unit will need to communicate with the public as part of the Planning Unit's planning, response and recovery activities. This communication is essential to ensure that the general public understands the consequences of a CRSE and the type of responses that will be required.

What is the goal of this section?
The goal of this section is to develop a communication plan tailored to the public.

How does this section fit into the overall planning process?
This Section 10.4 encourages the Planning Unit to develop a communication strategy tailored to the public. The other sections of this chapter address communication plans for the five other key audiences (providers, patients, partners, the press and politicians).

Why is this section included in the Planning Guide?
Public acknowledgement, if not acceptance, of the basic concept of a critical resource shortage response is essential to the Planning Unit's ability to successfully implement its Critical Resource Shortage Response Plan (CRSRP). To obtain this acknowledgement or acceptance, prior to a critical resource shortage event (CRSE), the public must be educated on the concept of a CRSE, the type of response that hospitals will be forced to implement and the consequences of such a response. Once a CRSE does occur, the public will need to be informed about the event itself as well as the actions that providers are taking to respond most effectively. These will be difficult messages to deliver in a way that conveys the severity of the event without causing a panic or inspiring backlash against the hospital(s) in the Planning Unit and the use of the CRSRP. After an event, the public will need to be informed about the progress of recovery efforts and the steps that the Planning Unit is taking to improve its response in the next CRSE. During a CRSE and in its immediate aftermath, it will be virtually impossible for the Planning Unit or the hospital(s) in the Planning Unit to find time to develop a process and the messages for conveying this information. As a result, intra-event and post-event communications plans for the public must be developed prior to the CRSE to achieve maximal effectiveness.

ACTION ITEMS

☐ Identify the objective(s) of communications with the public.

➢ Will the objective(s) be different for different phases of the communications (e.g., pre-event, intra-event and post-event)? If so, identify the objectives of communications during each phase.
Consider the following as possible objectives:

- Education
- Obtaining buy-in from the public on the CRSRP and associated Protocols
- Obtaining endorsement of the CRSRP and associated Protocols
- Seeking input on the content of the CRSRP
- Distribution of information for awareness
- Redefining patient expectations about the availability of resources during a CRSE

☐ Develop the key messages that will be delivered to the public.

- The key messages should further the identified objectives.
- Develop key messages for each phase of the communication plan (pre-event, intra-event and post-event).
- Determine specifically when each key message should be delivered.
- Consider the following as key elements of the messages:
  - What is the message intended to communicate? A change in operations? A change in the CRSRP? A change in the CRSE situation?
  - What is the reason or justification for the change? What triggered the change?
  - Where is the change occurring?
  - What is the intent, objective(s) or goal(s) of the change?
  - When will the change go into effect and how long is it expected to last?

☐ Determine what messaging platforms will be used to communicate with the public.

- Consider the following:
  - Lecture style seminars or forums
  - Group presentations and interactive discussions
  - Webinars and teleconferences
  - Publications, pamphlets and newsletters
  - Posters
  - Postings on various web-sites
  - Print material in local newspapers and magazines
  - Public Service Announcements on local radio and television
  - Media coverage and stories
Will the messaging platform be different for the different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the platforms for communications during each phase.

Determine who will be responsible for ensuring that this communication plan is implemented by the Planning Unit.

- Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
- Will the responsible party be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the responsible parties for communications during each phase.

Determine who will be the “spokesperson” for the messages – the person responsible for actually communicating messages to the public.

- Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
- Will the responsible party be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the spokesperson responsible for communications during each phase.

Determine who will be required to approve any communication plans before they are implemented.

- Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for the communication plans for each phase.

Determine who will be required to approve each message before it is delivered to the public.

- Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for each message during each phase.

Develop a process for evaluating any feedback received in response to the communication plans and whether such feedback should be used as a basis to revise the messages that are communicated.

- Will the evaluation process be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various evaluation processes for feedback received during each phase.
Ensure coordination of communications plans targeting the public with any relevant Planning Units so that members of the public are receiving a consistent message.

**Helpful Hints for Implementation**

💡 Consider consulting federal, state, and local governmental agencies to determine whether they have any educational literature that may be adapted to help your Planning Unit communicate with the public.

💡 Consider the use of surveys (informal or formal) or focus groups to evaluate the effectiveness of your communication plan. If you are going to use surveys or focus groups, this will need to be done pre-event.

💡 Recognize that no single hospital or group of hospitals wants to be the one informing the public that scarce resources may have to be allocated during a CRSE. This message will likely have to be delivered at a very high level, like the state or the nation.

💡 To the extent that the Planning Unit undertakes pre-event public communications about the impact of CRSEs, understand that these communications should be a continuing process and should not be considered complete once initial educational efforts have been implemented. The messages should be refined based upon any input and relevant comments and any changes to the Planning Unit’s CRSRP.

💡 Communications to the public should be tied to a “hook” – a relevant story that has already been communicated to the public and in which people are interested. For instance, if there is a story in the news about overcrowding in an emergency room after a hurricane, this might be a good opportunity to run a story about high-level plans for responding to a larger-scale event that will result in greater demand for care and fewer resources.

💡 Consider whether any communication announcing the end of the CRSE to the public should “lag” somewhat from the point in time at which the Planning Unit believes to be the actual conclusion, to make absolutely sure that any announcement that the CRSE has ended is not premature.
10.5. Develop a communication strategy tailored to the press.

The Planning Unit will need to communicate with the press as part of the Planning Unit’s planning, response and recovery activities. During a CRSE, the press will cover the disaster that created the CRSE on a “24/7” news-cycle. Recent disasters have demonstrated how press coverage can help or hurt an effective disaster response. To assist in making press coverage of the CRSE and the Planning Unit’s response as beneficial as possible, the Planning Unit should begin educating the press now on its CRSE preparedness efforts and keep it informed of developments during its response and recovery.

What is the goal of this section?
The goal of this section is to develop a communication plan tailored to the press.

How does this section fit into the overall planning process?
This Section 10.5 encourages the Planning Unit to develop a communication strategy tailored to the press. The other sections of this chapter address communications plans for the five other key audiences (providers, patients, partners, the public and politicians).

Why is this section included in the Planning Guide?
The press has enormous power to shape public perception of events. During a critical resource shortage event (CRSE), the press will cover the disaster that created the CRSE, and the response to the CRSE, on a “24/7” news-cycle. The type of coverage afforded to the disaster and the response will have a significant impact on the public’s reaction to the Planning Unit’s implementation of its Critical Resource Shortage Response Plan (CRSRP). Recognizing that the press has this type of power, the Planning Unit should attempt to harness it and use it to help support the Planning Unit’s response efforts, or at the very least, prevent it from completely disrupting its response efforts. To assist in making press coverage of the CRSE and the Planning Unit’s response as beneficial as possible, the Planning Unit should consider beginning to educate the press now on its CRSE preparedness efforts and keep the press informed of developments during its response and recovery.

ACTION ITEMS

- Identify the objective(s) of communications with the press.
  - Will the objective(s) be different for different phases of the communications (e.g., pre-event, intra-event and post-event)? If so, identify the objectives of communications during each phase.
  - Consider the following as possible objectives:
Education
Distribution of information for awareness
Correcting misinformation that may have already been published or broadcast
Correcting misinformation that is about to be published or broadcast
Outreach to the general public
Proactively addressing any “bad” press that could be created by mischaracterizations of the Planning Unit’s CRSRP

☐ Develop the key messages that will be delivered to the press.
  ➢ The key messages should further the identified objectives.
  ➢ Develop key messages for each phase of the communication plan (pre-event, intra-event and post-event).
  ➢ Determine specifically when each key message should be delivered.
  ➢ Consider the following as key elements of the messages:
    ▪ What is the message intended to communicate? A change in operations? A change in the CRSRP? A change in the CRSE situation?
    ▪ What is the reason or justification for the change? What triggered the change?
    ▪ Where is the change occurring?
    ▪ What is the intent, objective(s) or goal(s) of the change?
    ▪ When will the change go into effect and how long is it expected to last?

☐ Determine how the Planning Unit will communicate with the press.
  ➢ Will there be a specific point(s) of contact for all press inquiries? If so, make sure to appoint alternates in case the point(s) of contact is unavailable.
  ➢ Will the point(s) of contact be different for pre-event, intra-event and post-event communications? If so, identify the point(s) of contact for each phase.

☐ Determine who will be responsible for ensuring that this communication plan is implemented by the Planning Unit.
  ➢ Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
  ➢ Will the responsible party be different for pre-event, intra-event and post-event communications? If so, identify the responsible parties for communications during each phase.
Determine who will be required to approve any communication plans before they are implemented.

- Will the required approvals be different for pre-event, intra-event and post-event communications? If so, identify the various approval requirements for communications during each phase.

Determine who will be required to approve each message before it is delivered to the press.

- Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for each message during each phase.

Ensure coordination of communications plans among any other relevant Planning Units so that the press is receiving a consistent message.

**Helpful Hints for Implementation**

💡 The hospital(s) in the Planning Unit may not believe that the Planning Unit should be responsible for educating the press on the potential impacts of a CRSE or its CRSRP. The hospital(s) may believe that such education will just lead to questions the Planning Unit is not ready, willing or capable of answering. Instead, the hospital(s) may believe that a national dialogue on the impact of CRSEs should be responsible for educating the press, and therefore the public, on these issues. Discuss the consequences of the failure to hold such a national dialogue prior to the next major disaster leading to a critical resource shortage event.

💡 There will likely be a demand from the press for more information than the Planning Unit is willing or able to provide during a CRSE. Recognize that in an information vacuum, the press will find other sources for “information” which may not be accurate or based on facts. Attempt to negotiate with the press about the amount of information that will satisfy its requests.

💡 Consider the importance of publicizing the successes of the Planning Unit in implementing its CRSRP. This positive publicity will engender support and confidence in the Planning Unit’s preparedness planning and the implementation of its CRSRP.

💡 Many Planning Units may have only a few public information officers (PIOs) who are capable of handling the press inquiries and types of issues that will arise during a CRSE. Remember that, depending on the type of disaster, these PIOs may not report to work for a variety of reasons. Make sure to have well thought out and trained alternate points of contact for the press.
COMMUNICATION PLANS
SECTION 10.6

10.6. Develop a communication strategy tailored to politicians.

The Planning Unit will need to communicate with various politicians as part of the Planning Unit's planning, response and recovery activities. During a CRSE, certain politicians will likely become a key audience since they may be heavily involved in emergency management or communications with their concerned constituents. This communication from the Planning Unit to the politicians is essential to ensure that the politicians are armed with good information on which they can base their own messaging.

What is the goal of this section?
The goal of this section is to develop a communication plan tailored to politicians.

How does this section fit into the overall planning process?
This Section 10.6 encourages the Planning Unit to develop a communication strategy tailored to politicians. The other sections of this chapter address communication plans for the five other key audiences (providers, patients, partners, the public and the press).

Why is this section included in the Planning Guide?
The hospital(s) in the Planning Unit probably do not customarily think of politicians as a key audience for communications. To the extent that politicians are involved in emergency planning and management activities, however, they will likely need information about the Planning Unit’s Critical Resource Shortage Response Plan (CRSRP) prior to an event, during an event and after an event. This information will help the politicians revise their emergency operations plans, respond to an event more effectively and be aware of relevant recovery efforts. Politicians may also need information about the Planning Unit’s CRSRP so that they can provide accurate information to their constituents and respond to any concerns that are brought to their attention. Because communication channels between politicians and the Planning Unit may not exist, and if they do, they may not be very strong, it is important to begin building these relationships now so that such channels are well-established prior to an event.

Real World Example
Redoak’s City Manager is also its Incident Commander during a disaster. In her role as Incident Commander, the City Manager will likely need information about the Planning Unit’s response to the critical resource shortage event.
ACTION ITEMS

☐ Identify the politicians with whom the Planning Unit will communicate regarding issues related to a critical resource shortage event (CRSE) and its CRSRP.

☐ Identify the objective(s) of communications with politicians.
  ➢ Will the objective(s) be different for different phases of the communications (e.g., pre-event, intra-event and post-event)? If so, identify the objectives of communications during each phase.
  ➢ Consider the following as possible objectives:
    ▪ Education
    ▪ Obtaining buy-in on the CRSRP and associated Protocols
    ▪ Obtaining endorsement of the CRSRP and associated Protocols
    ▪ Distribution of information for awareness

☐ Develop the key messages that will be delivered to politicians.
  ➢ The key messages should further the identified objectives.
  ➢ Develop key messages for each phase of the communication plan (pre-event, intra-event and post-event).
  ➢ Determine specifically when each key message should be delivered.
  ➢ Consider the following as key elements of the messages:
    ▪ What is the message intended to communicate? A change in operations? A change in the CRSRP? A change in the CRSE situation?
    ▪ What is the reason or justification for the change? What triggered the change?
    ▪ Where is the change occurring?
    ▪ What is the intent, objective(s) or goal(s) of the change?
    ▪ When will the change go into effect and how long is it expected to last?

☐ Determine what messaging platforms will be used to communicate with politicians.
  ➢ Consider the following:
    ▪ Presentations to and interactive discussions with small groups of politicians
    ▪ Webinars and teleconferences
    ▪ Publications and pamphlets
    ▪ One-on-one communications
➢ Will the messaging platform be different for the different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the platforms for communications during each phase.

☐ Determine who will be responsible for ensuring that this communication plan is implemented by the Planning Unit.
  ➢ Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
  ➢ Will the responsible party be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the responsible parties for communications during each phase.

☐ Determine who will be the “spokesperson” for the messages – the person responsible for actually communicating messages to politicians.
  ➢ Depending on the size of the Planning Unit, several people may be tasked with this responsibility.
  ➢ Will the spokesperson be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the spokesperson responsible for communications during each phase.

☐ Determine who will be required to approve any communication plans before they are implemented.
  ➢ Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for the communication plans for each phase.

☐ Determine who will be required to approve each message before it is delivered to politicians.
  ➢ Will the required approvals be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various approval requirements for each message during each phase.

☐ Develop a process for evaluating any feedback received in response to the communication plans and whether such feedback should be used as a basis to revise the messages that are communicated.
  ➢ Will the evaluation process be different for different phases of the communication plan (pre-event, intra-event and post-event)? If so, identify the various evaluation processes for feedback received during each phase.
Ensure coordination of communications plans among any relevant Planning Units so that politicians are receiving a consistent message.

**Helpful Hints for Implementation**

⚠️ Recognize that politicians may request more information than the Planning Unit is willing or able to provide. Responses to such requests will have to be carefully messaged so as not to impair the relationship between the Planning Unit and the politician.

⚠️ Communications with politicians may be especially difficult for Planning Units that cross jurisdictional boundaries. Not only will these Planning Units have to communicate with more politicians, they will have to communicate with politicians who may compete for resources for their constituents.

⚠️ Remember that many conversations to which politicians are privy may become public record.
We hope that you found this *Hospital Implementation Guide* useful and informative. Any questions about the *Planning Guide* or *Implementation Toolkit* can be directed to Dr. Marissa Levine at 804-864-7026 or marissa.levine@vdh.virginia.gov, Steve Gravely at 804-697-1308 or steve.gravely@troutmansanders.com or Erin Whaley at 804-697-1389 or erin.whaley@troutmansanders.com.