
Community Healthcare Decision Making Tool

Guide

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The Oak Ridge Institute for Science and Education (ORISE) is a U.S. Department of Energy (DOE) institute focusing on scientific initiatives to research health risks from occupational hazards, assess environmental cleanup, respond to radiation medical emergencies, support national security and emergency preparedness, and educate the next generation of scientists.

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The findings and conclusions in this guide are those of the authors, and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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Background

The Community Healthcare Decision Making Tool (CHDMT), along with the Pandemic Influenza Triage Algorithm (PITA)¹, is a component of the Pandemic Influenza Triage Tools that were created for clinicians, community and healthcare leaders and other decision makers to use during an influenza pandemic. The CHDMT consists of two components: the Community Site-of-Care Tool and the Community Healthcare Decision Pathway. Both components are algorithms designed to direct the user through a series of action steps and decision points that lead to an endpoint course of action.

The Community Site-of-Care Tool assists community and healthcare leaders and other decision makers to direct patients during an influenza pandemic to appropriate sites of care to be screened, treated, or possibly transferred to another healthcare facility based upon the patient's PITA acuity level and resource needs. The Community Healthcare Decision Pathway provides a process for community and healthcare leaders and other decision makers to assess resource availability and medical surge severity at community healthcare facilities.

The Pandemic Influenza Triage Tools can be used in conjunction with the National Incident Management System (NIMS) and Incident Command System (ICS) structure. Familiarity with NIMS, including the community's ICS and Emergency Operations Center (EOC), is essential for community leaders and decision makers. Having an understanding of NIMS will help community and healthcare leaders and other decision makers enhance coordination with their healthcare partners and create effective communication about resource needs, medical surge, and sites of care for patients during an influenza pandemic.

¹ The PITA is an algorithm designed to help clinicians triage patients with influenza-like illness (ILI) during an influenza pandemic. The PITA is intended for use during face-to-face clinician and patient encounters in a healthcare facility. Clinicians should use the PITA to determine patient acuity and to estimate resource needs in order to predict the level of care needed. The PITA uses a five-level triage scale to classify patients, with Level 1 being the most urgent and Level 5 being the least urgent.

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Goals of the CHDMT

One of the goals of the CHDMT is to help community and healthcare leaders and other decision makers assess medical surge at the community level in order to mobilize necessary resources during an influenza pandemic. Mobilizing additional resources to healthcare partners when needed will help alleviate stress on community healthcare facilities. Another important goal of the CHDMT is to help community and healthcare leaders and other decision makers direct patients to the appropriate sites of care during an influenza pandemic based on each patient's PITA acuity level and resource needs.

Assumptions of the CHDMT

- The CHDMT is used when an influenza pandemic is declared.
- Community-level partnerships have been established among public health departments, community healthcare agencies and organizations, and emergency management agencies.
- Partners and community leaders are in communication with each other on a regular basis.
- Partners and community healthcare leaders have developed a pandemic influenza preparedness plan at the community level that addresses issues such as resource needs, medical surge, and sites of care.
- Partners and community healthcare leaders are familiar with NIMS, including functions of an EOC and a community ICS.

Things to Consider Before Using the CHMDT

Community and healthcare leaders and other decision makers should take into account that healthcare partners will encounter non-influenza patient conditions, such as heart attacks, strokes, trauma, and child births that will require medical care. These situations can impact medical surge and healthcare resource needs.

Resource sharing between community partners will be very important during an influenza pandemic. Shortages in resources and supplies may result from medical surge. Community partners should work together to create a strategy for resource sharing and tracking. Examples of

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resources and supplies are beds, masks, gloves, gowns, intravenous fluids, and medications (e.g., antibiotics, antipyretics, antivirals).

Workforce shortages also should be considered when planning for an influenza pandemic. Replacing or supplementing existing staff may be required. Community and healthcare leaders and other decision makers should consider how to access resources for additional staff, if needed. Examples of additional staff to consider are physicians, physician assistants, and nurses, including retirees and volunteers with the desired skill set. Just-in-time training material also should be prepared and made available for additional staff.

How to Use the Community Site-of-Care Tool

The Community Site-of-Care Tool should be used when the following situations exist:

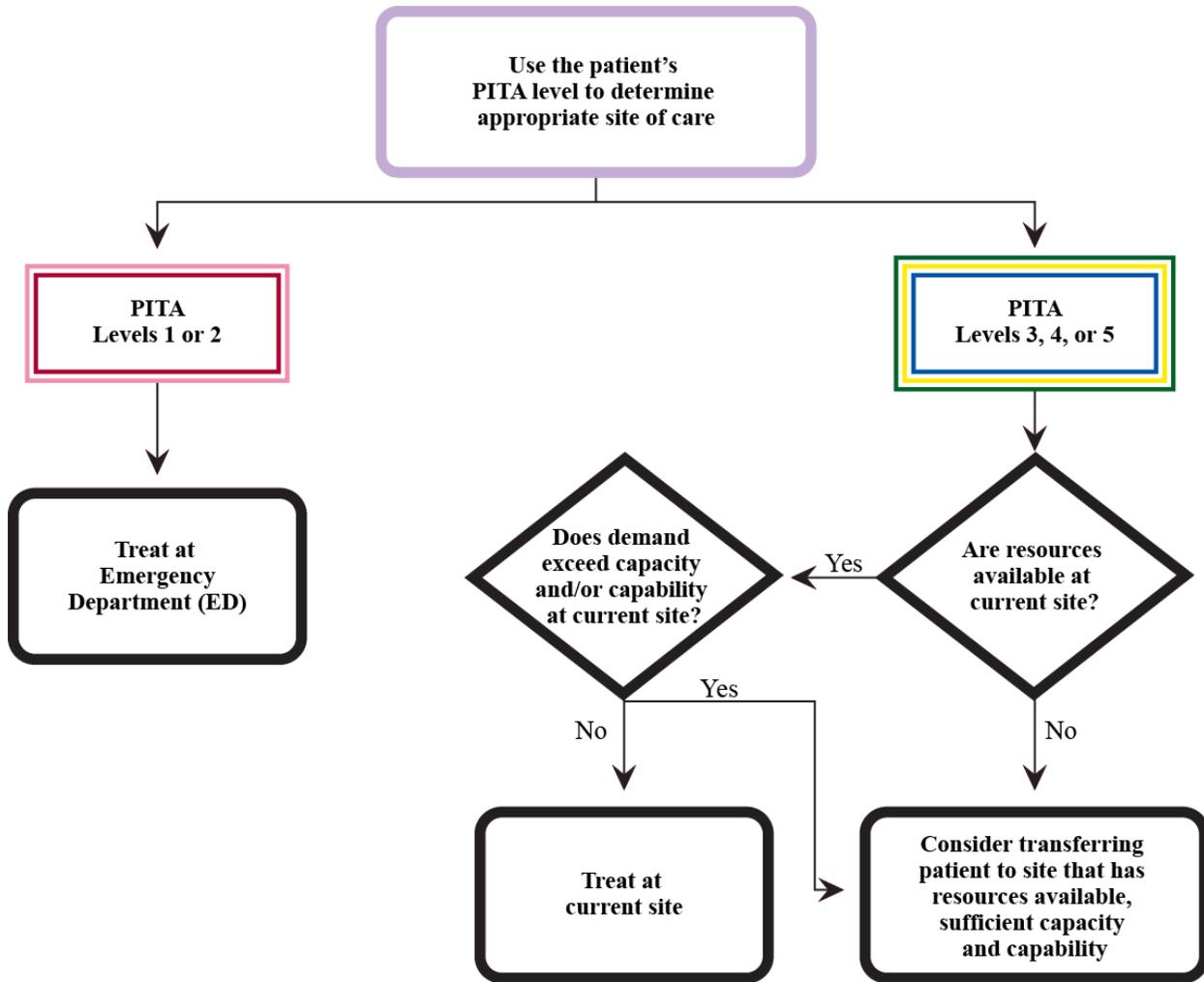
- An influenza pandemic is declared.
- Medical surge is highly probable.
- PITA levels have been determined for patients.

This tool is shown on the next page.

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Community Site-of-Care Tool



Suggestions for Appropriate Patient Site of Care

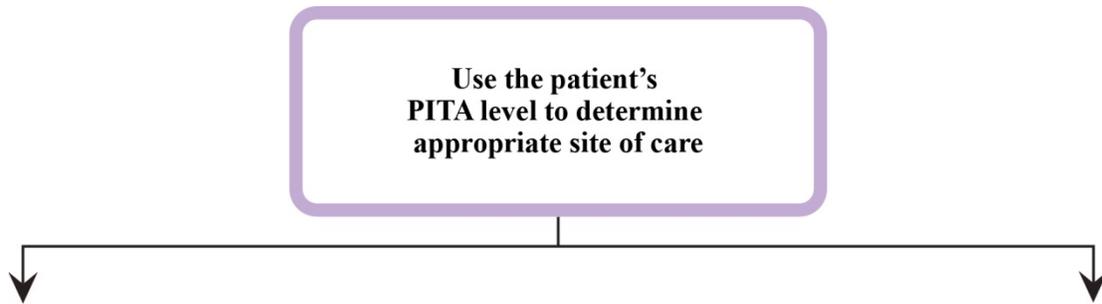
The following information is dependent on resource availability, patient demand and other community coordination considerations:

- Level 1: ED (resuscitation needed)
- Level 2: ED (potential to deteriorate, necessary resources available)
- Levels 3-5: ED, urgent care centers, primary care providers, outpatient clinics, long-term care facilities, or other alternate healthcare facilities (depending upon resource availability)

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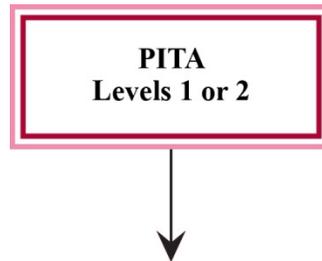
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Action Step 1



During triage, one of five PITA levels is assigned to patients depending on the severity of presenting signs and symptoms of ILI. A review of the PITA provides detailed information about the five levels. The Site-of-Care Tool can be used to help determine appropriate treatment facilities for patients based on their PITA levels.

Action Step 2



Patients who were triaged by healthcare professionals and rated as PITA Levels 1 or 2 should follow on to Action Step 3. The following descriptions for PITA Levels 1 and 2 show why this action is necessary.

PITA Level 1

PITA Level 1 patients need life-saving interventions to treat major problems with airway, breathing, circulation, or mental status. This is the most urgent acuity level.

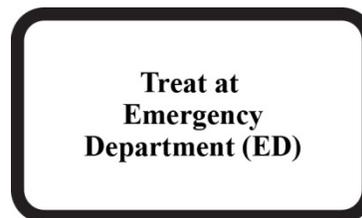
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PITA Level 2

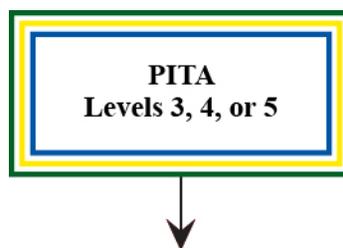
PITA Level 2 patients are those who are at high risk for problems with airway, breathing, circulation, or mental status. They should not wait for evaluation or care. Some Level 2 patients may appear toxic while others may not appear toxic, but are at risk of deteriorating, developing a more serious illness, or needing hospitalization.

Action Step 3



The appropriate site of care for patient PITA Levels 1 or 2 is at the ED because their resource needs and illness acuity. Patients who are assigned as PITA Level 1 need lifesaving interventions. Patients who are assigned as PITA Level 2 have a high risk to deteriorate, and they may need lifesaving interventions.

Action Step 4



Patients who were triaged by healthcare professionals and rated as PITA Levels 3, 4, or 5 should follow the next action steps and decision points. The following information provides descriptions for PITA Levels 3, 4, and 5.

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PITA Level 3

PITA Level 3 patients are those who do not meet the criteria for PITA Levels 1 or 2 (including no significant abnormalities in vital signs), but are in need of complex care that may include a workup for possible hospital admission and multiple interventions. For example, a patient may require, but is not limited to, the following multiple interventions: a chest radiograph, laboratory studies, intravenous fluids/medications, and oxygen.

PITA Level 4

PITA Level 4 patients are those needing minimal care. These patients are hemodynamically stable and not likely to need hospitalization. They require a lower complexity of care and minimal interventions. PITA Level 4 patients may need a single intervention from those listed as examples for PITA Level 3, or they may need medication orally or by metered dose inhaler.

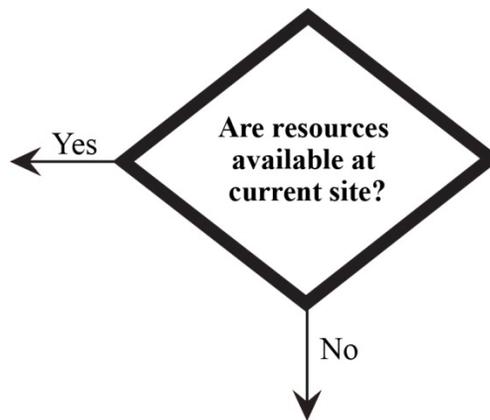
PITA Level 5

PITA Level 5 patients include those who are mildly ill with ILI as well as those who may have been exposed to influenza but are well. They do not need any of the defined resources that PITA Levels 3 and 4 patients may need. These patients will receive an examination by a provider and discharge education to include when to return (if not better in 10 days or if symptoms worsen). They may receive discharge prescriptions when appropriate.

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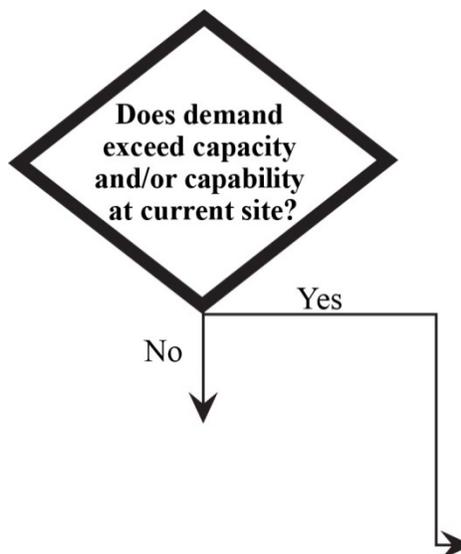
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Action Step and Decision Point 5



Resource availability is essential in the treatment of patients, and it helps determine appropriate sites of care. If resources are available at the patient's current treatment site for PITA Levels 3–5, then maintaining treatment at this current facility is appropriate. If resources are not available at the patient's current treatment site for PITA Levels 3–5, then healthcare facility staff should consider transferring the patient to a site that has resources available for appropriate care.

Action Step and Decision Point 6



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Sufficient healthcare capacities and capabilities² are essential in the treatment of patients, and helps determine the patient's appropriate site of care. If demand does not exceed capacity or capability at the patient's current treatment site for PITA Levels 3–5, then maintaining treatment at this current facility is appropriate. If demand does exceed capacity or capability at the patient's current treatment site for PITA Levels 3–5, then healthcare facility staff should consider transferring the patient to a site that has adequate staffing and resources available for appropriate care.

Action Step 7a

**Treat at
current site**

The appropriate site of care for patient PITA Levels 3–5 is their current site if resources are available and demand does not exceed capacity or capability. These patients will need resources for treatment, but not as comprehensive as for patient PITA Levels 1 or 2.

Action Step 7b

**Consider transferring
patient to site that has
resources available,
sufficient capacity
and capability**

Consider transferring patient PITA Levels 3–5 to an appropriate site of care if their current site does not have available resources or the demand exceeds capacity and capability.

² Medical Surge Capacity is the ability to provide adequate medical resources during events that exceed the limits of normal infrastructure of an affected community. Medical Surge Capability is the capability of the community to rapidly expand the capacity of the existing healthcare system in order to provide subsequent medical care.

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Suggestions for Appropriate Patient Site of Care

PITA Levels 3–5 can be treated at the ED, urgent care centers, primary care providers, outpatient clinics, long-term care facilities, or other alternate healthcare facilities. The capability to treat at these sites of care is dependent on resource availability, patient demand, and other community coordination considerations.

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How to Use the Community Healthcare Decision Pathway

The Community Healthcare Decision Pathway should be used when the following situations exist:

- An influenza pandemic is declared.
- Demand for community resources has increased.
- A need to assess patient surge, medical resources, and healthcare capacities and capabilities exists.

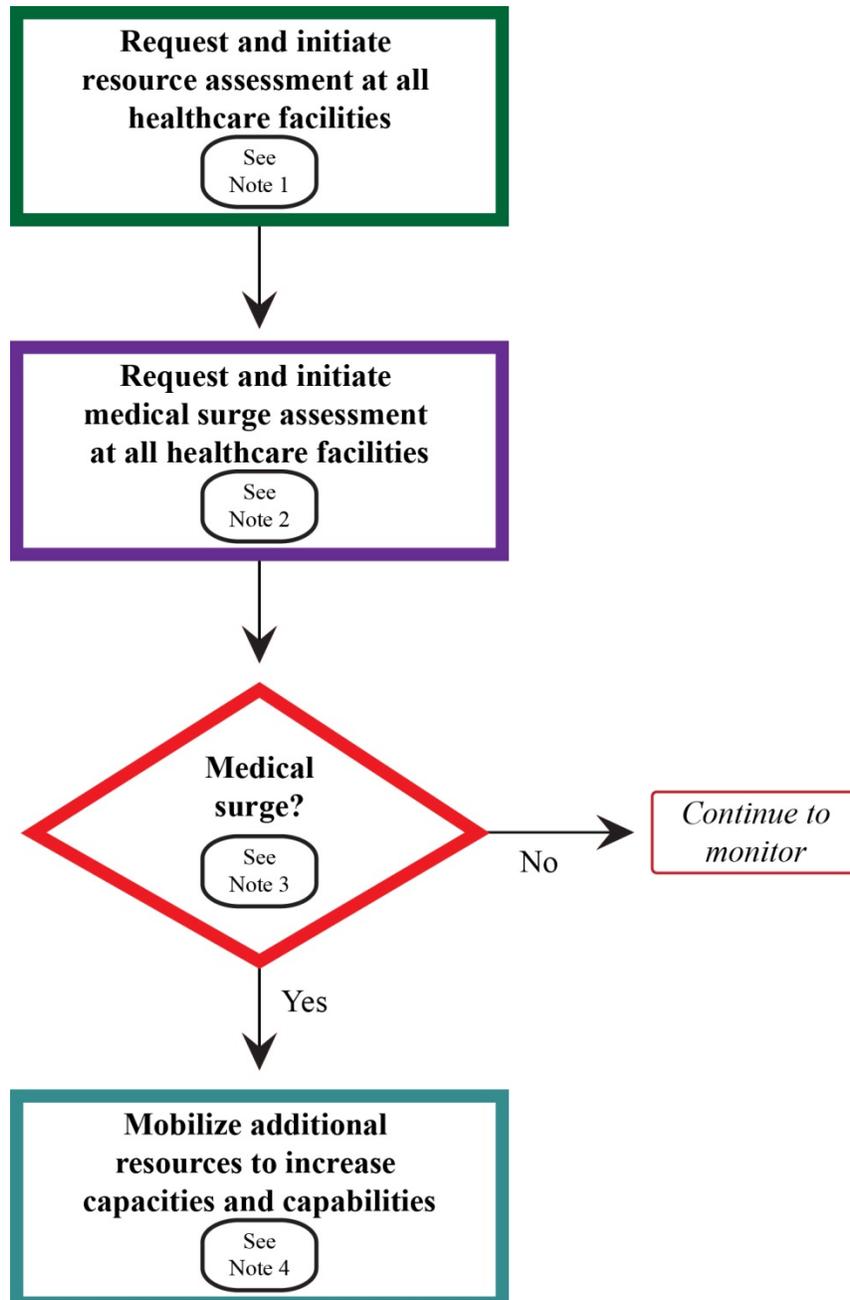
This tool is shown on the next page.

Note: Community Healthcare Decision Pathway fillable worksheets are available for use electronically in the online application.

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Community Healthcare Decision Pathway



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Action Step 1



The first action step in the Community Healthcare Decision Pathway is for community and healthcare leaders and other decision makers, such as public health officials, healthcare partners and emergency management coordinators to initiate resource assessment at all healthcare facilities. This assessment should identify all available resources for treating patients with ILI. Examples of resources to assess are beds, oxygen, IV fluids, medications, and ventilators.

Additional information that community and healthcare leaders and other decision makers can refer to for this action step is contained within Note 1, which is shown on the next page.

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Note 1: Request and initiate resource assessment at all healthcare facilities.

- Public health and emergency management coordinators working within the community ICS during an influenza pandemic should request all healthcare partners to initiate a resource assessment at their facilities.
- This assessment should identify all available resources for treating patients with influenza-like illness (ILI).
- Examples of resources to assess are oxygen, labs, IV fluids, radiology, medications, ventilators, beds, and resuscitation equipment.
- Availability of resources determines which patient Pandemic Influenza Triage Algorithm (PITA) level(s) the healthcare facility staff could manage during an influenza pandemic.
- The following table is a list of minimum suggested resources needed for each PITA level.

PITA Resource Needs Table

PITA Level 1 (Resuscitation)	PITA Level 2* (Emergent)	PITA Level 3 (Urgent)	PITA Level 4 (Semi-urgent)	PITA Level 5 (Stable)
Provider Evaluation	Provider Evaluation	Provider Evaluation	Provider Evaluation	Provider Evaluation
Oral Fluids	Oral Fluids	Oral Fluids	Oral Fluids	
Oral Medications	Oral Medications	Oral Medications	Oral Medications	
Metered Dose Inhalers	Metered Dose Inhalers	Metered Dose Inhalers	Metered Dose Inhalers	
Oxygen	Oxygen	Oxygen		
Labs	Labs	Labs		
IV Fluids	IV Fluids	IV Fluids		
Nebulized Medications	Nebulized Medications	Nebulized Medications		
CXR	CXR	CXR		
Ventilators				
Resuscitation Equipment				

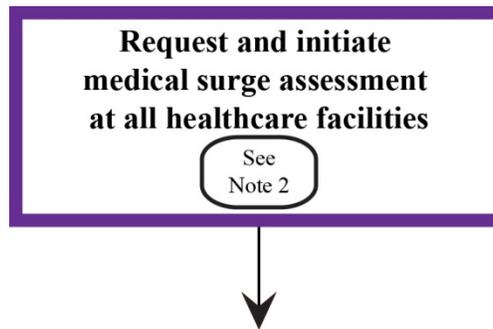
*Patients with comorbid conditions are likely to require a higher level of care. Consult current CDC guidelines.

Note: The Resource Assessment Worksheet for Healthcare Facilities is available for use electronically in the online application.

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Action Step 2



The second action step in the Community Healthcare Decision Pathway is for community and healthcare leaders and other decision makers to initiate medical surge assessment at all healthcare facilities. Appointed employees at healthcare facilities should assess for patient surge each day (or according to time frames indicated by community pandemic influenza plans). Assessment data should be collected and reported as dictated in the community pandemic influenza plan(s). This assessment will help public health and emergency management coordinators determine if community healthcare facilities are currently surged by the pandemic.

Additional information that community and healthcare leaders and other decision makers can refer to for this action step is contained within Note 2, which is shown on the next page.

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Note 2: Request and initiate medical surge assessment at all healthcare facilities.

- Public health and emergency management coordinators working within the community ICS during an influenza pandemic should request all healthcare partners to initiate medical surge assessment.
- Surge data obtained through the assessment should be collected and reported as stated in the community pandemic influenza plan(s).
- Appointed employees at healthcare facilities should report numbers or percentages (above baseline) of patients presenting with ILI within time frames indicated by community pandemic influenza plan(s).
- The following table is an example of the information healthcare facility staff could collect to help initially assess medical surge against baseline data during an influenza pandemic.

Initial Medical Surge Assessment Table

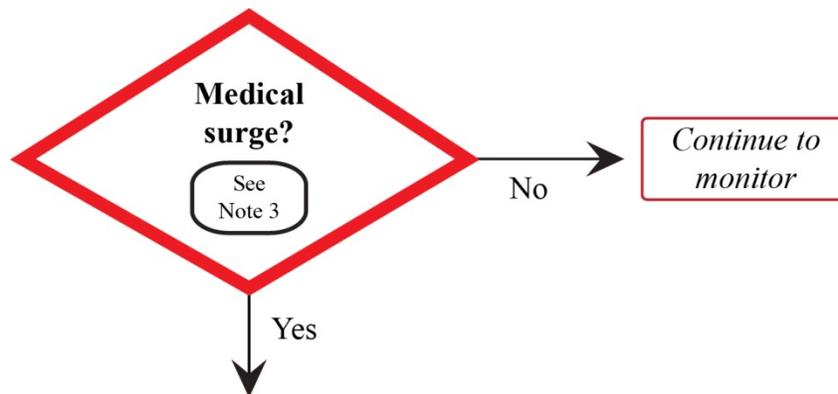
	Patient Volume (total number of patients assessed at your facility)	Number or percentage of patients transferred to ED from other settings	Number of patients treated at ED	Number or percentage of patients admitted to hospital from ED	Number or percentage of patients who left the ED without being seen by a provider	Number or percentage of patients evaluated for ILI	Number or percentage of confirmed influenza cases seen at your facility	Number or percentage of staff that called in sick at your facility
Current								
Last week								
One month ago								
One year ago (baseline)								

Note: The Surge Assessment Worksheet for Healthcare Facilities is available for use electronically in the online application.

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Action Step and Decision Point 3



The third action step and decision point is for community and healthcare leaders and other decision makers to determine the presence and the severity of medical surge. These healthcare leaders and decision makers should notify their healthcare partners when monitoring and assessing medical surge are recommended. If the assessment indicates no medical surge currently exists, healthcare facility staff should continue daily monitoring. If the assessment indicates the healthcare facility is experiencing medical surge, then healthcare facility staff should notify the community EOC so that it can assist in mobilizing any additional resources needed.

Additional information that community and healthcare leaders and other decision makers can refer to for this action step and decision point is contained within Note 3, which is shown on the next page.

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Note 3: Medical surge?

- Appointed employees at healthcare facilities should assess for patient surge daily to determine the severity of the event.
- If the assessment indicates no medical surge currently exists, then healthcare facility staff should continue daily monitoring.
- If the assessment indicates that the healthcare facility is experiencing medical surge, then the community ICS should assist in mobilizing any additional resources needed (see Note 4).
- The following table is an example of information that healthcare facility staff could collect to determine surge severity. The healthcare facility should maintain a daily record of patients with ILI who were rated using the PITA.

Influenza Surge Assessment Table

Week of:								
PITA Level	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
1 (Resuscitation)								
2 (Emergent)								
3 (Urgent)								
4 (Semi-urgent)								
5 (Stable)								
Total								

Note: The Influenza Surge Severity Worksheet for Healthcare Facilities is available for use electronically in the online application.

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Action Step 4

**Mobilize additional
resources to increase
capacities and capabilities**

See
Note 4

The fourth action step in the Community Healthcare Decision Pathway is for community and healthcare leaders and other decision makers to initiate mobilization of additional resources to the healthcare facilities to address the impact of medical surge. Staff at healthcare facilities experiencing a shortage of resources during an influenza pandemic should inform the community EOC so that additional resources can be obtained through the community ICS. Examples of ways to increase capacities and capabilities are to add staff and volunteers during peak hours of operations, cancel elective surgeries, convert single rooms to double or triple room occupancy, if possible, and postpone routine annual checkups.

Additional information that community and healthcare leaders and other decision makers can refer to for this action step is contained within Note 4, which is shown on the next page.

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Note 4: Mobilize additional resources to increase capacities and capabilities.

- If the healthcare facility is experiencing a shortage of resources during an influenza pandemic, then appointed staff should inform the community EOC of the shortage so that additional resources can be mobilized through the ICS.
- Examples of ways to increase capacities and capabilities.
 - Convert more rooms or areas of a healthcare facility to airborne infection isolation rooms (AIIRs) with negative pressure² air handling, if possible.
 - Add staff and volunteers during peak hours of operation.
 - Cancel elective surgeries.
 - Convert single rooms to double or triple room occupancy, if possible.
 - Postpone routine annual checkups.
 - Activate memoranda of understanding (MOU) with partners for sharing of resources.
 - Open tent(s) on hospital property for triage or care.
 - Activate alternate care system (ACS), such as
 - Open influenza treatment centers.
 - Expand the role of outpatient clinics.
 - Facilitate home-based care for patients in cooperation with public health and home care agencies.
 - Open an overflow hospital for influenza patients.

²Negative pressure is created by adjusting a room's or area's ventilation system so that more air is mechanically exhausted than is mechanically supplied. This creates a ventilation imbalance through which air is continually being drawn into the room or area rather than being let out into other areas where exposure may occur.

Note: The Increased Resources Worksheet for Healthcare Facilities is available for use electronically in the online application.

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Summary

The CHDMT is one of many tools available to assist community and healthcare leaders and other decision makers to plan for, assess, and respond to an influenza pandemic. This tool will assist users in determining resource needs, assess the impact of patient demand at healthcare facilities, and help direct the right patient to the right place for treatment and care. The overall intent of the tool is to minimize the impact of medical surge on hospitals and the entire community healthcare system.