Community Healthcare Decision Making Tool
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.
Overview of the CHDMT

Community and healthcare leaders and other decision makers, such as public health officials, healthcare partners and emergency management coordinators, can use the Community Healthcare Decision Making Tool (CHDMT) during an influenza pandemic to assess resources available at healthcare facilities, medical surge within the community, and the severity of the medical surge. The CHDMT also can help community and healthcare leaders and other decision makers to make decisions regarding appropriate sites of care where patients can be screened, treated or transferred during an influenza pandemic. Therefore, when using the CHDMT, these leaders and decision makers should advise their healthcare partners to appoint employees at these facilities to collect needed site-of-care assessment data when requested. Finally, use of the CHDMT in conjunction with the Pandemic Influenza Triage Algorithm (PITA)\(^1\) can enhance overall community influenza pandemic planning, preparedness and response.

Goals of the CHDMT

- Help community and healthcare leaders and other decision makers assess medical surge at the community level to mobilize necessary resources during an influenza pandemic.
- 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 levels and resource needs.

Assumptions of the CHDMT

- 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 the National Incident Management System (NIMS), including functions of an Emergency Operations Center (EOC) and a community Incident Command System (ICS).

Recommended Use of the CHDMT

- When an influenza pandemic is declared.
- Along with the PITA and community pandemic influenza plans.
- In conjunction with other available methods to assess community and healthcare resources, medical surge, and medical facility capacities and capabilities.
- To help identify appropriate sites of care for patients (based on their PITA levels).

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\(^1\) The Pandemic Influenza Triage Algorithm (PITA) was developed by the Centers for Disease Control and Prevention, Healthcare Preparedness Activity (CDC-HPA) with input from a group of medical triage experts. The PITA is intended only for in-person triage of patients (performed by healthcare professionals) who have suspected exposure to influenza during a pandemic.
Community Site-of-Care Tool

Use the Site-of-Care Tool When:
- Influenza pandemic declared
- Medical surge is highly probable
- Pandemic Influenza Triage Algorithm (PITA) levels have been determined for patients

Use the patient’s PITA level to determine appropriate site of care

PITA Levels 1 or 2
- Treat at Emergency Department (ED)

PITA Levels 3, 4, or 5
- Are resources available at current site?
  - Yes
    - Does demand exceed capacity and/or capability at current site?
      - Yes
        - Treat at current site
      - No
        - Consider transferring patient to site that has resources available, sufficient capacity and capability
  - No
    - Treat at current site

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)

The Site-of-Care Tool is used to help determine appropriate treatment facilities for patients based on their PITA levels.
Community Healthcare Decision Pathway

Use the Pathway When:
- Influenza pandemic declared
- Demand for community resources has increased
- Need to assess:
  - Surge
  - Resources
  - Capacities and capabilities

Request and initiate resource assessment at all healthcare facilities
See Note 1

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

Medical surge?
See Note 3

Continue to monitor

Yes
Mobilize additional resources to increase capacities and capabilities
See Note 4
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

<table>
<thead>
<tr>
<th>Provider Evaluation</th>
<th>Provider Evaluation</th>
<th>Provider Evaluation</th>
<th>Provider Evaluation</th>
<th>Provider Evaluation</th>
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</thead>
<tbody>
<tr>
<td>Oral Fluids</td>
<td>Oral Fluids</td>
<td>Oral Fluids</td>
<td>Oral Fluids</td>
<td>Oral Fluids</td>
</tr>
<tr>
<td>Oral Medications</td>
<td>Oral Medications</td>
<td>Oral Medications</td>
<td>Oral Medications</td>
<td>Oral Medications</td>
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<tr>
<td>Metered Dose Inhalers</td>
<td>Metered Dose Inhalers</td>
<td>Metered Dose Inhalers</td>
<td>Metered Dose Inhalers</td>
<td>Metered Dose Inhalers</td>
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<tr>
<td>Oxygen</td>
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<td>Oxygen</td>
<td>Oxygen</td>
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<tr>
<td>Labs</td>
<td>Labs</td>
<td>Labs</td>
<td>Labs</td>
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<td>IV Fluids</td>
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<tr>
<td>Nebulized Medications</td>
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<td>CXR</td>
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<tr>
<td>Ventilators</td>
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<td>Resuscitation Equipment</td>
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</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>PITA Level</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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<td>(Resuscitation)</td>
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<tr>
<td>(Emergent)</td>
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<td><strong>Total</strong></td>
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</table>
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 pressure\(^2\) 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.

\(^2\) Negative 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.