Hospitals have planned for an influenza pandemic for several years, but thus far the characteristics of the 2009 H1N1 pandemic are different than the high-severity pandemic that had been anticipated. The Centers for Disease Control and Prevention (CDC) and The Office of the Assistant Secretary for Preparedness and Response (ASPR) have developed this Readiness Review Checklist as a supplement to existing hospital emergency management plans. This list focuses on information hospitals can use in response to a surge in H1N1 and seasonal flu patients rather than the basic planning and regulatory considerations included in earlier checklists. Additional information on planning for pandemic influenza can be found at [http://www.pandemicflu.gov/professional/hospital/index.html](http://www.pandemicflu.gov/professional/hospital/index.html).

An effective plan will also incorporate information from state, regional, tribal and local health departments, emergency management agencies/authorities, hospital associations, and suppliers of resources. In addition, hospitals should ensure that their pandemic influenza plans comply with applicable state and federal regulations and with standards set by accreditation organizations such as the The Joint Commission.

CDC and ASPR recommend that hospitals review the following four steps to maintain a state of readiness for each wave of patient surge that occurs in this pandemic and into the seasonal flu period.

1. **Protect and Prepare Hospital Staff**
   - Continue to offer seasonal and 2009 H1N1 flu vaccines, as available, and provide antivirals in accordance with CDC guidelines. Educate staff on vaccine safety and the importance of vaccination in the prevention of disease. Information and tools are at [http://www.hhs.gov/ophs/initiatives/vacctoolkit/index.html](http://www.hhs.gov/ophs/initiatives/vacctoolkit/index.html). Tracking of vaccine distribution will be important for reporting purposes and for evaluating adverse events.
   - Ensure Human Resource sick leave and family leave policies are current, adequate, enforced, and easy to follow.
   - Educate staff on sick leave policies related to the current influenza pandemic.
   - Continue to support Occupational Health and Infection Control policies and procedures at all times. For the most current guidance refer to the websites at [http://www.osha.gov/h1n1/healthcare.html](http://www.osha.gov/h1n1/healthcare.html) and [http://www.cdc.gov/h1n1flu/infectioncontrol/](http://www.cdc.gov/h1n1flu/infectioncontrol/).
   - Re-emphasize training for all staff on
     i. Personal Protective Equipment (PPE)
     ii. Triage
     iii. Infection control measures
     iv. Isolation/quarantine
     v. Record keeping
     vi. Safety measures for temporary assignments
     vii. Patient placement
     viii. Home care measures to protect staff are at [http://www.cdc.gov/h1n1flu/homecare/](http://www.cdc.gov/h1n1flu/homecare/)
Review the emergency credentialing policy and volunteer management plan, if appropriate.
Conduct a facility-wide inventory of skills needed for the next wave of H1N1 surge in patients (e.g., ventilator, critical care, translation).
Continue to cross train patient care and non-patient care staff throughout the hospital system so they can be reassigned quickly and are able to function safely in their new role. Training can be done online or by CD/DVD in order to reduce the need for trainers and classroom space. Resources are available at http://www.bt.cdc.gov/coca/training.asp.
Review plans to increase staffing in the Emergency Department, Intensive Care Units (ICUs) and other areas affected to address increased demand due to patient surge. Non-essential staff from other departments can assist patients with Activities of Daily Living (e.g., bathing, eating, dressing, etc.), food tray delivery, cleaning, and patient transport.
Consider using volunteers in areas that do not require licensed healthcare workers such as staffing for multiple strategically located information desks. Verify volunteers are trained in
i. Related regulatory requirements
ii. Measures to protect the safety and health of themselves and others
iii. Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule
Communicate with staff, volunteers, licensed independent practitioners, and others about how information regarding 2009 H1N1 will be disseminated. This should include new information on treatments, worker and patient protection, and current influenza spread in the community.
Inform staff regularly of any changes in hospital procedures including a change in work location, parking, or work practices used during the pandemic.

2. Implement Plans to Address Patient Care Issues and Hospital Operations

Maintain a standing (24 hour/7 days a week) clinical care or ethics committee Point of Contact (POC) to examine clinical, ethical, and other issues raised by the need to triage and allocate resources, extend the use of supplies or utilize reusable supplies. Provide staff with a means to immediately access this POC.
Review regulatory guidelines (see reference section at the end of this document)
Anticipate temporary changes in guidelines from non-regulatory agencies such as Centers for Medicaid and Medicare Services (CMS).
Review disaster plan triggers and determine at what point regulatory waivers may be needed. Compile a list of those waivers.
Review specific clinical issues that may have arisen (e.g., surge of pediatric patients or obstetric patients in non-obstetric facilities). Information on how to care for special groups is available at http://www.cdc.gov/h1n1flu/clinicians/patient_management/.
Re-evaluate screening algorithms or other procedures in Emergency Departments. The algorithms should rapidly screen and separate suspected influenza patients from others in Emergency Departments, inpatient areas and outpatient areas. Examples of algorithms can be found at the following links:
i. [http://www.cdc.gov/h1n1flu/clinicians/pdf/adultalgorithm.pdf](http://www.cdc.gov/h1n1flu/clinicians/pdf/adultalgorithm.pdf)  
ii. [http://www.cdc.gov/h1n1flu/clinicians/pdf/childalgorithm.pdf](http://www.cdc.gov/h1n1flu/clinicians/pdf/childalgorithm.pdf)

- Review strategies that permit conservation, reuse, adaptation, and/or substitution of critical resources while minimizing the impact on clinical care.
- Re-evaluate the plan to manage patients who do not need to be seen in the Emergency Department.
- Establish/review/update plans to expedite patient flow in the Emergency Department and other areas affected by a surge in patients.
- Review mechanisms to maximize bed and space utilization including:
  - Discharging or transferring patients
  - Reducing hours or altering delivery of non-essential services
  - Opening closed units
  - Using ambulatory and non-patient care space
  - Cohorting H1N1 patients
- Verify that current patient tracking and billing systems can be utilized for “surge beds” or establish alternate means to track billable services/supplies.
- Continue to coordinate hospital plans for patient management. Contact other medical and clinical facilities in the community such as physician practices, community health clinics, long-term care and hospice. Include local and state public health departments who can help in developing a communication campaign focused on prevention and managing community expectations with regard to healthcare services.
- Coordinate fatality management plans with local emergency management, medical examiner offices, and local funeral home providers.

3. **Address Equipment and Supply Needs**

- Consider increasing the inventory of basic and critical supplies. New provisions should be made for the necessary supplies for a subsequent wave of an influenza pandemic. Also, take into account the rapid consumption of certain supplies and services. This may include PPE supplies, alcohol based hand sanitizer, tissues, etc.
- Review and update mechanisms for tracking basic and critical supplies throughout the facility. Take into account the rapid consumption of certain supplies, services and the location of, and logistics for, alternate care sites.
- Establish triggers for replenishing resources that may become scarce in Emergency Department and ICU which may include:
  - Ventilators and components
  - Oxygen and oxygen delivery devices
  - All vascular access devices
  - Specialty beds
  - Specialty medications (e.g., intravenous fluids, sedatives and analgesics, reversal agents, specific antibiotics, antivirals and vasopressors/inotropes)
  - Medical transportation
- Review and familiarize all staff with procedures for emergency procurement of supplies through vendors, suppliers, group purchasing agreements, and memoranda of agreement for priority status with partners.
Re-emphasize availability and provide training for select staff on the ordering and use of Strategic National Stockpile (SNS) equipment and supplies that they may not normally use (e.g., Strategic National Stockpile ventilators, masks, and antivirals). Contact your State Public Health Officials to determine procedures to obtain SNS stocks.

Develop a plan, in conjunction with Emergency Management, to address donations from public and private entities as well as from individuals in the community.

Review existing Mutual Aid Agreements (MAA) and Memorandums of Understanding (MOUs).

4. Provide for Security

- Emphasize to staff the importance of maintaining the facility’s access control, security, revised visitor policies, limited access plans and procedures, and how to report security breaches. Include these procedures for hospital run Alternate Care Sites.
- Review security risk assessments and make changes as necessary to enhance the facility’s perimeter control, and ability to secure and limit access to the facility.
- Establish/review plans to protect scarce resources, and protection of staff handling them. Be sure to include SNS stocks received.
- Confirm that security equipment is functioning properly and that security vendors have backup capability and redundancy and staffing plans.
- Determine signage needs inside and outside the facility with consideration for the diversity of your population and changes in location of service or hours of operations.
- Identify potential additional waiting area space and implement its usage before existing space is overflowing. Adequate seating, drinking water, waste disposal containers, and alcohol based hand sanitizer should be provided.
- Determine if your visitation policy adequately protects your patients, staff, visitors, and others coming to the hospital campus. Make necessary modifications and communicate changes to the public to reduce the chance of negative encounters.
- Remind staff to be aware of potential crimes within the facility that may be committed during times of overcrowded conditions and staff distractions.

Federal References and Resources


Centers for Disease Control and Prevention (CDC), “2009 H1N1 Flu (Swine Flu),” http://www.cdc.gov/h1n1flu/.

