Hospital Surge Evaluation Tool

Main Content

**A software-based tool designed to help hospitals evaluate their level of preparedness for mass casualty incidents**

Mass casualty incidents have happened throughout the country in places as large as Boston, MA and as small as Newtown, CT.  Hospitals need to be ready to respond with rapid treatment, effective triage, and coordinated communications to help them respond effectively when every second counts.

The Hospital Surge Evaluation Tool is a user-friendly peer assessment tool that was designed to identify gaps in a hospital’s preparedness and help assess its ability to respond to a mass casualty event.  The tool takes the form of an essentially no-notice drill, and incorporates the real-life considerations of healthcare delivery in acute care settings.

The tool is intended for use by hospital emergency managers, hospital administrators, and clinical staff to assess and improve their hospital’s surge plans. It is not intended for use as an accountability tool.   Hospitals need to exercise their preparedness for a mass casualty incident regularly.  This tool can help hospital emergency managers to make recurring tabletop exercises a reality by providing a fully developed tabletop exercise that can be used at their facilities.  In some respects this tool can be thought of as “Surge Evaluation in a Box”.

The tool has two components, one for triaging patients in the emergency department and another for the hospital incident command center.

**Expected Outcomes**

At the conclusion of the exercise there will be a “Hotwash” to discuss a variety of quantitative and qualitative metrics. The “Hotwash” include feedback from the two areas of activity for the exercise, the Hospital Command Center and the Hospital Emergency Department. This is supported by graphical displays of data that are automatically generated using the data collected throughout the exercise.  These data displays, which can be projected on screen and saved for future use, include:

* Immediate Bed Availability Over Time
* Patients Arrivals Over Time (By Criticality Type)
* Patient Transfers Out Of The ED Over Time

**Command Center Tabletop Exercise Component**

The command center component requires incident command leadership and necessary staff to respond and to assess capabilities such as bed availability within the facility. These may also be referred to as “players”. Both the Command Center and Emergency Department components of a drill are run concurrently.

**Emergency Department Table Top Exercise Component**

The ED component requires that the “players” in the exercise, typically a nurse and physician, be free of clinical duties and able to take instructions from the Command Center “players” during the course of the drill. They will be asked to triage the automated generated list of patients who are presenting. The ED must be able to communicate with the hospital’s Command Center.

**Staff Commitments & Time Requirements**

In order for the drill to be successful four peer assessors, preferably from another health care entity, are required.  Two will be positioned in the ED at the start of the drill (with their laptops) and applicable exercise software; two will be positioned in the Hospitals’ Command Center  with their laptops and applicable software.

The peer assessor roles:

* The ED Controller
* The ED Qualitative Evaluator
* The Incident Command (Command Center) Evaluator
* The Bed Control Evaluator

As mentioned above in the Emergency Department Table Top Exercise Component section, two ED staff, typically a doctor and a nurse, FREE OF OTHER CLINICAL DUTIES for the duration of the actual exercise (75 – 90 minutes) need to be on hand. They will triage the automated generated list of patients who are presenting.  The command center component requires incident command leadership and necessary staff to respond and to assess capabilities such as bed availability within the facility.

HPP estimates that it will take 2 – 3 hours for the exercise director to become familiar with the exercise materials. Once the exercise commences, the entire drill should take between 90 minutes to two hours.  The exercise scenarios can be modified and customized by incident type, patient load and treatment requirements.   Additional time (approximately one to two hours) is also necessary for an after action debrief (“hotwash”) with the peer assessors  as described above.

**Equipment & Exercise Materials**

* Four (4) laptops (which will need to be pre-loaded with the applicable software (Excel/Adobe Reader/Word).NOTE: Each laptop should have the Excel (preferably version 10 or higher), as well as MS Word Office 2010 or newer and Adobe Reader X or newer.
* The Controller & Evaluator Handbook.
* The Arrival List Generator, ED Exercise Controller and Qualitative Tools, and the Command Center Incident Commander and Bed Controller Tools - embedded in the Excel – based automated tools/spreadsheet.

The Hospital Surge Evaluation Tool builds on a prototype developed by RAND in 2012. While well received in terms of the tool’s practicality it was apparent that additional development would be needed in order to make the Surge Evaluation Tool both useful and user-friendly.  The current version of the Hospital Surge Evaluation Tool was pilot tested at a number of hospitals during the second half of 2014. This particular tool is also being adapted by RAND Corporation, under the direction of the Hospital Preparedness Program, for use by Healthcare Coalitions in much the same manner as this tool.

To learn more about the tool and how it works, see the [Hospital Surge Evaluation Tool Manual](https://asprwgpublic.hhs.gov/aspr/hpp/Documents/surge-test-hospital.pdf). For additional questions or to discuss this tool further please contact your HPP Field Project Officer or email your questions to the [Hospital Preparedness Program.](mailto:HPP@hhs.gov)

Interested in conducting an exercise as a health care coalition?  Check out the [Health Care Coalition Surge Evaluation Tool](http://www.phe.gov/Preparedness/planning/hpp/Pages/coaltion-tool.aspx).