Hospital Surge Tabletop Exercise

Master scenario events list (MSEL)

Prepared by:

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Emergency Preparedness and Response Exercise Program

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 PREFACE

The purpose of the Master Scenario Events List (MSEL) Package is to provide central exercise facilitation team members a complete edition of the MSEL. This includes the summary listing as well as any detailed inject forms that will be delivered to players. Core control team members, may use this document to track exercise play, manage Simulation Cell (SimCell) functions, and maintain situational awareness for the Exercise Director. Evaluators may also reference individual pieces of the document through teamwork with facilitators.

Exercises are the culmination of training toward a higher level of preparedness. This document was produced with help, advice, and assistance from planning team members from various departments and agencies.
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EXERCISE OBJECTIVES

Overall Objectives

1. Discuss the trigger points and relevant plans/policies/procedures related to the sequential transitions from normal operations to escalating hospital surge activities and evaluate the mechanisms used for internal and external information exchange for obtaining and maintaining situational awareness at the hospital, local, regional and state levels.

2. Demonstrate and discuss the relevant roles and responsibilities of internal staff and associated mechanisms for efficient integration of community partners during escalating hospital surge activities.

3. Evaluate the strategies available for hospital staff to optimize the caching and use of potentially scarce critical resources in accordance to existing plans/policies.

4. Explore the options for outpatient surge mitigation and discuss the efficient integration of nearby hospitals, primary care centers, long term care sites, community health centers and university health systems during a surge response in accordance to existing plans/policies.

5. Outline and discuss the strategies and mechanisms for efficiently requesting, receiving and utilizing scarce and/or critical resources in the context of surge mitigation activities. Discuss and identify the anticipated/envisioned roles of both DPH and emergency management agency in support of hospital surge coordination and operations continuity at both the regional and state levels.
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<tr>
<th>Event #</th>
<th>1</th>
<th>Event Time: 09:45</th>
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<tbody>
<tr>
<td>Recipient Player(s):</td>
<td>Your Hospital</td>
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### Event Description:
Establishes the starting point related to events that will serve as catalysts for subsequent preparatory/response activities

### Inject:
Over the past 6 days, your emergency department has seen an almost 20% spike in its usual daily volume. Most of the volume increase seems to be due to respiratory complaints. Although the majority of the patients that have been seen are mildly ill and can be discharged with supportive care, a surprising percentage of patients have needed admission to the hospital for IV fluids, supplemental oxygen and occasionally antibiotics. Several patients with the same clinical picture have required admission to the ICU and are on ventilators.

The rise in ED demand has been very concerning to the ED staff, who are struggling to keep pace with the patient volume. Your ED leaders are contacting hospital leadership to ask for assistance and to see if there is anything unusual going on in the rest of the local medical community.

After a brief internal investigation, your hospital medical leadership has been able to gather the following preliminary information:

- Several of the adult and pediatric practices have also noted a rise in upper respiratory complaints in the past 10 days. Several practices have been forced to suddenly extend their hours to accommodate the surprising number of last minute sick calls.
- The hospital lab reports no change to the number of influenza, RSV, or other viral or bacterial pathogen results over baseline in the past 2 weeks.
- The Intensive Care Unit staff note that the hospital has admitted 4 patients in the past 10 days with severe respiratory failure, diarrhea and alveolar hemorrhage but for whom no diagnosis has yet been made.
- Your occupational health providers note a small spike in employee sick calls in the past day, but did not think it was worth mentioning without any other context.
- Your inpatient medical and surgical beds are at 100% occupancy and your ICUs are full.
- Your emergency department is bursting at the seams with every conceivable horizontal and hallway space full. You have twice your usual number of inpatient boarders currently in the ED, and that number is expected to rise.
- Your head of infection control is aware of a smoldering outbreak of a new type of coronavirus (the same general type of virus as caused SARS) that has been ongoing in
“insert another country” for the past 2 months with respiratory distress and diarrhea as its chief symptoms. There have been no reported cases of the new virus outside of “insert another country” to date, and he is not sure whether this outbreak is related, but the new virus appears highly transmissible from person to person.

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<th>Expected Action(s):</th>
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<td>Communication of information vertically within each hospital site: key EP, hospital leadership, operations and clinical staff. Assessment of the broader situation is expected, potentially by contacting local, regional or state public health representatives and/or other institutions. This should begin discussions on the implications of the apparent outbreak and the need to surge.</td>
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Module 1- Initial Decision Making and Incident Management

General Discussion Questions

1. How do you determine the extent and severity of the surge in illness that is currently occurring in the community?
   a. Do you know what is going on at other hospitals? At CHCs and other outpatient facilities? At universities and colleges? At home health care agencies?
   b. How are you maintaining a regional or statewide awareness of what is occurring? Do you have any functional system for communicating regionally with your partners?
   c. What information would you want to know? How would you get that information?

2. What information are you looking for from DPH and/or local public health and what information are you providing to them? When and how are you communicating with them?

3. What are your hospital’s initial priorities?
   a. Are you performing an assessment at this point?
   b. Is someone assessing critical personnel and material resource needs? How long will this take?
   c. Do any decisions need to be made before the assessment is completed?

4. When would you activate you EOP?
   a. Is there a trigger to activate you EOP?
b. How would this decision be made? Who makes the decision?

5. What does your Incident Command structure/organization look like at this point?
   a. How will you rapidly compile, verify and share information/reports?
   b. What mechanisms are you using to send/receive information from local public safety and local public health representatives?
   c. What types of information do you need?
   d. What information are you sending them? When are you sending it?

6. Which other response partners are you in communication with at this point?
   a. How are you communicating with them?
   b. What specific information do you need from them?
   c. What information do you need to share with them?

7. What input/influence will outside agencies have on decisions to surge?
   a. Would you be willing to be the first hospital to implement their surge plan when others are not?
   b. Do you require a state emergency declaration in order to implement your surge plan?
Event # | 2 | Event Time: 10:15
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Recipient Player(s): | Your Hospital

Event Description:

More definitive information that will push the hospital towards the surge decision.

Inject:

- It is now 16 days later. The number of new cases of acute respiratory illness with diarrhea has continued to climb geometrically in the region.
- Your region seems harder hit than anywhere else in the state and your state is clearly the epicenter of this outbreak in the nation.
- The CDC and WHO have both sent representatives to your state, joining a very large number of DPH staff in the investigation of the outbreak.
  - The CDC and WHO have confirmed that the novel disease outbreak in your state is indeed the same coronavirus infection as was recently seen in “insert another country”.
- Based upon the epidemic curve in “insert another country” to date, the WHO estimates that hospitals in your state may expect to see a 30-40% rise in need for inpatient hospitalizations that is likely to be sustained for as long as 4 weeks.
  - Emergency departments may see more that double their usual number of visits per day.
  - Outpatient practices, health clinics, and urgent care centers should also expect to be similarly overwhelmed as well.
- The WHO and CDC are recommending airborne isolation for suspected and confirmed cases, but recognize that this is likely not possible given the very large number of cases presenting to US hospitals. Based upon early data from “insert another country”, they suspect that the major route of transmission of the virus may be by droplet.
- There is no vaccine or unique treatment for patients with the infection.
  - Most patients who require hospitalization require several liters of IV fluid per day and supplemental oxygen.
  - A small number of patients have progressed to pulmonary hemorrhage and renal failure, increasing the need for hospital-based dialysis of acutely ill patients.
- DPH and the US Department of Health and Human Services have each declared a public health emergency.
- On the advice of the Secretary of USDHHS, DPH, similar to many adjacent states, has ordered hospitals to take all necessary steps to be able to accommodate a patient influx of 20% of patients beyond their licensed bed capacity.

Expected Action(s):

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<td>Final deliberations on the need to surge. Discussion of the specific actions taken to accommodate a 20% surge in</td>
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inpatient capacity. Discussion of how to accommodate outpatient and ED needs as well. Coordination with local, regional and state public health officials. Discussion on managing scarce resources and access to care.

Module 2- Operations

Key Issues

- Workforce mobilization is required to execute the operation, including internal staff, off-duty staff and external staff
- Non-personnel resources must be assessed, identified, prioritized, allocated and integrated into the response
- Cancellation of elective or routine admissions, surgeries and/or procedures and implementation of rapid early patient discharge must occur to support operations
- Triage of patients must occur during the operation
- Patient care and safety must be maintained during the operations

General Discussion Questions

1. What information do you need and from whom do you need it in order to make the decision to surge?
   a. How are you getting this information? Is there a standardized format that you use to obtain the information?
   b. How quickly are you getting the information you need?
2. How and what are you communicating to DPH?
   a. What do you think are the critical pieces of information needed by DPH?
   b. What information do you need from DPH?
3. Are there formalized stages in your surge plan with defined actions?
   a. If so, what are those actions?
4. What are your primary methods of internal and external communication?
   a. What external agencies/entities are you communicating with at this point?
   b. What information do you need from them and what information are you giving them?
c. How are you interacting with EMS? With LPH? With public safety?
    Outpatient providers? LTCF? Home care providers? Universities and
    colleges? Large private sector employees with health related capacity?

5. How does your communications office or PIO communicate with other
   PIO/communication personnel?

6. Who takes the lead for risk communication with staff internally? With patients and families?

7. What are the trigger points at which you would triage patients differently?
   a. From outpatient practices to the EDs?
   b. From the ED to urgent care center
   c. To “surge screening” clinics?
   d. To floor-level care?
   e. To ICU-level care?
   f. For access to ventilators?

8. Are potential changes to any of the above triage policies formalized in your plan?

9. How and where are presumed infectious patients triaged during a major surge event/outbreak?

10. What are the policies and procedures for shifting the provision of care from patient-based outcomes to population-based outcomes?
    a. Who decides when to activate a change in triage?
    b. How will changes in triage be communicated to staff?

11. Who will be tasked with making triage decisions in difficult cases? Have they received any formal training in the triage plan?
    a. Is there an existing framework for ethical decision making related to triage?
    b. What are the mechanisms for resolving disputes over triage within the facility?

12. Will you use phone triage to identify patients that need to come to the hospital for emergency care and those that can be seen elsewhere?
    a. Where is the staff for phone triage coming from?
    b. Do you have protocols that can be used for phone triage? If not, how would phone triage be accomplished?
c. How is staff trained?

13. What are your plans for operating additional or alternate triage sites?
   a. How are such sites staffed?
   b. How are they equipped?
   c. Who is responsible for setting up the site?
   d. Who has operational control over the site?

14. How will you maximize and prioritize use of patient care space within your facility?
   a. What are the critical areas within your facility in which space is likely to be limited early on in the disaster?

15. How are additional inpatient and outpatient care spaces activated?
   a. What equipment, supplies and staff need to be in each area?

16. Can you surge 20% immediately above capacity in
   a. Critical care (ICU, PICU, NICU, CCU)
   b. Burn care
   c. Med-surg
   d. Pediatric
   e. Telemetry
   f. Maternity care
   g. Airborne isolation

17. Can you surge in the areas below an additional 5% in 2 hours? 10% in 12 hours? 15% in 24 hours? 20% in 72 hours?
   a. Critical care (ICU, PICU, NICU, CCU)
   b. Burn care
   c. Med-surge
   d. Pediatric
   e. Telemetry
   f. Maternity care
   g. Airborne isolation

18. If needed, could you surge 5-10% in outpatient volume in 2 hours? 50% in 24 hours? 100% in 72 hours?

19. If needed, could you surge 150% of beds in your emergency department in 2 hours?
20. If needed, could you surge 100% of your emergency department daily volume in 24 hours?

21. What is your understanding of the role of DPH and emergency management agency during a surge event? How will the hospital IC structure coordinate/communicate with DPH and emergency management agency during the surge operations? What information will you be communicating and what information would you want from them?

22. What, if any, roles will other agencies play in the hospital surge (home based care, LTCF, colleges and universities)?
   a. How will you be coordinating with them?
   b. Do you know the resources or capacity they have available to assist?

23. What are the triggers for implementing rapid patient discharge?
   a. Who makes the decision to implement rapid patient discharge?

24. What is the estimated potential bed yield by units at this point?

25. Do you have a Surge Bed Management Committee or Team that is in charge of organizing and directing activities related to inpatient admissions, discharges and transfers?
   a. How are any changes in bed management policies communicated to staff?

26. Do you have a plan to identify and resolve barriers to discharge such as including timely physician involvement and identification of who can discharge a patient, development of policies related to pending labs, policy regarding wait times for prescriptions, lack of discharge planning tool, awaiting bed at other facility etc?

27. What will be done if family refuses rapid discharge?

28. Is there an assigned waiting area for patients discharged to home if they cannot be picked up by families as soon as they are ready for discharge?

29. What are the triggers for implementing cancellation of elective or routine admissions, surgeries or procedures?
   a. Who has the authority to implement cancellation of elective or routine admissions, surgeries or procedures?

30. Are there clear definitions of what constitutes elective or routine admissions, surgeries or procedures?
31. How are cancellation decisions applied equitably?

32. Do you have a list of elective or routine admissions, surgeries or procedures that could be deferred for up to 1 week? For greater than a week? For greater than 1 month?

33. How are these decisions communicated to staff?

34. Who is responsible for contacting the patient about the postponement of the admission, surgery, or procedure? What happens if you can’t contact the patient?

35. Do you have a plan to identify and resolve barriers to cancellations such as including timely physician involvement, appeals process, late notification of decision, etc?

36. How are you initially assessing adequacy of inventory of key material resources and existing supplies?

   a. What are the challenges in defining these resources?

   b. Is there a plan for automatically conducting/submitting unit-level resource needs/utilization reports? What is the trigger for units to submit such reports? Who is compiling the reports? How long will it take? How is the information continually updated?

   c. Do you have caches of critical supplies? Where are they and how are they accessed? What critical supplies will likely run out first?

   d. Is there a plan to limit the non-essential use of certain supplies? If so, what supplies and how is this communicated to staff? How is it monitored?

37. Do you have a framework for prioritizing resource needs? Who has the authority to prioritize needs across hospital? How are these decisions made?

38. How does your institution compile a list of the number of available assets (portable cardiac monitors, portable ventilators, oxygen cylinders, suction machines, IV pumps with battery, etc.) and the location of those assets?

39. How is access to durable medical equipment prioritized during surge operations?

40. How does your institution ensure that the available equipment is matched to the appropriate patients?

41. If needed, from where are you getting additional medical equipment?

42. What supplies are you likely to run out of?
43. In particular, how is the use of PPE prioritized during the response?
   a. How have you identified the amount and types of additional PPE needed to support your response?

44. How are you identifying amount of food supplies needed to support your operations?
   a. Where are you getting the additional food supplies?

45. How have you identified the number of additional cots, blankets and pillows needed to support your response?
   a. Where are you getting the additional cots, blankets and pillows needed for the response?

46. Have you worked with your partner agencies and other hospitals to discuss specific resource availability? What assets do you anticipate that your partner agencies and/or other hospitals could supply? How soon will external assets be available?

47. Do you have an inventory of the skills and abilities of staff (competencies and skills beyond licensing) that might allow you to redeploy staff to other specialty areas (i.e. ED, OR, ICU, etc)?

48. How will you identify the number and skill mix of personnel not currently available but that will be needed for the response (immediate and projected needs)?
   a. Will available personnel within your facility be sufficient for the response?
   b. In what areas would you be severely limited first?
   c. What are the types and skill mix of additional personnel outside your facility that will be needed for the response?
   d. Can you anticipate how long will they be needed?

49. How are you prioritizing personnel needs?

50. How are nursing and medical students and residents dealt with? If they are shared among a number of hospitals, how is it determined who they will be “assigned” to?

51. How to you deal with per diem staff? Staff that work in multiple institutions?

52. How will your staffing model change? Who has the authority to make the decision to alter your staffing model? How is this decision communicated to staff?
   a. How will you use and/or re-deploy on site personnel?
   b. How will you recall appropriate staff to respond?
c. Will you use incentives?

53. How will decisions be made regarding scope of practice? Who makes these decisions? How will they be communicated to staff?

54. How are volunteers being identified, assigned and integrated into the response?
   a. How are they credentialed?
   b. Who manages them?
   c. What are their expected roles and responsibilities?
   d. How are they trained/oriented?

55. Have you identified any other potential pools of medical staffing resources besides the local MRC, and state and federal credentialing programs?

56. Have workers been trained in behavioral disaster support?

57. Where and how will you reach out for additional behavioral health support staff?
Module 3- Recovery

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<tr>
<th>Event #</th>
<th>3</th>
<th>Event Time: 11:10 am 5 days later</th>
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<tbody>
<tr>
<td>Recipient Player(s):</td>
<td>Your Hospital</td>
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Event Description:
Decrease in surge demands

Inject:

It is now 3 weeks later. Based upon social distancing measures similar to those used in SARS, the rate of new cases has fallen steadily for the past 5 days. The USDHHS and DPH are cautiously optimistic that the worst of the surge has passed. They are encouraging hospitals to plan for recovery and return to normal operations, but caution that hospitals must still be able to care for any new cases that present as the outbreak (hopefully) continues to wane.

Expected Action(s):

Notes

Key Issues

- The hospital successfully surged and met the needs of the community.
- Recovery operations are ongoing and include the return to normal operations.
- The administration is anticipating a continued workload surge across a number of departments as the hospital resumes normal activities.

General Discussion Questions

1. What are your operational objectives at this point in time?
2. Who has the authority to make the decision to transition back to normal operations?
   a. What is the process to make this happen?
   b. Are there defined triggers?
   c. Who is involved in this process?
3. What are your priorities at this point? Who determines them and how are they determined?
4. What process will you use to resume routine or elective admissions, procedures, and surgeries?
   a. How will prioritization of routine or elective admissions, surgeries, and procedures take place?
b. Are there tools or guidelines developed?

5. With whom are you in communication at this point in time?

6. Are there any resources needed for the transition?
   a. Are these resources different from response resources?

7. How will hospital staff be notified about key decisions?

8. How will you notify the public that the hospital is transitioning to normal operations?

9. What process will be followed to reconstitute the local response capability?

10. What role will partner agencies play in repopulating the hospital facility?

11. Will you have enough resources/personnel to assist in the recovery to normal operations?
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<th>Event #</th>
<th>4</th>
<th>Event Time: ~11:45</th>
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<td>Recipient Player(s):</td>
<td><em>Your Hospital</em></td>
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<td>Event Description:</td>
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