

Dear Colleague,

Thank you again for assisting us with this effort to identify measures of effectiveness in disaster medical response.

In our second of three rounds, you and nearly 30 other experts helped to identify 56 of the most meaningful measures used to describe disaster response. We are now in the **final round** of this study, and we need your help. Please review this final list of measures, and assess their value using the defined rating scale.

**There is only one page of questions; it should take about 10 minutes to complete.**

**Due to the design of this round, surveys should be completed in one sitting. Unsaved answers will not be stored until all measures have an answer and you click the "Next" button.**

Should you have any questions, please let us know.

Thanks again,

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**Instructions:**

Please review the following measures as they pertain to the following prompt:

A single-impact natural disaster has struck a large community, resulting in mass traumatic injury and incapacitation of existing medical infrastructure. Medical teams are deployed to assist with provision of medical care spanning 72 hours post event (T+72 hours) through the next two weeks (T+14 days). **What clinical measures are predictive of reduction in morbidity and mortality during this time?**

Please rate the measures by the following scale:

- 1 = This measure has **no value** and should be eliminated
- 3 = This measure has value in some situations
- 5 = This measure has **definite value** in most situations and should be kept

**This is the only page of questions**

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**\*Please rate the following**

	No Value (1)	Some Value (3)	Definite Value (5)
Are your medical services being coordinated through the incident command center?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are latrines available for patient use?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are translators present?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What rate of open fractures required early debridement? (# patients receiving early debridement / # of patients with open fractures / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are pediatric formulations for medications present?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the rate of distribution of matched blood products? (# of matched blood units transfused / # of blood units requested / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are milk supplies available for infants?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is communicable disease monitoring being performed?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is sterilization equipment present?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the age specific morbidity rate? (# of those within age group with a medical visit / # within age group within catchment area / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What rate of cases are being treated for non-traumatic conditions? (# of patients treated for non-traumatic condition / # of patients evaluated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Does a disposal mechanism exist for human waste removal?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the rate of provision of mental health resources for children? (# of children receiving mental health resources / # of children screened for mental health concern / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What percentage of infectious outbreaks are reported to an overseeing epidemiology agency within 24 hours of detection?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the under-5 mortality rate for patients treated? (# of under-5 deaths / # of under-5 patients cared for / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the rate of limb amputation? (# of amputations / # of identified limb threatening injuries evaluated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are safety measures in place for providers?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What basic life support measures are available?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have providers had prior disaster training?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are infection control procedures in place?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What rate of patients are presenting with behavioral health concerns? (# of patients identified with a behavioral concern as the sole diagnosis / # of patients treated for any condition / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the rate of debridement of dirty wounds? (# patients receiving debridement / # of patients with contaminated wounds / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What rate of injuries requiring debridement received early antibiotics? (# of patients with injury receiving antibiotics / # of patients identified with injury requiring early antibiotics / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the cause-specific mortality rate? (deaths from "X" cause / those identified with "X" cause / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What percentage of patients have been identified with moderate to severe injuries?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Was a needs assessment performed by an advanced team?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What rate of children require assistive devices such as mechanical ventilation? (# of pediatric patients days on critical care devices / # of pediatric patient days / week)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What percent of providers have been trained in the current system of triage?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is medical support provided to local health facilities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the rate of transport for critically ill patients? (# of critically ill patients transported to a higher acuity facility / # of patients treated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What rate of your staff needed to be evacuated from the treatment site and why? (# of evacuated staff / # of staff on site midweek / week)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are local emergency activation protocols or MOUs for blood use incorporated into response plans?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
How many healthcare facilities are open and operating? (functional centers / total centers / region)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the rate of surgical procedures (minor, moderate, severe)? (# of procedures of each type / # of patients evaluated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the mortality rate of patients in critical care areas? (# of deaths / # of patients treated in a critical care area / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What method is used to hand-off patient care on departure of team?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the number of pregnant women being treated? (# of females aged 15-45 identified as pregnant / # of females aged 15-45 evaluated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are public health staff incorporated into response?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are social services available?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Have medical teams been registered with a coordinating body prior to arrival?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has food and water been transported with the team?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Did search and rescue teams coordinate with medical teams?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the healthcare provider to patient ratio in critical care areas? (# of critical healthcare provider days / # of critical care patient days / week)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the rate of hospitalized amputations? (# of patients receiving amputation / # of patients treated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are mental health services available?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What amount of time elapsed between recognition of surge needs and access to adequate personnel and equipment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What rate of patients need treatment for orthopedic injury? (# of patients with a new orthopedic injury / # of patients newly evaluated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is electricity available?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What number of patients have been treated? (patients / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are local medical staff incorporated into the response?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What proportion of the essential drug list is not available to the prescribing provider? (# of drug types out of stock / # of drugs on essential drug list / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What rate of patients with a communicable disease (airborne, droplet, contact) are hospitalized in an isolation setting? (# of patients in isolation / # of patients with transmissible infection / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has a clear chain of command been in place?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is personal protective equipment available for providers?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are critical care staff available?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
What is the volume of clean water available per person per treatment facility? (liters of clean water / # of persons treated / day)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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## Demographics

**\*Name (last, first, middle initial):**

**\*Email:**

**Organization:**

## Thank You

Thank you again for your participation in this study. Over the coming weeks, your answers and those from our other study participants will be compiled. These responses will be used to construct a final reporting tool. Once this is done, we will gladly share our results with all contributors.

Again, your contributions have been deeply appreciated. Our goal is to provide a means by which to assess disaster response, thereby enabling agencies to highlight successes and identify opportunities for improvement.

Please feel free to contact us should you have any questions or feedback, or use the comments box below.

Thanks again,

Rajesh K. Daftary, MD  
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**Comments:**