

National Center for the Study of PREPAREDNESS AND CATASTROPHIC EVENT RESPONSE



Science of Surge



PACER Organization





Background

Scientific Basis for Medical Surge

- One of 37 associated target capabilities of the Nat Prep Goals
- HSPD 21 major focus
- Emergency Support Function 8
- IOM Major Focus
- HHS HPH JAWG Major Focus
- Recent Pronouncement by the Secretary



Current Surge Projects & Results



Science of Surge Conference

- 1. May 2006, San Fransisco
- 2. G. D. Kelen, M.D. Course Director
- Published Proceedings Nov AEMJ 2006
- 4. >30 publications
- 5. Richard Carmona—Keynote Speaker
- 6. Initiated Work on Surge Capacity Metrics





Project 1a: Research Priorities

From the Science of Surge Conference



Rothman et al. AEMJ 2006I13L1160





Project 1b: Predicting Capacity

(Kelen & McCarthy, AEMJ: 13:1089-)

Project 1c: Defining Components of Surge

Components of Medical Surge Capacity

System	Space	Staff	Supplies
Planning Community Infrastructure Government Informal Networks	Facilities Medical Care Storage Laboratory	Numbers Capability/Skill Set Expertise Stamina	Biologics Respirators PPE Standard Supplies
Public Health Incident Command All Levels	Mortuary Housing of Staff	Psyche	Food and Water
HEIC Regional Co-operation Multiagency Interhealth System	Quality Size Capability		
Communications & Information Flow Supply Chain Distribution EMS/First Responders			
Continuity of Operations			

Coalling, Acivid.



Hospital Readiness WALEX*

1. Determine Metrics for Health System Preparedness in the model



- 2. Special Issue in *Journal of Disaster Medicine and Public Health Emergencies*
 - June 2009
- * Conference and Publication Funded by AHRQ



Health System Readiness WALEX Pending Publications

Macintyre , A	Emergency Management: Role in Preparedness			
Kelen	Surge Capacity from Reverse Triage			
Hick, J	Refining Surge Capacity			
Hodge, J*	Legal Issues Related to Hospital Preparedness			
Bierenbaum, F	Business Continuity Hospitals During Disasters			
Rothman et al.	Laboratory Response Networks			
Pines et al.	Public Health Syndromic Surviellance			
Barbera et al.	Challenges of Hospital Emerg Management			
McCarthy et al.	Health Care Emergency Management			
Jenkins et al.	Review of existing Hosp Prep Instruments			
Knebel & Phillips	National Strategy for Health System Readiness			



Project 3. Predicting Surge

EMCAPS

Scenario Selection			
Juliu Virpén	EMC Electronic Mass Casualty As	SWHOC 3HH	
RADIOLOGICAL	BIOLOGICAL	CHEMICAL	EXPLOSIVE
RDD - Dirty Bomb	Inhalational Anthrax	Blister Agent - Mustard Gas	IED - Truck Bomb
	Pneumonic Plague	Toxic Gas - Chlorine	
	Food Contamination GI Anthrax	Nerve Agent - Sarin	
-	Pandemic Influenza: CDC FluSurge Model		Exit EMCAPS

Scheulen et al. AEM 2009;53:226



Project 4. Operation Sustainability

Predicting Work Days lost in Pandemics





Model Memorandum of Understanding Between Hospitals during Declared Emergencies

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Model Memorandum of Understanding Among Hospitals during Declared Emergencies

This Memorandum of Unde	rstanding (MOU) is made a	and
entered into as of this	day of	in the
year, by and betwee	en	

(list hospitals that are parties to the MOU)

Each of these hospitals is a party to this MOU and collectively they constitute the "Hospital Mutual Aid Network" for the purposes of this MOU.

NOW, THEREFORE, the parties agree as follows:

General Provisions

I.1.1 **Definitions.** As used in this MOU, these terms shall be defined as follows:

(1)"**Contractor**" means a healthcare professional who provides healthcare services at a hospital, but is not under the direct control of the hospital and exercises independent judgment and discretion.

(2) "**Designated representative**" means an individual and at least one alternative designee



Project 6. Reverse Triage

Reverse Triage Strategy for Scarce Resources



HSPD-21

Kelen et al., Lancet 368:1984-90, 2006



Figure 1a. Potential Surge Capacity

Academic Center (N=658 total licensed study beds)



Kelen et al. DMPHP (In press)



Project 6. Reverse Triage







beds

beds



Project 7. Special Edition

Disaster Medicine and Public Health Preparedness

An Official Publication et me American Medical Association

www.dmphp.org



IN THIS ISSUE

Thermal Stress and FOC Testing Performance Gender-based Violence Among Women 2 Years Post-Katrina A Method for Developing Consensus on Appropriate Standards of Disaster Care Variations in Disaster Preparedness by Health Starss Willingtons of Health Care Personnel to Work in Disaster



Wolters Kluwer Lippincott williams & Wilkins

World Health Day 2009

Save lives. Make hospitals safe in emergencies



safehospitals.info

World Health Day 2009 focuses on the resilience and safety of health facilities and the health workers who treat those affected by emergencies. Events around the world will highlight successes, advocate for safe facility design and construction, and build momentum for widespread emergency preparedness.





National Cera ODe Million Agent Based Biothreat Modelling PREPAREDNESS AND CATASTROPHIC EVENT RESPONSE





PACER Projects (Domain A)

- 1. EMCAPS II
- 2. Pharmaceutical Supply Chain Management
- 3. Surge Metrics II
- 4. Legal: Changing Standards of Care
- 5. Estimation of National Acute Care Surge: Risk of Altered Standards of Care
- 6. Triage Tool for Accurate Resource Utilization
- 7. KHS lead situation awareness for surge



Final Note

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Obama to Nominate Esther Brimmer of SAIS to State Department Post

By Felisa Neuringer Klubes SAIS

President Barack Obama has announced his intent to nominate Esther Brimmer, a scholar at SAIS, to serve as assistant secretary of state for international organizations. Brimmer is currently the deputy director and director of research at SAIS' Center for Transatlantic Relations and a professorial lecturer.

At the State Department, Brimmer will oversee policy relating to U.S. relations with the United Nations, and other multilateral issues. Her responsibilities will include leading a bureau with posts at U.N. organizations in seven cities: New York, Geneva, Paris, Rome, Vienna, Montreal and Nairobi.

Obama also announced the appointments of Philip H. Gordon as assistant secretary of state for European and Brimm



Five Dimensions of Homeland and International Security,

Published a series of papers in a book, edited by Dr. Esther Brimmer (SAIS:2008).



"An Idea That Is Not Absurd, Has No Chance"



