Community Based Medical Surge Capacity

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Most critical gap in mass casualty care is the ability to provide adequate medical care to large numbers of patients during a mass casualty event.

- Outpatient surge needs
- Inpatient surge needs
Mass Casualty Surge Events

- Overwhelming to healthcare system
- Multi-agency and multi-jurisdictional response is critical
- Outside resources may not arrive in a timely manner or not at all.
- Effective community response may limit or even halt a contagious event
Critical Community Response Capabilities

- Mass vaccinations
- Mass prophylaxis
- Medical Surge Capacity
- Decontamination
- Isolation and quarantine
- Evacuation
- Surveillance
- Communication and coordination with state, regional and federal resources (sometimes international)
In any large event, State and Federal assistance will take 48-72 hours to arrive.

In an event such as pandemic flu, State and Federal assistance may be unavailable.

Communities must be self-sufficient for the first 48-72 hours or more in a disaster.

By grouping communities into regions, resources and personnel can be shared to improve disaster response.
NH Sub-State Regions

- All Health Hazard Regions (AHHR) (Tier 3)
- Tier 3 is defined as that community-wide medical surge capacity and capability created by the AHHRs via a MCC. This planning occurs in the framework of a Modular Emergency Medical System (MEMS). ACCs, NEHCs, and coordination with primary medical providers are included in MEMS planning.
19 AHHR Regions

- 19 All Hazards Health Care Regions
- Population and geographically determined
- Modified Hospital Service Areas
- MOU from each town within region
- Point of Contact
- Responsibility for planning, response, exercises and drills activities
- Common protocols/functions/structures and resources-ACC, NEHC, Decon, forward movement of patients
Surge Capacity is the sum of available surge options

- **Community based**
  - Acute Care Centers
  - Alternate Care Facilities: Mass care facilities, coliseums, shuttered hospitals

- **Healthcare Facility based**
  - Internal surge strategies
  - External surge strategies

- **Federal response**
  - DMAT
  - FMCS
  - Military & Uniformed Services

- \(\text{HCFs} + \text{Community based} + \text{Federal response} = \text{total surge capacity}\)

- The more defined the response, the more testable and reproducible, and therefore more reliable.
Figure 5. Modular Emergency Medical System showing individual components. Patients may be moved between any component based on their specific condition.
Community based healthcare surge facility.

Incident specific care and ongoing supportive therapy (i.e., antibiotic therapy, hydration, bronchodilators, and pain management).

Critical care is specifically excluded.

Defining level of care is essential.
Height of the Influenza Pandemic  
Camp Funston, Kansas
Activities and Observations

Community Objectives: Practice setting up Emergency Operations Center

- Hanover emergency planners set up EOC in new location – what to bring?
- Practice with ICS – not all familiar with chain of command
- Job Action Sheets and diagram assisted ICS set-up
- Communication: cell phones, landlines, internet – did not test radios
Activities and Observations

Community objectives: Practice admitting 50 patients to ACC

- Local High School and Dartmouth students volunteered as “patients”
- No acting – each received a patient card with a description of symptoms
- Strike team admitted patients
- No patient care given
- Written orders to track activities, use of staff and supplies
Activities and Observations

Patients tracking and EMR tracking 50 patients in ACC using patient tracking

- Patients given tag with bar code at triage (ED, NEHC)
- Scanned at every point of contact – discharge facility, transfer, receiving
- Handheld scanners (HCS) are multipurpose tool
- HCS linked to WebEOC, monitors anything and everything
- Athena tracks care given, resources used
Activities and Observations

Community Objectives: Practice setting up an Acute Care Center

- Multiple organizations: NNE MMRS NH Strike Team, HFD
- Besides Hanover FD, none of these people had ever worked together before
- Determine ICS – Job Action Sheets and diagram helpful
- Physical set up of Cabela’s cots – Supplied by Hanover
- Receiving and unloading of medical supplies from DHMC
- Secure facility
Storm Surge of Hurricane Omni at Landfall (N) + 1 hour
Planning Assumptions

- Building a mass casualty emergency response system
- Maximum utilization of community based emergency response systems.
- Realistic expectation of the roles of healthcare facilities.
- Most Essential Support Functions (ESFs) are required
- Near real time information regarding resources and need are necessary to accurately allocate resources.
- Essential partners must be included in planning, training, and response.
- A process must be in place which allows for the altering of standards of care.
The NNE MMRS encourages communities to use the mass care facility models outlined in the Modular Emergency Medical System publications from SBCCOM, as they develop their mass care and surge capacity plans.
Critical aspects of sub-state response

- Describe community-Functional Response Community (FRC)
- Describe common protocols/functions/structures and resources-ACC, NEHC, Decon, forward movement of patients
- Incorporate ICS, Command and Control
- Communications
- Common planning
- Exercises and drills
- GIS mapping of sites/resources
Plan to motivate and sustain operations

Incorporate into day to day operations

Local Emergency Planning Councils (LEPC) or other groups may evolve beyond their current response planning responsibilities
Contact Information

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