Hospital Surge Strategies: Pros & Cons
2nd National Emergency Management Summit
Washington, DC

George W. Contreras, MPH, MS, EMT-P
Director
Office of Emergency Management
NYU Hospitals Center

February 3, 2008

Emergency Management

Emergency management has been described as a discipline dealing with risk and risk avoidance. Risk represents a broad range of issues and includes an equally set of players. The range of situations that could possible involve emergency management is extensive. This supports the premise that **emergency management is integral to the security of everyone's daily lives and should be integrated into daily decisions and not just called upon during times of disaster**. (Haddow, 2003).

NYU Medical Center
We advance medicine.™

Emergency Management related issues

- Mass Casualty Incidents (MCI)
  - Secondary to explosion
  - Motor vehicle accident
  - Building collapse
  - Hazmat
  - Terrorism

NYU Medical Center

We advance medicine.™

Emergency Management related issues

- Mass Casualty Incidents (MCI)
  - Secondary to explosion
  - Motor vehicle accident
  - Building collapse
  - Hazmat
  - Terrorism
- Large number of patients to your ED and hospital
  - Pandemic influenza

NYU Medical Center
We advance medicine.™

Surge capacity

- How can you rapidly expand your ED capabilities to receive large number of patient in a short period of time
- After you reach the maximum capacity in ED, what are other areas which can be readily converted
- How can other areas in the hospital support the surge capacity planning

NYU Medical Center
We advance medicine.™

Surge capacity planning

- Rapid patient discharge program is the first step
- Using other areas in the hospital is key
- Practice converting those other areas
- Increasing overall surge capacity

NYU Medical Center
We advance medicine.™

Senior leadership involvement

- CEO involvement is key to push any project forward
  - NYC DOHMH letter to CEO was the first step to push this project forward
- CEO support shows high level of commitment to the rest of senior leadership and staff

NYU Medical Center
We advance medicine.™

Case study: NYU Hospitals Center

- CEO receives letter from NYC DOHMH
- He sends email to Director of Emergency Management and VP of Operations requesting full support of this project
- Director of EM starts to coordinate meetings

NYU Medical Center
We advance medicine.™

Case study: NYU Hospitals Center

- Director of EM and VP of Operations brainstorm BMC "key players"
  - Vice President, Nursing
  - Chief, Internal Medicine
  - Vice President, Hospital Operations
  - Director, Emergency Management

NYU Medical Center

We advance medicine.™

Case study: NYU Hospitals Center

- Bed Management Committee
  - VP, Nursing
  - VP, Hospital Operations
  - Coordinator, Emergency Management
  - Director, Social Work
  - Director, Bed Management
  - Chief, Internal Medicine
  - Director, Building Services
  - Director, Emergency Department

NYU Medical Center
We advance medicine.™

Case study: NYU Hospitals Center

- Use a tool that is already in place by services
- Modify the tool for emergency use
  - Staff will already be familiar with tool during a disaster
  - Reduce additional need for training
  - Make tool part of everyday use
  - Streamline and increase efficiency of tool

NYU Medical Center
We advance medicine.™

Case study: NYU Hospitals Center

- Obstacle #1: hospital requires that attending MD sign off on discharges
- Obstacle #2: extended wait period for consulting MD
- Obstacle #3: MDs do not usually estimate (and document) date of discharge
- Obstacle #4: private MDs round late due to conflict with office hours
- Obstacle #5: extended period of time waiting for prescription

NYU Medical Center
We advance medicine.™

Next steps

- Finalize emergency census tool
- Educate all relevant staff on emergency census tool
- Use the tool as part of drill requiring the need for rapid patient discharge
- Make modifications based on drill observations

NYU Medical Center
We advance medicine.™

Hospital Surge Capacities areas

- Cafeteria (medical gas lines pre-installed)
- Auditoria (pre-designated areas for select staff)
- Conference rooms
- Urgent care areas
- Lobby (triaging)
- Gyms (conversion to surge areas)

NYU Medical Center
We advance medicine.™

PT Gym conversion summary

- Who was involved
  - PT/OT, administration, security, building services, nursing, radiology, emergency management, respiratory, infection prevention and control
- What they did
  - Plan, implement and evaluate
    - December 7, 2007 at 430pm on a Friday
- Outcome
  - Actually converted the area to a surge capacity treatment area
  - At least 25 stretchers placed in this area (4 feet apart)
  - Drill was also videotaped by Japanese film crew for a TV show regarding pandemic preparedness

NYU Medical Center
We advance medicine.

PT Gym conversion summary

- Lessons learned
  - Staff area and staff flow needed to be modified
  - Back up power needs to be increased
  - Clean work area for staff
  - PT services needed to find back up locations since they would not be able to provide regular outpatient services (backup locations for long term operations)
  - Where do other depts provide critical services

NYU Medical Center
We advance medicine.™

Surge capacity planning

Rusk PT Gym area before conversion

NYU Medical Center

We advance medicine.™

Surge capacity planning

Surge capacity planning

Rusk PT Gym area after conversion

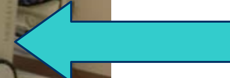
NYU Medical Center
We advance medicine.™

Surge capacity planning

Meds carts

O2

Portable Xray machine



Rusk PT Gym area after conversion

NYU Medical Center
We advance medicine.

More Hospital Surge Capacities areas

- Community health centers (in the immediate area, start with affiliated off-site locations)
- Other off site locations within the community
- Community physician offices
- Churches
- Hotels (ballrooms, conference rooms)
- Other hospitals (local and not-so-local)
  - MOU, MOA

NYU Medical Center
We advance medicine.™

More Hospital Surge Capacities areas

- All of the previously mentioned areas require plenty of planning and practice in implementing
- Liability issues
- Financial issues

NYU Medical Center
We advance medicine.™

Concerns

- Infrequency of practice makes staff nervous and anxious
- Real events which require such conversions are limited
- Long term costs to sustain such surge capacity efforts and their cascading effects are significant

NYU Medical Center
We advance medicine.™

Closing thoughts

- Revised EM standards require organizations to plan for alternate care sites and surge capacity areas
  - Communication with these ACS is just as important
- Broader umbrella of EM in the near future will force hospitals to plan for such events and even more

NYU Medical Center
We advance medicine.™

Questions/comments

- George.Contreras@nyumc.org
- 212-263-2628

NYU Medical Center

We advance medicine.

Questions/comments

- George.Contreras@nyumc.org
- 212-263-2628

NYU Medical Center

We advance medicine.

Questions/comments

- George.Contreras@nyumc.org
- 212-263-2628

NYU Medical Center

We advance medicine.™

Questions/comments

- George.Contreras@nyumc.org
- 212-263-2628

NYU Medical Center

We advance medicine.™

Questions/comments

- George.Contreras@nyumc.org
- 212-263-2628

NYU Medical Center

We advance medicine.

Questions/comments

- George.Contreras@nyumc.org
- 212-263-2628

NYU Medical Center

We advance medicine.™

Questions/comments

- George.Contreras@nyumc.org
- 212-263-2628

NYU Medical Center
We advance medicine.