Implementing a Statewide Ambulance No-Diversion Policy

Abdullah Rehayem
Director, MDPH/OEMS
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Overview of Policy

• Effective January 1, 2009, ambulance services may honor diversion requests only when a hospital emergency department (ED)’s status is “code black”.

• “Code black” means that an ED is closed to all patients due to internal emergencies. Examples include:
  – Fires
  – Chemical or other environmental hazards
  – Flooding due to broken water mains
  – Bomb threats

• There is a 24-hour phone number to consult with DPH, if needed.
Ambulance Diversion

• The Institute of Medicine (IOM), National Quality Forum (NQF), American College of Emergency Physicians (ACEP) and others discourage routine diversion and focus on reducing and eliminating boarding.

• When ED crowding occurs, the number of patients in need of care outweighs the availability of resources, potentially resulting in diminished quality and safety of patient care and increased stress and dissatisfaction of staff.
  – ED crowding is a hospital-wide problem caused by factors that extend far beyond the ED itself.
  – A related problem is the “boarding” of patients in the ED for extended periods of time while waiting for an inpatient bed.
Primary reasons for ambulance diversion

• No available staffed inpatient beds resulting in:
  – Boarding: waiting several hours in ED corridors
  – Overcrowding and saturation in ED
• Less than optimal coordination between ED and rest of the hospital
Demand has increased for emergency room services over the last 10 years

• Some causes of increased demand:
  – Aging population
  – Increase in patient acuity
  – Difficulty finding PCPs/Medical homes
  – Closures of nearby facilities (Massachusetts has lost about 1/3 of its hospitals over the last 20 years)
Massachusetts factors that potentially influenced policy development:

- Hospital and Ambulance Service regulators are in the same bureau, which facilitates policy change
- Close relationship between DPH and regulated facilities
- Multiple pilot projects at academic and community hospitals
- Establishment of Boarding and Diversion Task Force
- Constant communication, through MDPH, between Task Force and hospitals
The Boarding and Diversion Task Force (BDTF) has played a key role in policy development and implementation related to ED overcrowding and was key to the no-diversion policy.

Membership includes statewide representation from:
- Emergency Departments
- Hospital Administration (teaching and community)
- EMS
- MHA
- Professional Associations
- MNA, MONE, MENA, MACEP

The group has now been re-named the Boarding and Patient Flow Task Force to reflect its revised focus.
Addressing ED Overcrowding

Some DPH recommended strategies for addressing ED overcrowding (beginning in 1999):

- Maintain a daily bed management and tracking system
- Develop diversion criteria and definition of ED saturation, boarding and diversion
- Notification of key staff when overcrowding may occur
- Inter-institutional coordination with EMS and other hospitals for diversion planning
- Develop systems to direct non-emergent patients from the ED to outpatient departments and satellite facilities
- Staff licensed beds during peak demand
- Consider rescheduling elective surgeries when inpatient beds are not needed by higher-acuity patients
- Institute procedures for timely discharge of inpatients
- Coordinate with inpatient service to minimize patient time in the ED
- Development of alternate tracks for lower-acuity patients presenting in the ED
- Creation of a saturation/gridlock response plan
Diversion was generally recognized by providers as ineffective in addressing ED overcrowding.

Non-diversion approaches to ED overcrowding were already being used, with additional possibilities being explored.

Some strategies already in use include:

- Smoothing elective admissions to facilitate admission from the ED during peak times.
- Research by Eugene Litvak, PhD, on effect of managing admissions of elective surgeries.
- August 30, 2008; Boston Globe article highlighting 6 years of work at Cincinnati Children’s Hospital:
  - “Cincinnati Children’s Hospital estimates efficiency measures will allow the hospital to generate additional $137m in revenue this year from treating more children with same staffing level.”

- Moving patients waiting for an inpatient bed out of the ED to other appropriate holding areas.
Policy Development

- The idea to eliminate diversion was first discussed at the Boarding and Diversion Task Force.
- The membership was supportive of the policy change, recognizing that it would shift the focus from just the ED to hospital-wide patient flow.
- Some hospitals never used diversion, or tried a no-diversion policy with no adverse outcome, so there was institutional experience.
- Reestablishment of the Diversion and Boarding Committee.
Trials with no-diversion

- Hospitals:
  - Various locations.

- Regions:
  - Cascading no-diversion policy.
Annual Diversion Hours in Massachusetts

Total Hours on Diversion in Massachusetts Hospitals, 2002-2007

Year

Diversion Hours

2002 2003 2004 2005 2006 2007 2008

0 5,000 10,000 15,000 20,000
Provider Reaction and Feedback

Five (5) conference calls over a 4-month period were held to hear provider reaction. Feedback was overwhelmingly positive.

- Implementation went remarkably smoothly.
- Hospitals have done significant work to improve patient flow, often developing innovative solutions.
- Hospital leadership was taking, and continues to take an active role in improving patient flow.
- Boston EMS reports a decrease in “at hospital time” throughout the city.
- Other ambulance providers have not experience any adverse effects.

As of June 2009, the hospitals agreed that the conference calls were no longer needed and that no-diversion was declared a success.
Data and Reporting

• On a monthly basis, hospitals are reporting to the Department:
  – Number of ED visits per month.
  – Median time from ED arrival to ED departure for admitted ED patients (NQF measure ED-001-08).
  – Median time from ED arrival to ED departure for discharged ED patients (NQF measure ED-002-08).

• These measures were chosen for feasibility of reporting and the development of a database with which to measure progress.

• Additional measures are being considered by the committee.
Data and Reporting

• The existing diversion website (now the Hospital Capacity website) was used for reporting, so the interface was familiar.

• The first year of reporting will provide baseline data about hospitals ED patient flow.

• As reporting improves and the data is cleaner, trend analyses will be conducted.
Issues

Without diversion as an option, other patient flow issues have been highlighted:

- Corridor boarding controversy with some stakeholders.
- Psychiatric patients boarding in the ED.
Questions?