Continual Disaster Preparedness for Interdisciplinary Teams

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Lakeland Regional Medical Center
Lakeland, FL
851 Beds
Chest pain center with PCI
Level 2 trauma center
138,000 ED visits annually
Florida
You think of…
Florida
You think of...
Florida

Or you think of...
Florida
You don’t think of...
Jan. 9, 2008

Lakeland Ledger
Headline

4 Dead, 38 Injured in Massive Pileup
Actions... all the pieces fell into place

- Coordination with EMS and Law Enforcement
- Rapid response of trauma center activation
- Full hospital deployment
- Work with press to provide information
- Provide feedback to county EOC
So...

How can a hospital maintain readiness??
Working Together
Interdisciplinary Teams And Disaster Preparedness
The process begins with pre-hospital providers.

The scene information must be communicated to the ED so we can prepare for the patients' arrival.
Emergency Department Pharmacist

- Recommend decon & PPE
- Recognize/ID toxins
- Anticipate meds
- Preparation of meds
- Communication
Emergency Department Physicians

- ED physicians
- ED physician assistants
- Trauma surgeons
- Intensive care physicians
- Neurologists, cardiologists, surgeons
Emergency Department Staff Issues

- Most live in the community
- Spouses/friends work in EMS and law enforcement
- Inability to focus
Staff Issues
Early Response Allows for Rapid Activation

- Mobilize resources…
  - Decontamination tents
  - Additional staff
  - Additional medications and supplies
Problem Is...

Still have to provide assessment, diagnosis, and treatment of patient with other acute emergency medical conditions
This Doesn’t Just Happen…
FIRST

Systems Must Allow Flex UP
Code Purple

- Capacity planning
- Saturation calculation
- Activation of code purple
Countywide Plan

- Meetings with area hospitals
- Lavender/purple status countywide
- Cooperation w/area hospitals and EMS
- Website updates every 6 hours
Lakeland Regional Medical Center

Emergency Department Saturation Form

Date ___________________________ Time ___________________________

Main ED Saturation (this includes CC and IC beds for a total of 51 beds)

Number of CC beds occupied (27 beds in CC): (2 in A, 2 in B, 2 in C, 2 in D, 2 in E, 4 in F, 5 in CC 1-5, 8 in CC 6-13)

Number of IC beds occupied (16 beds in IC): (12 in IC 1-ENT, 4 in Surgery & Ortho)

Number of IO - 2 beds occupied (8 beds in IO - 2): (8 in IO 12-19)

Number of patients in hall beds

Number of patients in halls in chairs or under the board without a bed

Patients who are in the Waiting Area (reasonable Lobby capacity is 10% or 6 patients)

Number of patients in the Lobby greater than a total of 5

Number of patients in the Lobby greater than 6 hours ______ x 2 = ______

Ambulance Patients (reasonable EMS incoming capacity = 5)

Number of patients enroute via EMS

Number of EMS units out of service over 15 minutes (reasonable EMS out of service = 0)

Admission & Acuity

Number for patients without a bed assignment for Med/Burg, Tele, or Observation

Number for patients without a bed assignment for Med/Burg, Tele, Observation with a delay greater than 2 hours

Number for patients without a bed assignment for Med/Burg, Tele, Observation with a delay greater than 8 hours

Number for patients without a bed assignment for Med/Burg, Tele, Observation with a delay greater than 24 hours

Number for patients without a bed assignment for a Cardiac area

Number for patients without a bed assignment for a Cardiac area with a delay greater than 2 hours

Number for patients without a bed assignment for a Cardiac area with a delay greater than 8 hours

Number for patients without a bed assignment for a Cardiac area with a delay greater than 24 hours

Number for patients without a bed assignment for ICU ______ x 2 = ______

Number for patients without a bed assignment for an ICU with a delay greater than 2 hours

Number for patients without a bed assignment for an ICU with a delay greater than 8 hours

Number for patients without a bed assignment for an ICU with a delay greater than 24 hours

Number for Trauma Alerts ______ x 3 = ______

Number for Code 99 ______ x 3 = ______

Total of all lines above

A score of 62 = 100% capacity
A score of 78 = 125% capacity
A score of 87 = 140% capacity - Lavendar Alert
A score of 93 = 150% capacity - Purple Alert
Secure Website

Accessing the application link would bring up a screen similar to this.

Note: TheDisclaimer shown has NOT been passed through legal review as of the creation of these screen displays.
Critical vs. Intermediate Care

- Division of patients & staff
- Designated Area
- Criteria
Admission/Discharge Unit

- Flex up hospital bed space
- Designated area of adequate size
- Criteria for placement
- Discharges from floors
SECOND...

Process Must Support Enhanced Flow
Code STEMI

- In the ED… rapid identification and involvement of the cardiologist
- Code STEMI for EMS arrival
- Chest Pain screening area
- Bedside troponin & chem 7
- Immediate MD interpretation of EKG
- Dial extension “1AMI”
Stroke Alert

- Rapid identification by triage screen
- Screening sheet for walk inpatients
- Immediate availability of CT
- Immediate MD interpretation & involvement of neurologist
LAST...

Process Must Be Scrutinized and Improved
Case Reviews

- Evaluate hazards that we confront
- Process review
- Multidisciplinary approach
- Action plan format
# Case Reviews

## Action Plan
**Submitted by:** Emergency Department Process Review  
**Date:** December 19, 2007  
**MR #** 68-19-31

**GOAL**

**Promote:** The care and treatment of patients suffering from a Cerebrovascular Vascular Accident

**AUDIENCE:** Managers / Directors / Charge Nurses / Team Leaders / SNI / NI

<table>
<thead>
<tr>
<th>Discussion</th>
<th>Action Steps</th>
<th>Reason for Change</th>
<th>Who will be involved</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Hand off communication at shift change</td>
<td>Nurses will do room to room walking rounds at shift change</td>
<td>So that the nurses can evaluate their patients with the off-going nurses to detect any possible changes in condition. Importance in remaining constantly alert with these patients because they can change quickly.</td>
<td>All nurses in all clinical areas</td>
<td></td>
</tr>
<tr>
<td>2 Nurses presence during physician assessments</td>
<td>Nurses will be present at the bedside when the Neurologist does his patient assessment</td>
<td>The nurse will be able to see the condition of the patient during the physician’s assessment to be alert to any changes in condition. This is a good learning opportunity for the nurses.</td>
<td>The RN responsible for the CVA patient</td>
<td></td>
</tr>
<tr>
<td>3 Continuity of patient assessment</td>
<td>Dorothy Adair will send copies of the Stroke Neuro check form and the NIH Stroke form to Pam and Marge to review to see if the ED would like to use this form.</td>
<td>This form contains all of the neuro assessments with areas for dates and times. When used it is a good representation of the patient's condition during the shift.</td>
<td>Marge Keck and Pam Carter</td>
<td></td>
</tr>
<tr>
<td>4 Continuity of physician orders</td>
<td>Encourage the physicians to use the Zynx preprinted orders for all stroke/TIA patients.</td>
<td>The orders contain all orders to treat the patient of a suspected stroke or TIA including management of blood pressure and blood glucose</td>
<td>All nurses and physicians</td>
<td></td>
</tr>
<tr>
<td>5 Communication with the Neurologist</td>
<td>The ED physician will contact the Neurologist at any time they feel is necessary. When the ED physician contacts the Neurologist to advise them of a stroke alert prior to the CT scan the ED physician will also call back the Neurologist ASAP to advise them whether they are needed to see the patient.</td>
<td>Maintain good communication between the ED physician and the Neurologist regarding a stroke alert patient.</td>
<td>All ED physicians</td>
<td></td>
</tr>
</tbody>
</table>
Identify…

- Current resources & capabilities
- Short & long term goals
- Multiple options to reach goals
- Internal & external support
Regular Practice
You can’t plan for every possible event
You can plan for most plausible events

“Possible” today is “plausible” tomorrow
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