THE REGIONAL HEALTHCARE SYSTEM RESPONSE

AFTER AN EARTHQUAKE

ANNE NEWCOMBE

CLINICAL DIRECTOR, EMERGENCY SERVICES

UW MEDICINE HEALTH SYSTEM EMERGENCY MANAGEMENT LIAISON

OBJECTIVES

• Understand the “normal” role of the Disaster medical Control Center (DMCC)
• Understand the changing role of the DMCC after an earthquake
• To be able to describe your agency response to a DMCC activation
• Understand the principles of patient movement

DISASTER MEDICAL CONTROL CENTER (DMCC)
THE MISSION

The mission of the DMCC is to minimize the impact of emergencies and disasters to the community through communication, patient distribution, and response coordination between pre-hospital providers, hospitals, and other healthcare partners.

WHAT IT IS NOT.
WHAT IT IS NOT

• An EMS dispatch center
• Resource coordination center
• Definitive patient tracking
• Harborview’s Transfer Center

WHAT IT IS.
THE GAP

DMCC

Incident

Hospital &
EOC’s

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THE LINK

DMCC
Coordinator

DMCC @
Harborview

2-Way Communication Established

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ROLE OF THE DMCC

- Activation and notification
- Communication – hospitals, field, agencies
- Mitigation – event planning
- Hospital function – damage assessment
- Patient distribution
THE BIGGER PICTURE

- Catastrophic events
- Role stretches to multi-county at their request
- Liaise with other DMCC’s
- Can assists Washington State with patient distribution and status reports if requested

WHERE IS THE DMCC?

Located in the Emergency Department
COMMUNICATION - REDUNDANCY

HEAR Radio
800 MHZ Radios
Amateur radio
Landline/Fax
Cell phone
Satellite phone
WATrac - Internet

STAFFING

- Emergency Department Attending Physician
  - Communicates with the field
- Emergency Department RN
  - Communicates with the hospitals (ED)
- Clinical Engineer
  - Radio expertise
- Seattle Fire Department Representative
  - Liaison, field expertise
WHO DOES THE DMCC NOTIFY WHEN THEY ACTIVATE?

<table>
<thead>
<tr>
<th>Action Name</th>
<th>Time Called</th>
<th>Time Responded</th>
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<tbody>
<tr>
<td>ED Charge RN</td>
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<td>ED Nursing Management</td>
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<td>Medical Director</td>
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<td>Community Relations</td>
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<tr>
<td>Clinical Engineering</td>
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</tr>
<tr>
<td>Seattle King County Public Health Duty Officer</td>
<td>(206) 296-4606</td>
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</tr>
<tr>
<td>City of Seattle EOC Duty Officer</td>
<td>(206) 233-5147</td>
<td></td>
</tr>
<tr>
<td>King County EOC Duty Officer</td>
<td>(206) 296-3830</td>
<td></td>
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<tr>
<td>HMC DPS – Decon Activation</td>
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WHAT THE DMCC NEEDS FROM HOSPITALS

- ED Capacity – what you can take
- Direct communication with the ED – landline preferred
- Communication with RN or MD
- Ability to monitor WATrac - alerts
- Flexibility
CAPACITY ...

(Alpha I) ED Now
(Alpha II) ED within 30 min

(Bravo I) OR within 30 minutes
(Bravo II) OR within 60 minutes

(Charlie I) Adult Med/Surgical
(Charlie II) Adult ICU
(Charlie III) CCU
(Charlie IV) Peds Med/Surg
(Charlie V) Psych

PATIENT TRACKING DURING AN MCI

• MCI plan – unique identifier (ID Band) from the field
• Current state, DMCC will not be tracking individual patients
• Future state, hospitals to record unique identifier for tracking on patient arrival

Patient Distribution

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CATASTROPHIC EVENT

THE ROLE CHANGES

PATIENT MOVEMENT

DMCC – CHANGES ROLE

• Focus on CAPACITY not “bed counts”
• Patient movement north/south/east
• Assist in coordination of patient movement out of the region
• Coordination of special care
• Assist WA state
• Liaise with PH network

PATIENT DISTRIBUTION - PRINCIPLES

• Consider impact of self presenters
• Nearest appropriate (clinical & resource)
• Clear the scene
• Families together
• School children together
• Rotate hospitals – spread the load
HOW DO WE DECIDE WHERE PATIENTS GO

- Type of incident
- Location
- Number of patients
- Types of injuries
- Regional resources
- Transportation corridors (weather, traffic)
- Current ED status
- Families
- Consider Field Treatment Site impacts
- Alternative Care Facilities

REGIONAL DMCC COORDINATION

WASHINGTON STATE ACUTE TRAUMA CENTERS
NORTHERN TRAUMA CENTERS

- Island Hospital – Level III
- PeaceHealth St. Joseph Medical Center – Level III
- Providence Regional Medical Center Everett – Level III / III P
- Skagit Valley Hospital – Level III
- Whidbey General Hospital – Level III
- Cascade Valley Hospital – Level IV
- Swedish/Edmonds – Level IV
- United General Hospital – Level IV
- Valley General Hospital – Level IV
- Peace Island Medical Center – Level V

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CENTRAL TRAUMA CENTERS

- Harborview Medical Center – Level I
- Multicare Auburn Regional Medical Center – Level III
- Evergreen Hospital Medical Center – Level III
- Overlake Hospital Medical Center – Level III
- Valley Medical Center – Level III
- Highline Medical Center – Level III
- Highline Medical Center – Level IV
- Northwest Hospital & Medical Center – Level IV
- St. Francis Hospital – Level IV
- St. Elizabeth Hospital – Level V

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SOUTHERN TRAUMA CENTERS

- Madigan Army Medical Center – Level II
- Tacoma Trauma Center (joint) – St. Joseph Medical Center/Tacoma General Hospital – Level II
- Mary Bridge Children’s Hospital & Health Center – Level II P
- Multicare Good Samaritan Hospital – Level III
- Grays Harbor Community Hospital – Level III
- Providence St. Peter Hospital – Level III
- Capital Medical Center – Level IV
- Providence Centralia Hospital – Level IV
- St. Anthony Hospital – Level IV
- St. Clare Hospital – Level IV
- Summit Pacific Medical Center – Level V
- Morton General Hospital – Level V
- Willapa Harbor Hospital – Level V

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RCPGP background

- DHS-funded, 4-year grant awarded to 8-county Puget Sound region
- Focus on regional planning & response to catastrophic disasters
- Develop a regional disaster coordination plan and supporting annexes
  - Pre-Hospital Emergency Triage & Treatment (PETT) is one of the annexes

PETT Annex status

- PETT Annex promotes planning and response coordination among EMS, public health, and hospitals
- Structure and processes developed for a regional EMS Coordination Group to facilitate information sharing and strategic coordination
- The Regional Catastrophic Planning Team approved the PETT Annex in May 2011

Catastrophic incident response

LEGEND
- Mass Casualty incident
Regional Catastrophic Incident(s)
(Incident + 2 hours)
Patient flow (incident + 2 hrs)

Regional Catastrophic Incident(s)
(Incident + 6 hours)
Patient flow (incident + 6 hrs)

Regional Catastrophic Incident(s)
(Incident + 36 hours)
Patient flow (incident + 36 hrs)
PATIENT MOVEMENT OUT OF THE REGION

- Regional planning intersects with National Disaster Medical Systems
- Assist in local coordination and prioritization
SPECIAL PATIENT POPULATIONS

Pediatrics, Psychiatry and Burns

PEDiatric RESOURCES

- Staffing and training
- Equipment and supplies
- Pharmaceutical planning
- Dietary planning
- Security and psychosocial support
- Transportation
- Inpatient bed planning
- Decontamination of children
- Hospital-based triage
- KC Health care coalition: Hospital Guidelines for Management of Pediatric Patients in Disasters
PSYCHIATRIC PATIENTS

Planning has started in King and Pierce Counties
Very different constraints and needs
Movement of patients is very disruptive to their care and recovery

More focus for the future

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BURN CENTERS NOT AS AVAILABLE AS TRAUMA CENTERS

There are thousands of US trauma center
In contrast, for burns:

Only 132 Burn Centers
1,897 Burn beds nationally

Only 43 – 45 Burn Centers are verified by the American Burn Association and the American College of Surgeons

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ABA DISASTER POLICY SUMMARY

- Burn care is distinct from trauma care
- Primary triage should be to a burn center as soon as possible
  - preferably to a verified burn center within 24 h
- Secondary triage should be implemented when a burn center reaches 50% above normal maximum capacity
  - 1st to a verified burn center
  - 2nd to other burn centers
- Key function of NDMS in burn mass casualty
  - to assist local burn center director with secondary triage of burn patients

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ABA-HHS
Burn Asset Resource Tracking System

Madrid, 272 patients in 2.5 hours
THANK YOU

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