SUBJECT: HOSPITAL EMERGENCY RESPONSE TEAM (HERT) POLICY NO. 375A

PURPOSE:

To establish the policies and procedures related to the Hospital Emergency Response Team (HERT) at Harbor-UCLA Medical Center.

POLICY:

Harbor-UCLA Medical Center's Hospital Emergency Response Team is an organized group of healthcare providers from a designated Level I Trauma Center. The HERT is available throughout the entire jurisdiction of Los Angeles County at all times to provide advanced on-scene surgical and medical expertise. Harbor-UCLA has been granted Los Angeles County Emergency Medical Services (EMS) Agency approval as a HERT provider.

PROCEDURE:

A. BACKGROUND

California Health and Safety Code (Div 2.5, Section 1798) dictates that "authority for health care management in an emergency shall be vested in that licensed or certified health care professional at the scene of an emergency who is most medically qualified for the provision of rendering emergency medical care".

At the request of the Los Angeles County EMS Agency, the Trauma Program at Harbor-UCLA Medical Center established this policy and procedure for providing rapid advanced surgical and medical care at the scene of traumatic injuries in which a higher level of expertise is requested by the on-scene EMS provider.

The Hospital Emergency Response Team (HERT) is utilized in situations where advanced surgical or medical expertise is needed in the field. This includes entrapped patients with anticipated prolonged extrication. The HERT provides advanced on-scene resuscitation and monitoring of patients to prolong the time during which a safe extrication can be attempted. The HERT also provides pain management, sedation, and advanced airway support as needed. The HERT is equipped to employ life-saving surgical procedures (including field amputation) to facilitate extrication of critical patients. The HERT staff is authorized by the Los Angeles County Department of Health Services (DHS) to provide this level of advanced care to patients within its jurisdiction.

EFFECTIVE DATE: 3/08

REVISED: 12/14, 9/15, 9/18, 3/20 REVIEWED: 12/14, 9/15, 9/18 3/20

REVIEWED COMMITTEE:

APPROVED BY

Kim McKenzie KN, MSN CPHO

Chief Executive Officer

SUPERSEDES:

Chief Medical Officer

Nancy Blake, PhD, RN, NEA-BC, FAAN

Chief Nursing Officer

SUBJECT: HOSPITAL EMERGENCY RESPONSE TEAM (HERT) POLICY NO. 375A

B. TEAM COMPOSITION

The composition of the Harbor-UCLA HERT team will include a board-certified Trauma Surgeon, a board-certified Emergency Medicine (EM) physician/board-eligible fellow, and a Trauma Nurse. The Trauma Surgeon will serve as the Team Leader. Trauma Surgeons assigned to the HERT are designated by the Trauma Medical Director. The EM physicians and Anesthesiologists assigned to the HERT are designated by their respective Department Directors. The Trauma Nurse assigned to the HERT must be experienced in advanced trauma care as designated by the Trauma Program Manager/designee.

At the discretion of the Team Leader, the composition of the HERT may be modified based on the magnitude and nature of the incident. A formal HERT call schedule, including back-up responsibilities, is created monthly and posted in the Emergency Department (ED) Radio Room and other key locations within the Medical Center by the Trauma Program Manager/designee.

Activation of the HERT may require utilization of back-up surgeons, physicians, or other personnel in order to provide uninterrupted care of currently hospitalized patients.

C. EQUIPMENT AND SUPPLIES

Standard medical and surgical equipment listed in (Attachment I) is preassembled, readily available, and stored in the Ambulance Ramp Closet labeled HERT across from the heliport in bags labeled "HERT". The key for the closet is located in the Emergency Department Trauma Bay PYXIS with the HERT meds.

A predetermined cache of medications (Attachment II), preassembled by the Pharmacy, is stored in the Trauma Bay Pharmacy PYXIS machine, and labeled "HERT meds". When the HERT is activated, the Trauma Nurse retrieves the HERT meds from the PYXIS under HERT Trauma and add patient. The Trauma Nurse guarantees the safety and security of these medications within his/her standard scope of practice.

D. IDENTIFICATION OF NEED

Pre-hospital providers in the field notify the Incident Commander on scene if advanced surgical or medical expertise is needed on-scene. Possible indications for HERT team involvement include, but are not limited to, prolonged (>30 minute) extrication time, need for advanced airway management, control of hemorrhage, need for advanced monitoring and resuscitation (including transfusion of blood products), need for advanced sedation to facilitate humane extrication, evaluation and performance of field amputation, crush injuries, mass casualty triage for large number of potential victims, or treatment of any potentially life-threatening injuries.

E. TEAM ACTIVATION

When the HERT is requested, the Incident Commander on scene will contact the Medical Alert Center (MAC) via the VMed28 frequency for MAC and intra-hospital communication. The MAC will notify Harbor-UCLA via contact to the MICN. The MICN will page the HERT activation to the team via the usual trauma batch pager. The MICN will call the Trauma Surgeon, ED Physician and Nurse listed on the HERT schedule posted in the radio room. The MAC will provide the Team Leader with all pertinent information regarding the needs at the scene as it becomes available and facilitate communication between the Team Leader and the Incident Commander (IC) as needed. The Team Leader may request the MICN assist with notification of available Emergency Physicians and

SUBJECT: HOSPITAL EMERGENCY RESPONSE TEAM (HERT) POLICY NO. 375A

Trauma nurses based on communication with the IC on scene. The call schedule is provided to the MAC monthly by the Trauma Program Manager/designee and is posted in the ED Radio Room.

In the event the need for HERT activation is recognized through paramedic contact with the Harbor-UCLA Base Station, the MICN on duty will notify the MAC of HERT activation and will attempt to contact the HERT Team Leader via the hospital's internal phone system, concurrently with the MAC, in order to expedite contact.

The MAC will notify the Incident Commander of the estimated time of HERT arrival and mode or transport. When air transport is utilized, the MAC will indicate the time HERT is assembled and the expected departure time from helipad if utilizing air transport and estimated ground transport time.

Although every effort will be made to provide continuous service, the deployment of the Harbor-UCLA HERT will depend upon the availability of the necessary individual personnel. If the appropriate HERT personnel are encumbered in other clinical duties (e.g., mass-casualty incidents, natural and man-made disasters, or hospital-based emergencies), the Team Leader will work to assemble an equivalent group of providers and notify the MAC of any anticipated limitations to the on-scene care provided.

F. TEAM ROLES AND RESPONSIBILITIES

Upon notification by the Team Leader, all HERT members will assemble in the staging area (ED Ambulance bay) within 20 minutes of activation with all appropriate equipment.

As the Team Leader, the Trauma Surgeon will determine whether augmentation of the team is required based upon the magnitude and nature of the incident and contact other appropriate individuals if needed. The Team Leader will notify MAC once the team has been assembled in the staging area and indicate the number of team members requiring transport. The Trauma Surgeon will also ensure the equipment and supplies are present at the time of transport, and that all members are appropriately outfitted in HERT protective attire.

The EM physician will report to the Team Leader on arrival to the staging area. The EM physician is expected to perform advanced airway management, provide analgesia/ sedation/neuromuscular blockade as needed for patient comfort, assist with monitoring and advanced resuscitation, assist with surgical procedures as needed, and provide field triage per START (Simple Triage and Rapid Treatment) guidelines as indicated by Los Angeles County prehospital protocols, as directed by the Team Leader.

The Trauma Nurse will report to the Team Leader in the staging area after retrieving the "HERT meds", blood when appropriate, HERT bags, and a "Trauma Flowsheet" from the Emergency Department. The ED Registration Clerk will register the patient as a Trauma alias and print labels. The Trauma Nurse will guarantee the safety and security of the medications until they are administered or returned to the ED. The Trauma Nurse will also be responsible for documenting all HERT activities in the field on a Trauma Nursing Flowsheet. The Trauma Nurse will provide IV access, administer medications and IV fluids, and assist with airway management or other procedures as needed and directed by the Team Leader provided it is within his/her standard scope of nursing practice. At the Team Leader's discretion and if the need for transfusion of blood products is anticipated,

SUBJECT: HOSPITAL EMERGENCY RESPONSE TEAM (HERT) POLICY NO. 375A

the Trauma Nurse will open the fridge to alarm the blood bank that units are being obtained, provide the blood bank with the Trauma alias medical record number, provide the HERT attending name, and obtain two (2) units of type O- or whole blood from the ED satellite refrigerator. Blood will be transported in a small ice chest labeled "HERT". Upon return from the event, the Trauma Nurse will complete the medications used form located in the HERT medication bag and return the medications bag and sheet to the ED Pharmacist for re-stocking. The HERT bags will also be restocked upon return by the Trauma Nurse. The blood slips will be provided to the Blood Bank.

Once assembled in the staging area, the Team Leader will brief the team members regarding any incident information currently available. The Team Leader will confirm the method of transport (air or ground) and ensure all HERT members are accounted for at all stages of transportation to and from the scene.

G. TRANSPORT

When ground transportation is indicated, the MAC will arrange for ambulance transportation for the HERT through either the Los Angeles County Central Dispatch Office or a private ambulance agency. If County-sponsored transportation is not immediately available, the Trauma Surgeon will contact MAC to determine whether 9-1-1 transport is indicated. If indicated, MAC will contact the appropriate 9-1-1 EMS service provider to arrange transport.

When air transportation is indicated, the on-scene pre-hospital provider requesting HERT will be responsible for arranging transportation.

Transportation of the patient will be initiated by the Incident Commander upon consultation with the Team Leader. Once an appropriate receiving facility is identified, the HERT will accompany the patient during transport, provided this does not compromise aircraft or ambulance capacity limitations. If there are limitations on the number of personnel able to accompany the patient, the Team Leader or his/her designee will accompany the patient to the receiving facility. Any HERT members remaining at the scene will have transportation back to Harbor-UCLA arranged by the MAC.

On arrival to a receiving facility, the Team Leader or his/her designee will give a physician-to-physician "hand-off" of the patient. This information exchange should include all pertinent aspects of the incident, the injuries suspected or identified, field interventions, medications/fluids/blood products administered, hemodynamic trends, and any details deemed important for patient care.

Upon the conclusion of the incident, the MAC will be contacted to arrange transportation of the HERT back to Harbor-UCLA.

H. ON SCENE ACTIVITIES

Upon arrival of the HERT on scene, the Team Leader will report directly to the Incident Commander or his/her designee. The Incident Commander will brief the Team Leader on the pertinent features related to: the incident, the location of the victim(s), known scene safety issues, and personnel available to assist with HERT activities. The Incident Commander will also provide an appropriate staging area for the HERT to assemble gear/supplies. All HERT team members will report directly to the Team Leader, and always

SUBJECT: HOSPITAL EMERGENCY RESPONSE TEAM (HERT) POLICY NO. 375A

wear visible photo I.D.'s identifying themselves as Los Angeles County/Harbor-UCLA Medical Center Staff.

I. TRAINING/SKILLS MAINTENANCE

All HERT team members will participate in regular drills, training exercises, continuing education modules, and quality improvement activities as scheduled by the Trauma Program and Department of Emergency Medicine. All HERT members will participate in a basic "aircraft safety" course, when available, as provided by LA County Fire or Sheriff.

J. QUALITY IMPROVEMENT

Following any HERT activation, a debriefing will occur within 48 hours to review the incident, discuss issues encountered, and identify areas of potential improvement. The HERT Policy and Procedure (POLICY #375A) will be reviewed by HERT members annually, with formal revisions/updates published no less than every 3 years.

APPROVED BY:

Amy Kaji, M.D.

Acting Chair, Emergency Medicine

Brant Putnam, M.D.

Chief, Trauma Surgery

Revised and Approved by:

Medical Executive Committee - 3/20

annowing

Janine R. E. Vintch, M.D.

President, Professional Staff Association

SUBJECT: HOSPITAL EMERGENCY RESPONSE TEAM (HERT) POLICY NO. 375A

Attachment I: HERT Medical and Surgical Supply List

Full face shields
Face masks
Sterile gowns x 4

Sterile towels 2 packs of four each

Sterile gloves (2 each of size 6, 7, 7.5, 8)

Half sheets x 2 Lap sponges x 50

18 x 18 gauze x 4 packs 6 inch ace bandage x 4 Silk tape 2 inch rolls x 2

Betadine (2 bottles)

Surgilube

Battery-operated headlights x 2 Clip appliers (one med, one large)

QuikClot (2 packs)
0 Prolene suture x 10
2-0 Prolene suture x 5
0 Vicryl suture x 5
2-0 Vicryl suture x 5
Scalpels #10 disposable x 4

Instruments:

DeBakey forceps x 2 (305-367) 8 in horiz ser (305-368) 10 in vert ser Needle driver 10 in heavy x 2

Metzenbaum scissors Mayo scissors x 2 (100-222) 6 ¾ in curved (102-116) 9 in curved

Kelly clamps x 4

(105-130) 5 ½ in straight (105-131) 5 ½ in curved Amputating knife (225-412) 6 ½ in blade (225-413) 8 in blade Right angle hemostats x 2

Gigli saw

Saw handles 260-110 pair (260-106) 20 in x 2

(260-104) 12 inch

Adson cerebellar retractors x2 (205-205) 4x4 sharp 22mm dp

7 ¼ angular

Laryngoscope handles x 2

Mac 2, 3, 4, and Miller 0, 1, 2, 3, and 4 laryngoscope blades

Elastic bougie pediatric, adult

LMAs #2.5, 3, 4, 5, and 6 (one each)

Endotracheal tubes with stylet (3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6, 6.5, 7, 7.5, 8 mm *cuffed* in addition to paramedic stock)

8.5 Fr single lumen venous catheter (cordis) kit

Broselow Pediatric Emergency tape

Heimlich valves x 2

Red biohazard bags x 2

EMS / military tourniquet x 2

Foley catheters (16, 18, 20 Fr with 10-30cc balloons)

Chest tubes (12, 16, 20, 28, 32, 36 Fr)

Normal saline 1 liter bottle x 2

EZ-IO adult and pediatric kits (two handles / drills)

Intravenous catheters (size 22G, 24G)

Battery operated saw

SUBJECT: HOSPITAL EMERGENCY RESPONSE TEAM (HERT) POLICY NO. 375A

Attachment II: HERT Medications List

(In addition to all standard paramedic stock)

Albuterol 5mg inh neb # 2

Cefazolin 2 grams x 2

Clindamycin 900 mg x2

Etomidate 20mg/10ml # 2

Flumazenil 1mg

Fentanyl 250mcg/5ml #4

Ketamine 200mg # 3

Lidocaine 1% 10mg/ml, 20ml #1

Lidocaine 2% 100mg/ml, 20ml Abboject #1

Lidocaine 2% 20mg/ml 20ml #2

Lorazepam 2mg/ml #2

Midazolam 5mg/5ml #2

Naloxone 0.4mg/ml #6

Insulin (Humulin Regular) 100 units/ml, 3ml #1

Rocuronium 50mg/ml #4

Sodium Bicarbonate 8.4% 50ml #2

Sterile Water 10ml/inj #4

Succinylcholine 200mg/10ml #2