PATIENT ASSESSMENT **ROUTINE MEDICAL CARE** PRIMARY AND SECONDARY SURVEY

APPROVED:

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DATE: January 2012

The purpose of the primary survey (see page 3 for Secondary Format) is to identify and immediately correct life-threatening problems.

Scene Size-Up/Global Assessment

- Recognize hazards, ensure safety of scene, and secure a safe area for treatment
- Apply appropriate universal body substance isolation precautions
- Recognize hazards to patient and yourself and protect from further injury
- Identify number of patients and resources needed
 - Call for EMS, fire and police backup
 - Initiate Multicasualty Incident Protocol as needed
- Observe position of patient
- Determine mechanism of injury
- Plan strategy to protect evidence at potential crime scene

General Impression:

- Remain global and check for life threatening conditions
- Determine chief complaint or mechanism of injury
- Determine mental status; orientation to person, place, time, and event

Airway:

- Ensure open airway. (see Respiratory Distress Protocol as needed)
- Protect spine from unnecessary movement in patients at risk for spinal injury
- Look for evidence of other upper airway problems and potential obstructions
 - o Vomitus
 - o Bleeding
 - Loose or missing teeth
 - o **Dentures**
 - Facial trauma
- Utilize any appropriate adjuncts (OPA or NPA) as indicated to maintain airway

Breathing:

- Look, listen and feel; assess ventilation and oxygenation
- Expose chest and observe chest wall movement if necessary
- Determine approximate rate and depth; assess character and quality

- Reassess mental status
- Interventions for inadequate ventilation and/or oxygenation:
 - o Supplementary oxygen
 - Bag-Valve Mask
 - Intubation (endotracheal or nasal with confirmation of correct placement) after initial ventilation, if indicated
 - Note: Defibrillation should not be delayed for advanced airway procedures
- Assess for other life-threatening respiratory problems and treat as needed

Circulation:

- Check for pulse and begin CPR if necessary
- Note: CPR should be performed until ready for defibrillation
- Control life threatening hemorrhage with direct pressure
- Palpate radial pulse if appropriate
 - Determine absence or presence
 - Assess general quality (strong/weak)
 - o Identify rate (slow, normal, or fast)
 - o Regularity
- Assess skin for signs of hypoperfusion or hypoxia (capillary refill)
- Reassess mental status for signs of hypoperfusion
- Treat hypoperfusion if appropriate

Level of Consciousness and Disabilities:

- Determine need for c-spine stabilization
- Determine Glasgow Coma Scale without delay

Expose, Examine, and Evaluate:

- In a situation with suspected life-threatening trauma mechanism, a Rapid Trauma Assessment should be performed (10 minute scene time is the goal)
 - Expose and examine head, neck, and extremities
 - Treat any newly discovered life-threatening wounds as appropriate and begin transport in the potentially unstable or critical patient

Secondary Survey

The secondary survey is the systematic assessment and complaint-focused, relevant physical examination of the patient. The secondary survey may be done concurrently with the patient history and should be performed after:

- The primary survey and initial treatment and stabilization of life-threatening airway, breathing and circulation difficulties
- Spinal immobilization as needed
- Beginning transport in the potentially unstable or critical patient
- A Rapid Trauma Assessment in the case of significant trauma
- Investigation of the chief complaint and associated complaints, signs or symptoms
- An initial set of vital signs
 - o Pulse
 - o Blood pressure
 - o Respiration
 - Lung sounds
 - Cardiac rhythm/monitor (if indicated)
 - o Consider orthostatic vital signs to assess volume status
 - Pulse oximetry (if indicated)
 - Assess for pain or discomfort. Use a 0-10 scale to rate and document the pain

Give initial treatment including oxygen, ventilate if indicated, control hemorrhage if needed, institute basic wound/fracture care, and establish IV access if indicated/capable.

The above set of assessment/treatments is referred to in these protocols as "Routine Medical Care". This care should be provided to all patients regardless of presenting complaint. The purpose of the secondary survey is to identify problems that may not be immediately life or limb threatening but could increase patient morbidity and mortality. Exposure of the patient for examination may be reduced or modified as indicated due to environmental factors.

History:

Optimally should be obtained directly from the patient: if language, culture, agerelated, disability barriers or patient condition interferes, consult family members, significant others, scene bystanders or first responders. Check for advanced directives, medical alert bracelets and prescription bottles as appropriate. Be aware of the patient's environment and issues such as domestic violence, child or elder abuse or neglect. If you are concerned, bring this to the attention of the receiving physician or nurse and file the appropriate report.

- Obtain chief complaint
- Allergies

- Medications
- Past medical history
- Ascertain recent medical history, admission to hospitals, reasons given, etc.
- Mechanism of injury
- See "Information Needed" section of each protocol for history relevant to specific patient complaints

Head and Face:

- Observe and palpate skull (anterior and posterior) for signs of trauma (contusions, abrasions, deformity, crepitus, or lacerations)
- Check eyes for: equality and responsiveness of pupils, movement and size of pupils, foreign bodies, discoloration, contact lenses, prosthetic eyes
- Check nose and ears for foreign bodies, fluid, or blood
- Recheck mouth for potential airway obstructions (swelling, dentures, loose or avulsed teeth, vomitus, malocclusion, absent gag reflex) and odors, altered voice or speech patterns, and evidence of dehydration

Neck:

• Observe and palpate for signs of trauma, jugular venous distention, use of neck muscles for respiration, tracheal shift or deviation, cervical spine tenderness, stoma, and medical information medallions

Chest:

- Observe and palpate for signs of trauma, implanted devices (AICD or pacemaker), medication patches, chest wall movement, asymmetry, retractions and accessory muscle use
- Have a patient take a deep breath if possible and observe and palpate for signs of discomfort, asymmetry, and air leak from any wounds
- Auscultate breath sounds bilaterally

Abdomen:

- Observe and palpate for signs of trauma, scars, diaphragmatic breathing and distention
- Palpation should occur in all four quadrants taking special note of tenderness, masses and rigidity

Pelvis/Genito-urinary:

- Observe and palpate for signs of trauma or asymmetry, incontinence, priapism, blood at urinary meatus, or presence of any other abnormalities
- Gently palpate lateral pelvic rims and symphysis pubis for tenderness, crepitus, or instability
- Palpate bilateral femoral pulses when necessary

Shoulders and Upper Extremities:

- Observe and palpate for signs of trauma, asymmetry, skin color, capillary refill, edema, medical information bracelets, track marks, and equality of distal pulses
- Assess sensory and motor function as indicated

Lower Extremities:

- Observe and palpate for signs of trauma, asymmetry, skin color, capillary refill, track marks, edema, and equality of distal pulses
- Assess sensory and motor function as indicated

Back:

Observe and palpate for trauma, asymmetry, spinal tenderness, and sacral edema

Precautions and Comments:

- Observation and palpation can be done while gathering patient's history
- A systematic approach will enable the rescuer to be rapid and thorough and not miss subtle findings that may become life-threatening
- Minimize scene time (goal is under 10 minutes for all trauma patients) for critical trauma or medical patients; conduct secondary survey en route to the hospital.
- The Secondary Survey should ONLY be interrupted if the patient experiences airway, breathing, or circulatory deterioration requiring immediate intervention. Complete the examination before treating the other identified problems
- Reassessment of vital signs and other observations may be necessary, particularly in critical or rapidly changing patients. Changes and trends observed in the field are essential data to be documented and communicated to the receiving facility staff
- Prehospital medical personnel (paramedics and EMTs) can assist patient with self-administration of own medication if appropriate