PATIENT ASSESSMENT DEFINITIONS

Scene Size-up — Steps taken by EMS providers when approaching the scene of an emergency call; determining scene safety, taking BSI precautions, noting the mechanism of injury or patient's nature of illness, determining the number of patients, and deciding what, if any additional resources are needed including Advanced Life Support.

Initial Assessment — The process used to identify and treat life-threatening problems, concentrating on Level of Consciousness, Cervical Spinal Stabilization, Airway, Breathing, and Circulation. You will also be forming a General Impression of the patient to determine the priority of care based on your immediate assessment and determining if the patient is a medical or trauma patient. The components of the initial assessment may be altered based on the patient presentation.

Focused History and Physical Exam — In this step you will reconsider the mechanism of injury, determine if a Rapid Trauma Assessment or a Focused Assessment is needed, assess the patient's chief complaint, assess medical patients complaints and signs and symptoms using OPQRST, obtain a baseline set of vital signs, and perform a SAMPLE history. The components of this step may be altered based on the patient's presentation.

Rapid Trauma Assessment — This is performed on patients with significant mechanism of injury to determine potential life threatening injuries. In the conscious patient, symptoms should be sought before and during the Rapid Trauma assessment. You will estimate the severity of the injuries, re-consider your transport decision, reconsider Advanced Life Support, consider the platinum 10 minutes and the Golden Hour, rapidly assess the patient from head to toe using DCAP-BTLS, obtain a baseline set of vital signs, and perform a SAMPLE history.

Rapid Medical Assessment — This is performed on medical patients who are unconscious, confused, or unable to adequately relate their chief complaint. This assessment is used to quickly identify existing or potentially life-threatening conditions. You will perform a head to toe rapid assessment using DACP-BTLS, obtain a baseline set of vital signs, and perform a SAMPLE history.

Focused History and Physical Exam – Trauma — This is used for patients, with no significant mechanism of injury, that have been determined to have no life-threatening injuries. This assessment would be used in place of your Rapid Trauma Assessment. You should focus on the patient's chief complaint. An example of a patient requiring this assessment would be a patient who has sustained a fractured arm with no other injuries and no life threatening conditions.

Focused History and Physical Exam – Medical — This is used for patients with a medical complaint who are conscious, able to adequately relate their chief complaint to you, and have no life-threatening conditions. This assessment would be used in place of your Rapid Medical Assessment. You should focus on the patient's chief complaint using OPQRST, obtain a baseline set of vital signs, and perform a SAMPLE history.

Detailed Physical Exam

This is a more in-depth assessment that builds on the Focused Physical Exam. Many of your patients may not require a Detailed Physical Exam because it is either irrelevant or there is not enough time to complete it. This assessment will only be performed while enroute to the hospital or if there is time on-scene while waiting for an ambulance to arrive. Patients who will have this assessment completed are patients with significant mechanism of injury, unconscious, confused, or unable to adequately relate their chief complaint. In the Detailed Physical Exam you will perform a head to toe assessment using DCAP-BTLS to find isolated and non-life-threatening problems that were not found in the Rapid Assessment and also to further explore what you learned during the Rapid Assessment.

Ongoing Assessment

This assessment is performed during transport on all patients. The Ongoing Assessment will be repeated every 15 minutes for the stable patient and every 5 minutes for the unstable patient. This assessment is used to answer the following questions:

1. *Is the treatment improving the patient's condition?*
2. *Are any known problems getting better or worse?*
3. *What is the nature of any newly identified problems?*

You will continue to reassess mental status, ABCs, re-establish patient priorities, reassess vital signs, repeat the focused assessment, and continually recheck your interventions.

ACRONYMS USED DURING PATIENT ASSESSMENT

MOI – stands for mechanism of injury

AVPU – used to classify the patient's mental status:

- **A** = awake, alert, and oriented
- **V** = alert to voice, but not oriented
- **P** = alert to painful stimuli only
- **U** = unresponsive to voice or painful stimuli

CUPS – used as an additional tool to prioritize the patient for transport:

- **C** = critical
- **U** = unstable
- **P** = potentially unstable
- **S** = stable

Priority	**Illness/Injury Severity**	**Transport Decision**
C ritical	Patients either receiving CPR, in respiratory arrest, or requiring and receiving life-sustaining ventilatory/circulatory support	**C – U – P** Scene Size-up Initial Assessment Rapid Assessment And Transport
U nstable **P** otentially unstable	Poor general impression Unresponsive with no gag or cough reflexes Responsive but unable to follow commands Difficulty breathing Pale skin or other signs of poor perfusion (shock) Complicated childbirth Uncontrolled bleeding Severe pain in any area of the body Severe chest pain, especially with a systolic BP of less than 100 mmHg Inability to move any part of the body	
S table	Minor illness, minor isolated injury, uncomplicated extremity injuries, and/or any patient that cannot be categorized as Critical, Unstable, or Potentially unstable.	**S** Scene Size-up Initial Assessment Focused Assessment And Transport

Priority Using CUPS

Status	Adult	Infant/Child
C	High	High
U	High	High
P	High	High
S	Low	Low

DCAP-BTLS – A mnemonic for EMT assessment in which each area of the body is evaluated for:

- **D**eformities
- **C**ontusions
- **A**brasions
- **P**unctures/Penetrations
- **B**urns
- **T**enderness
- **L**acerations
- **S**welling

DOTS – A mnemonic for CFR assessment in which each area of the body is evaluated for:

- Deformities
- Open Injuries
- Tenderness
- Swelling

SAMPLE – A mnemonic for the history of a patient's condition to determine:

- Signs & Symptoms
- Allergies
- Medications
- Pertinent past history
- Last oral intake
- Events leading up to the illness/injury

OPQRST – A mnemonic used to evaluate a patient's chief complaint and signs & symptoms:

- O = onset
- P = provocation
- Q = quality
- R = radiation
- S = severity
- T = time

Significant Mechanism of Injury

(listed below are some examples)

Vehicle-pedestrian collision

Death in the same passenger compartment

Medium speed vehicle collision (infants and children)

Falls greater than 20 feet (adults)

Falls greater than 10 feet (infants and children)

Penetrations of the head, chest, or abdomen

Motorcycle crash

High-speed vehicle collision

Roll-over of vehicle

Ejection from vehicle

Bicycle collision (infants and children)

PATIENT ASSESSMENT PRACTICE SHEET

SCENE SIZE-UP

Steps taken when approaching the scene

- Ensure BSI (Body Substance Isolation) procedures and & personal protective gear is being used.
- Observe scene for safety of crew, patient, bystanders.
- Identify the mechanism of injury or nature of illness.
- Identify the number of patients involved.
- Determine the need for additional resources including Advanced Life Support.
- Consider C-Spine stabilization

INITIAL ASSESSMENT

Assessment & treatment (life-threats)

GENERAL IMPRESSION

- Mechanism of injury or nature of illness
- Age, sex, race
- Find and treat life threatening conditions (any obvious problems that may kill the patient within seconds). Problems with Airway, Breathing, or Circulation
- Verbalize general impression of patient

MENTAL STATUS

- If the pt. appears to be unconscious, check for responsiveness, ("Hey! Are you OK"?)
- Evaluate mental status using AVPU.
- Obtain a chief complaint, if possible

AIRWAY

- Is the pt. talking or crying?
- Do you hear any noise?
- Will the airway stay open on it's own?
- Does anything endanger it?
- Open the airway - head-tilt-chin-lift or jaw thrust – as needed
- Clear the airway – as needed
- Suction - as needed
- Insert an OPA/NPA - as needed

BREATHING

- Do you see any signs of inadequate respirations?
- Is the rate and quality of breathing adequate to sustain life?
- Is the patient complaining of difficulty breathing?
- Quickly inspect the chest for impaled objects, open chest wounds, and bruising (trauma)
- Quickly palpate the chest for unstable segments, crepitation (trauma), and equal expansion of the chest
- If the pt. is responsive and breathing < 8 or > 24, administer oxygen using a NRB at 15 LPM.
- If the pt. is unresponsive and breathing is adequate, administer oxygen using a NRB at 15 LPM.
- If the pt. is unresponsive and breathing is inadequate, administer oxygen using a BVM at 15 LPM, with OPA.

CIRCULATION

- If the pt. is unresponsive, assess for presence and quality of the carotid pulse.
- If the pt. is responsive, assess the rate and quality of the radial pulse.
- If radial pulse is weak or absent, compare it to the carotid pulse.
- For patients 1 year old or less, assess the brachial pulse.
- Is there life threatening hemorrhage?
- Control life threatening hemorrhage
- Assess the patient's perfusion by evaluating skin for color, temperature and condition (CTC); can also check the conjunctiva and lips
- Assess capillary refill in infant or child < 6 yrs. old
- Cover with blanket and elevate the legs as needed for shock (hypoperfusion)

IDENTIFY PRIORITY PATIENTS *Is the patient:*

- ✓ **C**ritical
- ✓ **U**nstable
- ✓ **P**otentially Unstable
- ✓ **S**table

- Consider the need for Advanced Life Support
- If the patient is **C**RITICAL, **U**NSTABLE or **P**OTENTIALLY UNSTABLE , begin packaging the patient during the **rapid assessment** while treating life threats and transport as soon as possible.
- In addition, perform the **rapid trauma assessment** for the trauma patient if he/she has significant mechanism of injury and apply spinal immobilization as needed.
- For the unresponsive medical patient perform the **rapid medical assessment**.
- If the patient is or **S**TABLE, perform the appropriate focused physical exam (for the medical pt. perform the **focused physical exam**; for trauma patient perform the **focused trauma assessment**.)

FOCUSED HISTORY AND PHYSICAL EXAM - TRAUMA

Re-consider the mechanism of injury. If there is significant mechanism of injury, perform a **Rapid Trauma Assessment** on-scene while preparing for transport and then a Detailed Assessment during transport. If there is no significant mechanism of injury, perform the **Focused Trauma Assessment.** Direct the focused trauma assessment to the patient's chief complaint and the mechanism of injury (perform it instead of the rapid trauma assessment).

RAPID TRAUMA ASSESSMENT

perform on patients <u>with</u> significant MOI

- Continue spinal stabilization
- Re-consider ALS back-up
- Inspect and palpate the body for injuries to the following:

HEAD - inspect and palpate for signs of injury.

- DCAP-BTLS
- Blood & fluids from the head

NECK - inspect and palpate for signs of injury.

- DCAP-BTLS
- JVD (Jugular Vein Distention)
- Crepitation
- Apply CSIC (Cervical Spinal Immobilization Collar) - if not already done

CHEST - inspect and palpate for signs of injury.

- DCAP-BTLS
- Paradoxical movement
- Crepitation
- Breath sounds - bilateral assessment of the apices, mid-clavicular line; mid-axillary at the nipple line; and at the bases

ABDOMEN - inspect and palpate for signs of injury.

- DCAP-BTLS
- Pain
- Firm
- Soft
- Distended

PELVIS - inspect and palpate for signs of injury.

- DCAP-BTLS

If no pain is noted, gently compress the pelvis to determine tenderness or unstable movement.

EXTREMITIES - inspect and palpate the lower and upper extremities for signs of injury.

- DCAP-BTLS
- Crepitation
- Distal pulses
- Sensory function
- Motor function

POSTERIOR - Log roll the patient. Maintain c-spine stabilization.

- Inspect and palpate for injuries or signs of injury.
- DCAP-BTLS

FOCUSED TRAUMA ASSESSMENT

Perform on patients with no significant MOI

Assess the patient's chief complaint

- The specific injury they are complaining about – Why they called EMS
- Assess and treat injuries not found during your Initial Assessment
- Reconsider your transport decision
- Consider ALS intercept

Focused Assessment

- Follow order of the Rapid Assessment
- Focus assessment on the specific area of injury or complaint

Baseline Vital Signs

- Obtain a full set of vital signs including:
  - Respirations
  - Pulse
  - Blood Pressure
  - Level of Consciousness
  - Skin
  - Pupils

Assess SAMPLE History

- Signs & Symptoms
- Allergies
- Medications
- Pertinent Past Medical History
- Last oral intake
- Events leading up to the injury/illness

OBTAIN BASELINE VITAL SIGNS

RESPIRATIONS

RATE

Watch the chest/abdomen and count for no less than 30 seconds.
If abnormal respirations are present count for a full 60 seconds.

QUALITY

- Normal
- Labored?
- Shallow
- Deep
- Any unusual pattern?
- Noisy breathing?

PULSE

RATE

Check the radial pulse. If pulse is regular, count for 30 seconds and multiply x 2. If it is irregular, count for a full 60 seconds.

QUALITY

- Regular
- Irregular
- Strong
- Weak

SKIN (CTC)

Color - Look at the skin

- Normal (unremarkable)
- Cyanotic
- Pale
- Flushed
- Jaundice

Temperature - touch the skin

- Warm
- Hot
- Cool
- Cold

Condition - assess the skin

- Wet
- Dry

BLOOD PRESSURE

Blood pressure should be measured in all patients over the age of 3. Auscultate the blood pressure. In a high noise environment, palpate (only the systolic reading can be obtained).

PUPILS - use a penlight to check reactivity of the pupils; also assess for size

- equal or unequal
- normal, dilated, or constricted
- reactive - change when exposed to light
- non-reactive - do not change when exposed to light
- Equally or unequally reactive when exposed to light

ASSESS SAMPLE

- What **S**igns and **S**ymptoms is the patient exhibiting?
- Does the patient have any **A**llergies?
- Does the patient take any **M**edications?
- Does the patient have **P**ertinent past medical history?
- When was the patient's **L**ast meal?
  What did the patient eat? When did they last eat?
- **E**vents - What happened, how did this incident happen? Events leading up to the injury or illness.

FOCUSED HISTORY AND PHYSICAL EXAM - MEDICAL

During this phase of the patient assessment, the mnemonic **OPQRST** and **SAMPLE** will be used to gather information about the chief complaint and history of the present illness. **Baseline vital signs** and a **focused physical exam** or a **rapid medical assessment** will be performed. The order in which you perform the steps of this focused history and physical exam varies depending on whether the patient is responsive or unresponsive.

RAPID MEDICAL ASSESSMENT – performed on patients who are unconscious, confused, or unable to adequately relate their chief complaint.

- Perform a rapid assessment using DCAP-BTLS following the the order of the Rapid Trauma Assessment
    - Assess the head
    - Assess the neck
    - Assess the chest
    - Assess the abdomen
    - Assess the pelvis
    - Assess the extremities
    - Assess the posterior
- Obtain baseline set of vital signs
- Position patient to protect the airway
- Obtain the SAMPLE history from bystander, family, or friends.

Focused Medical Assessment – performed on the conscious alert patient who can adequately relate their chief complaint.

Obtain the history of the present illness

- **O**nset - "What were you doing when the symptoms started?"
- **P**rovocation - "Is there anything that makes the symptoms better or worse?"
- **Q**uality - "What does the pain/discomfort feel like?"
- **R**adiation - "Where do you feel the pain/discomfort?" "Does the pain/discomfort travel anywhere else?"
- **S**everity - "How bad is the pain?" "How would you rate the pain on a scale of 1-10, with 10 being the worst pain you've felt in your life?"
- **T**ime - "How long has the problem been going on?"

ASSESS SAMPLE

- What other **S**igns and **S**ymptoms is the patient exhibiting?
- Does the patient have any **A**llergies?
- Does the patient take any **M**edications?
- Does the patient have a **P**ertinent past medical history?
- When was the patient's **L**ast meal? (last oral intake)
  What did the patient eat/drink?
- **E**vents - What happened, how did this incident happen? Events leading up to the injury or illness.

Focused Assessment

- Follow order of the Rapid Assessment
- Focus assessment on the specific area of complaint (chief complaint)

Examples of questions to ask a conscious medical patient and assessment elements according to the patient's chief complaint		
Altered Mental Status ☐ Description of episode ☐ Duration ☐ Onset ☐ Associated symptoms ☐ Evidence of trauma ☐ Interventions ☐ Seizures ☐ Fever	**Allergic Reaction** ☐ History of allergies ☐ Exposed to what? ☐ How exposed ☐ Effects ☐ Progression ☐ Interventions	**Cardiac/Respiratory** ☐ **O**nset ☐ **P**rovocation ☐ **Q**uality ☐ **R**adiation ☐ **S**everity ☐ **T**ime ☐ **I**nterventions
Poisoning & OD ☐ Substance ☐ When exposed/ingested ☐ Amount ☐ Time period ☐ Interventions ☐ Estimated weight	**Environmental** ☐ Source ☐ Environment ☐ Duration ☐ Loss of consciousness ☐ Effects-general or local	**Behavioral** ☐ How do you feel? ☐ Determine if suicidal "Were you trying to hurt yourself?" "Have you been feeling that life is not worth living?" "Have you been feeling like killing yourself?" ☐ Threat to self or others ☐ Medical problem ☐ Interventions
Obstetrics ☐ Are you pregnant? ☐ How long have you been pregnant? ☐ Pain or contraction ☐ Bleeding or discharge ☐ Has your water broke? ☐ Do you want to push? ☐ Last menstrual period?	**Acute Abdomen** ☐ Location of pain ☐ Any vomiting If so, color/substance ☐ Taking birth control ☐ Vaginal bleeding or discharge ☐ Abnormal vital signs	**Loss of Consciousness** ☐ Length of time unconscious ☐ Position ☐ History ☐ Blood in vomit or stool ☐ Trauma ☐ Incontinence ☐ Abnormal vital signs

Baseline Vital Signs

- Obtain a full set of vital signs including:
    - Respirations
    - Pulse
    - Blood Pressure
    - Level of Consciousness
    - Skin
    - Pupils

Provide Treatment

- Provide emergency medical care based on signs and symptoms

DETAILED PHYSICAL EXAM

The **Detailed Physical Exam** is used to gather additional information regarding the patient's condition only after you have provided interventions for life threats and serious conditions. Not all patients will require a Detailed Physical Exam. It is performed in a systematic head-to-toe order. You will examine the same body areas that you examined during your rapid assessment. During the detailed physical exam, you will look more closely at each area to search for findings of lesser priority than life threats and/or signs of injury that have worsened. **Do not delay transport to perform a detailed physical exam; it is only performed while enroute to the hospital *or* while waiting for transport to arrive.**

Detailed Physical Exam – Trauma or Medical

HEAD - inspect and palpate for signs of injury.
DCAP-BTLS
Blood & fluids from the head

FACE - inspect and palpate for signs of injury.
DCAP-BTLS

EARS - inspect and palpate for signs of injury.
DCAP-BTLS
Drainage (blood or any other fluid)

EYES - inspect for signs of injury.
DCAP-BTLS
Discoloration
Unequal Pupils
Foreign Bodies
Blood in Anterior Chamber

NOSE - inspect and palpate for signs of injury.
DCAP-BTLS
Drainage
Bleeding

MOUTH - inspect for signs of injury.
DCAP-BTLS
Damaged/Missing Teeth
Obstructions
Swollen or Lacerated Tongue
Discoloration
Unusual Odors

NECK - inspect and palpate for signs of injury.
DCAP-BTLS
JVD
Tracheal deviation
Crepitation

CHEST - inspect and palpate for signs of injury.
DCAP-BTLS
Paradoxical movement
Crepitation
Breath sounds - bilateral assessment of the apices, mid-clavicular line; mid-axillary at the nipple line; and at the bases

- Present
- Absent
- Equal

ABDOMEN - inspect and palpate for signs of injury.

DCAP-BTLS
Pain/Tenderness
Firm
Soft
Distended

PELVIS - inspect and palpate for signs of injury.

DCAP-BTLS

If no pain is noted, gently compress the pelvis to determine tenderness or unstable movement.

EXTREMITIES - inspect and palpate the lower and upper extremities for signs of injury.

DCAP-BTLS
Crepitation
Distal pulses
Sensory function
Motor function

POSTERIOR - Log roll the patient. Maintain c-spine stabilization. Inspect and palpate for injuries or signs of injury.

DCAP-BTLS

ON-GOING ASSESSMENT

The **On-Going Assessment** will be performed on all patients while the patient is being transported to the hospital. It is designed to reassess the patient for changes that may require new intervention. You will also evaluate the effectiveness of earlier interventions, and reassess earlier significant findings. You should be prepared to modify treatment as appropriate and begin new treatment on the basis of your findings during the On-Going Assessment.

UNSTABLE PATIENTS – repeat On-Going Assessment at least every 5 minutes
STABLE PATIENTS – repeat On-Going Assessment at least every 15 minutes

REPEAT INITIAL ASSESSMENT

- Reassess mental status.
- Maintain an open airway.
- Monitor breathing for rate and quality.
- Reassess pulse for rate and quality.
- Monitor skin color and temperature (CTC)
- Re-establish patient priorities

REASSESS AND RECORD VITAL SIGNS

REPEAT FOCUSED ASSESSMENT

CHECK INTERVENTIONS

- Assure adequacy of oxygen delivery/artificial ventilation
- Assure management of bleeding
- Assure adequacy of other interventions