Part II: Key Issues in Emergency Pediatric Nursing Care

4 TRIAGE

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*It is often said, “Children are **not** just small adults.” Attention to the truth of this statement is critical for the triage nurse.*

RED FLAGS

- Abnormal airway sounds
- Abnormal vital signs
- Altered mental status
- Brief Resolved Unexplained Event (BRUE)
- Burns
- Diabetic ketoacidosis
- Fever >102 °F (38.8 °C) (>3 months to 3 years)
- Fevers in neonates >100.4 °F (38 °C) <3 months
- Head trauma (e.g., possible child abuse)
- Immunocompromised with fever
- Increased work of breathing (e.g., nasal flaring, sternal retractions, tracheal tug, use of accessory muscles)
- Overdoses/ingestions
- Petechial rash
- Seizures
- Severe dehydration/signs of shock
- Suspicion of child abuse
- Symptoms consistent with sepsis
- Unresponsive (unconscious)

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TRIAGE CONSIDERATIONS

- Always work from general body systems to a specific, focused assessment related to the chief complaint.
- Pediatrics often have vague, undefined complaints, and **decompensate suddenly**. Because of this, signs and symptoms of serious illness are often subtle and may appear suddenly.
- Not all hyperventilation is due to anxiety! Always think worst case scenario and get a capillary blood glucose (CBG) level. Perform a brief mental status assessment.
- Bradycardia in a child is an ominous sign.
- History of high temperature in infants and immunocompromised children prior to arrival may indicate significant illness even with a normal temperature at time of triage.
- **CAUTION:** Immunocompromised children must **not** have rectal temperature measurements, because this may result in proctitis and sepsis.
- Consider sepsis in neonate ≤ 28 days.
- Consider the possibility of febrile seizures.
- **CAUTION:** Be aware of the age limits for the use of certain medication. Use the correct dose related to weight/kilogram. For example: No aspirin <18 years old, no ibuprofen <6 months old, no ibuprofen with suspicion of chicken pox
- Pediatric altered mental status may be life-threatening. Ascertain from the parent/caregiver if the child is different from their normal personality, behavior, or responsiveness.
- A CBG should be considered on any patient with an altered mental state—irritability and agitation included.
- Central pain, as opposed to peripheral pain, suggests a possibly life- or limb-threatening condition.

TRIAGE ACUITY SCALES

Use a valid and reliable five-level triage acuity scale, such as the Canadian Triage and Acuity Scale (CTAS), the Emergency Severity Index (ESI)v4, the Manchester Triage Scale, and the Australasian Triage Scale.

The ESI arrives at the top two levels based on symptoms and presentation, and the bottom three levels based on expected ESI resource needs and considers danger zone vital signs. All other triage scales are fully symptom and presentation based for all levels.

Regardless of the individual scale descriptors, and how they arrive at the various levels, all five-level scales agree in practice that each level meets the following universal category descriptions:

Level 1: Resuscitation

- Immediate threat to life or limb (or imminent risk of deterioration) requiring **immediate** aggressive interventions to save life.
- Patients who require immediate, continuous, and/or resuscitative care:
  - Shock
  - Unresponsive (unconscious) patients
  - Cardiovascular and/or pulmonary arrest
  - Severe respiratory distress requiring immediate intervention
  - Major trauma

Level 2: Emergent (Very urgent)

- Conditions that are a threat to life, limb, or function, requiring **rapid** medical intervention or delegated acts. (Unstable)

Level 3: Urgent

- Conditions that could potentially progress to a serious problem requiring emergency intervention
- May be associated with significant discomfort or may affect ability to function at work or in activities of daily living
- *Frequent reassessment is imperative! (Potentially unstable)*

Level 4: Less urgent (Standard)

- Conditions that, related to patient age, distress, or potential for deterioration, would benefit from intervention or reassurance within 1 to 2 hours (Stable)

Level 5: Nonurgent

- Conditions that may be acute but nonurgent, as well as conditions that may be part of a chronic problem with or without evidence of deterioration (Routine)
- Conditions for which investigation or interventions could be delayed or even referred to other areas of the hospital or healthcare system (after receiving a medical screening exam (MSE) if required as in the United States)

KEY TIPS

- Be aware of triage drift; use **only** the criteria outlined by the chosen acuity scale/index tool.
- Do not assign acuity with the consideration of other factors, such as peer pressure, crowded departments, availability of beds, staff or other resources, or comparing the patient with others.
- Remember, pediatric patients have different physical and cognitive developmental issues that need to be considered.
- Do not delay placing a pediatric patient who meets Level 1 or Level 2 acuity criteria to take a full set of vital signs.
- The RN must accompany all patients who meet Level 1 criteria from triage to the pediatric treatment room.
- Accompany or give a telephone handover of Level 2 patients from triage to pediatric treatment room.

A systematic approach for triage is as valid for the pediatric patient as it is for the adult patient. **Pediatric triage has specific challenges**, including vague, undefined complaints, and rapid decompensation. Signs and symptoms (s/s) of serious illness are often subtle and may appear suddenly.

SYSTEMATIC TRIAGE ASSESSMENT PROCESS™

Step 1: The **Critical Look***

Step 2: Obtain the **Chief Complaint** and consider worst case scenario (WCS)

Step 3: Perform and document a **Rapid Triage Assessment** on all arriving patients (identify and facilitate placement of patients who meet Immediate Bedding Criteria). **

- Obviously ill or injured (or nurse can quickly and confidently determine accurate acuity and appropriate disposition)
- Open bed (available or can be obtained quickly)
- Available care provider(s) (consider acuity of the nurse's patient load)

If patient meets immediate bedding criteria, skip to Step 5 and assign acuity, then place in ED bed or treatment area.

If patient does not meet Immediate Bedding Criteria move to Step 4,

Step 4: Perform and document **Comprehensive Triage Assessment**

Step 5: Determine and document **Triage Acuity level and disposition**

Pull to capacity (requires open/staffed beds and close communication with charge nurse or bed coordinator to determine the most appropriate treatment area placement)

Step 6: **Initiate nursing interventions** and/or diagnostics according to common nursing practice or Advanced Triage Protocols or as directed by the medical provider (for patients in waiting areas).

Step 7: **Reassess the patient** according to specific triage acuity scale objectives and/or reassessment policy (for patients in waiting area).

*If the critical look is enough to ascertain that the patient is a Level 1 acuity or index score, begin immediate resuscitative measures and secure a treatment room. No further triage is necessary! Upon entry, you must unwrap blanketed infants and look! You can't see retractions if you don't look.

**All three required (McNair, 2019)

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PEDIATRIC ASSESSMENT TRIANGLE

The Pediatric Assessment Triangle (PAT) is a valid and useful tool to perform the initial step, also called The Critical Look. It helps to form the general impression and establish the severity of illness or injury and the urgency of the intervention. *It **does not** diagnose.*

NOTE: General appearance = **TICLS**; **T**one, **I**nteractiveness, **C**onsolability, **L**ook or gaze, **S**peech or cry (ENA, 2020)

PATIENT PRESENTATIONS USING THE PEDIATRIC ASSESSMENT TRIANGLE

Child is in Respiratory Distress

1. Normal appearance
2. Increased work of breathing
3. Normal circulation to skin

Child is in Respiratory Failure

1. Abnormal appearance
2. Abnormal work of breathing (increased or decreased)
3. Normal or abnormal circulation to skin

Child is Likely in Shock

1. Abnormal appearance
2. Normal work of breathing
3. Abnormal circulation to skin

Child Likely has a Primary Central Nervous System (CNS) or Metabolic Abnormality

1. Abnormal appearance
2. Normal work of breathing
3. Normal circulation to skin

KEY TIPS

- Do not do just across-the-room assessments for neonates and infants! They may have hidden deficits.
- A child who is irritable (not just fussy) and/or a child who is lethargic (not just drowsy) indicates a serious neurological event and should be taken seriously!
- A child with a respiratory complaint who appears ill or tires may be fatigued and on the verge of respiratory failure.

RAPID TRIAGE ASSESSMENT

Brief 60- to 90-second focused subjective and objective assessment

- Subjective assessment—Use open-ended questions first and then move to closed-ended questions for a rapid and focused triage
- Objective assessment—A brief and focused observation based on the chief complaint. A-B-C-D-E (airway, breathing, circulation and cervical spine, disability, environment/exposure)

COMPREHENSIVE TRIAGE ASSESSMENT

This is a 3- to 5-minute focused subjective and objective assessment.

- Subjective—Use open-ended questions first and then move to closed-ended questions for a rapid and focused triage using mnemonics:
  - **SAMPLE**: Signs and Symptoms, Allergies, Medications, Past history, Last oral intake/Last output, Events leading to visit or
  - **PQRST**: Provokes/Palliates, Quality, Region/Radiation, Severity/Symptoms, Timing/Temporal relations/Trauma for a complete pain assessment
  - **IIMAI**: Impression of caregiver *if applicable*, Intake and output, Medications and past medical/surgical history, Allergies, and Immunizations

- Objective assessment—Focused observations based on the chief complaint
  - General systems review—**MNRIA**: Mode of arrival, Neurological status, Respiratory status, Integumentary status, Abnormal observations
  - Focused physical assessment based on chief complaint
  - Vital signs—Vital signs per se are not always needed in a rapid triage assessment, unless time allows, or they are necessary to make the correct triage decision. However, a comprehensive triage assessment should elicit a full set of vital signs. Body system parameters (e.g., pallor, dusky, increased work of breathing) in opposition to actual vital signs will give the triage nurse an immediate signal that a patient might be presenting a high-risk situation.
  - **Temperature**—High-risk fevers include patients who look unwell, or are immunocompromised (neutropenia *[or suspected]*, chemotherapy, immunosuppressive drugs, steroids) or septic. Do they also meet systemic inflammatory response syndrome (SIRS) criteria?
  - **Blood Pressure (BP)**—Beware of elevated BP in adolescents! The BP itself is not as concerning as the associated presence of symptoms. High-risk symptoms are headache, nausea, shortness of breath, and chest pain. Hypertension in the pediatric patient sets the stage for the lifelong physiological consequences associated with hypertension. Not only should the triage nurse consider hypotension and the minimal acceptable BP, but they should assign importance to the elevated BP as well (Flynn et al., 2017). BP is difficult to obtain accurately in small children and infants because of crying, moving, cuff size, and so on.
  - **Capillary Blood Glucose (CBG)**—A CBG is a key measurement for determining acuity, especially in patients who must wait for a treatment bed assignment. A CBG should be obtained on any patient with acute (new onset) altered mental status. High risk blood glucose at the **low level** would be ≤ 2.5 mmols (45 mg/dL) in neonates and ≤ 3.3 mmols (60 mg/dL) in children with symptoms of confusion, diaphoresis, or behavioral change. High risk blood glucose at the **high level** would be >18 mmol/L (>324 mg/dL) with symptoms of dyspnea, dehydration, or weakness. Again, while the CBG itself may be concerning, the presence of symptoms combined with a high or low reading indicates a high-risk situation.

LENGTH-BASED TAPE

- Use of length-based tape sets up a common language from initial assessment through discharge.
- **CAUTION: The use of any length-based pediatric tape requires training and familiarization with the tool!**
- Post length-based tape near the triage area. Measure “Head to Red,” from head to heel (DeBoer, 2019).
- **CAUTION:** Tapes may be unreliable in overweight children.
- As soon as possible, obtain an actual weight in kilograms; **children must always be weighed in kilograms!**

LEGAL CONSIDERATIONS AND MANDATED REPORTING

Malpractice claims that are directly related to emergency nursing triage are mainly due to:

- failure to rapidly and accurately assess the severity of illness or injury;
- delay in recognizing a life-threatening illness or injury;
- failure to appropriately reassess the patient;
- triaging patients out of the department before performing a MSE; and
- delay in the MSE to gather payment or demographic details.

It is important for the triage nurse to be aware of applicable laws regarding minors who present without parents or guardians, seeking care for themselves, as well as minors who refuse the treatment or care requested by their parents or guardians. Some jurisdictions allow minors to seek care for certain issues without parental consent, such as pregnancy, contraception, sexually transmitted diseases, and substance abuse.

Emancipation rules and laws also differ from one region to another.

These situations can be tricky and liable to litigation. It is critical in these situations that the nurse document the following:

- Exactly what the patient says in the subjective statement
- Exactly what the nurse observes in the objective statement
- Any communication regarding the patient or situation
- Any verbal orders or instructions by leaders or medical providers
- Any actions, interventions, and disposition

NOTES