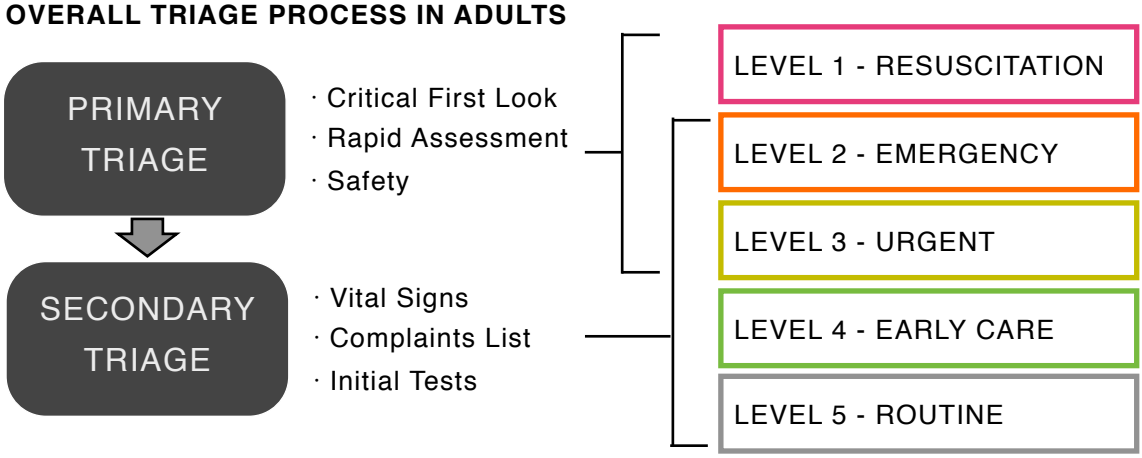
MALAYSIAN TRIAGE SCALE

FOR EMERGENCY AND TRAUMA DEPARTMENTS

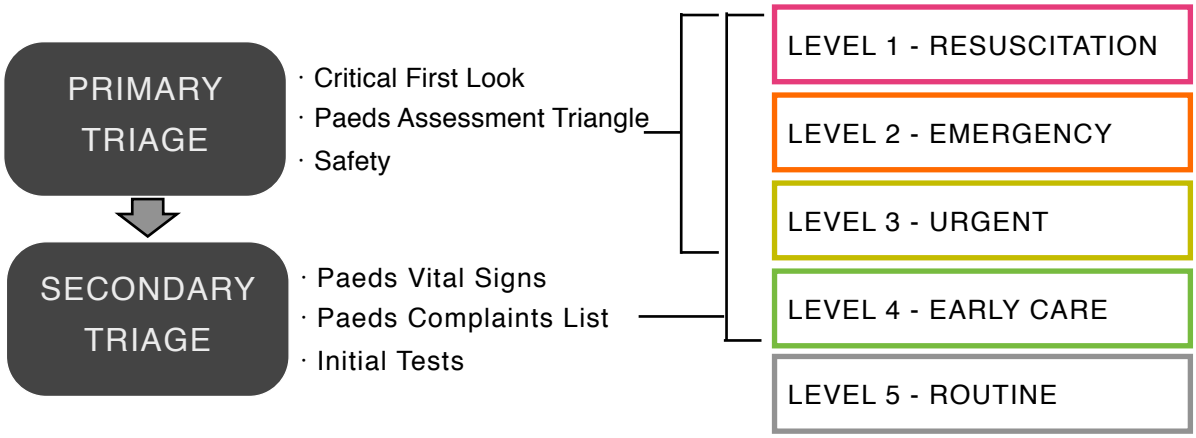
(NEW REVISED VERSION 2022)

OVERVIEW OF TRIAGE PROCESS IN EMERGENCY AND TRAUMA DEPARTMENTS

OVERALL TRIAGE PROCESS IN ADULTS



OVERALL TRIAGE PROCESS IN PAEDIATRICS



OVERVIEW STATEMENTS

- The Triage Services are the first point of contact for all patients accessing the services of the Emergency and Trauma Department. These protocols are designed to sort out patients according to their degree of severity, in order to ensure that they are seen in a timely manner and allocated appropriate resources.
- Triage processes are designed to be conducted rapidly within a few minutes in order to assign a triage level, which will determine priority, resources and treatment zones. This is vital to facilitate patient flow through the Emergency Department and avoid unnecessary congestion.
- Although Triage requires clinical judgement, it is not meant to make specific diagnoses, nor to identify all medical needs.
- Triage levels are assigned based on severity of the patients condition, and urgency of treatment needs, which is determined by rapid assessment, type of complaints and certain specific modifiers.
- Time to Treatment[1] standards relevant to Triage Levels are as follows
    - Level 1 - Resuscitation - 0 minutes (requires rapid team activation mechanism)
    - Level 2 - Emergency - under 10 minutes
    - Level 3 - Urgent - under 30 minutes
    - Level 4 - Early Care - under 60 minutes
    - Level 5 - Routine - under 90 minutes
- The number of treatment zones in Emergency Departments may vary according to size of hospital, number of ED attendances, availability of Emergency Physicians and degree of interventions carried out in the ED. A treatment zone may be designated to manage patients from different triage levels. This decision should be made at each individual ED based on its number of treatment zones and availability of staffing for those zones. Although treatment zones may vary according to hospitals, triage levels remain the same.
- Paediatric Triage takes into considerations the different challenges and presentations specific to the Under-12 population and is therefore described separately.
- The Triage process is meant to be repeated when new symptoms develop, symptoms worsen or the patient's condition appears to change. It is also recommended that patients are reassessed every hour, if they have not been seen by doctors yet.
- This guide is meant as a tool to facilitate the training and performance of triage processes by healthcare providers.

---

[1] *Time to Treatment - Time from registration to Time first seen by treating doctor*

PRIMARY TRIAGE

- The Primary Triage Officer, stationed at or near the front entrance of the ED, identifies critically ill or injured patients and diverts them immediately to treatment areas. Specifically, the Primary Triage Officer performs the following roles
    - Performs a Critical First Look and determines rapidly if the patient requires resuscitation or immediate emergency care

CRITICAL FIRST LOOK				
LOOK FOR	**LEVEL 1 - RESUSCITATION**	**LEVEL 2 - EMERGENCY**	**LEVEL 3 - URGENT**	**SECONDARY TRIAGE**
APPEARANCE	• Cardiac Arrest • Not Breathing • Major Trauma in Shock • Severe Resp Distress	• Not responding to call • Severe Chest Pain • Severe Pain • Ongoing Seizures	• Altered mental state • Cannot communicate • Cannot sit / stand unsupported	• Walking • Talking • Not distressed • Not aggressive

    - Performs a Rapid Assessment looking for Respiratory Distress, Shock State, Decreased Conscious Levels and / or Active Bleeding that requires resuscitation, immediate emergency care or urgent attention.

RAPID ASSESSMENT				
CHECK FOR	**LEVEL 1 - RESUSCITATION**	**LEVEL 2 - EMERGENCY**	**LEVEL 3 - URGENT**	**SECONDARY TRIAGE**
RESPIRATORY DISTRESS • Airway breathing • SpO2	• Abnormal sounds • Excessive work of breathing, sweating • Cannot speak; one-word reply • Confused, lethargic • Require assisted breathing • SpO2 < 90% room air	• Difficulty to breathe • Short phrases only • Agitation, anxious • SpO2 90 - 92% room air	• Wheeze, expiratory rhonchi; airway intact • SpO2 92 - 94% room air • Need O2 support	• Not breathless • Sp02 > 94% • No need O2
SHOCK STATE • Peripheries • Pulses • AVPU	• Pale, cyanosed, cold peripheries • Severe Tachycardia / Bradycardia • Absent Radial Pulse	• Tachycardia, Weak Pulses • Confused • Septic / Toxic • CRT > 2 seconds	• Peripheries warm, CRT normal • Cannot stand / walk unsupported	• Warm, pink, pulses normal • Alert, walking
CONSCIOUS LEVELS • Airway • AVPU • Brief Neuro	• Unresponsive • Airway unprotected	• Confused, agitated, disoriented • Obvious Neuro deficits • Ongoing Seizures • Abnormal posturing	• Not fully conscious • Cannot sit unsupported	• Alert • Sit upright

RAPID ASSESSMENT				
CHECK FOR	**LEVEL 1 - RESUSCITATION**	**LEVEL 2 - EMERGENCY**	**LEVEL 3 - URGENT**	**SECONDARY TRIAGE**
BLEEDING • Seen External • Suspect Internal • Bleeding Disorders • Anti-coagulant therapy	• Arterial Limb Bleeding • Active uncontrolled bleeding • Massive Vaginal bleed • Severe Facial Injury • Severe Pelvic Injury	• Active Vomit / Cough Blood • Suspected vascular injury • Suspected Intra-Abdominal Bleeding / Ectopic / AAA • Compartment syndrome	• Bleeding from Fractures/ Dislocations / Joints / Wounds • Menorrhagia • ENT Bleeding • Expanding haematoma • Bleeding Disorders	• Minimal / No active bleeding

- Ensures safety of the patient, healthcare providers and other persons in the ED by identifying all patients with potentially infectious diseases or at-risk exposures which may create harm or hazards to others, including highly contagious respiratory spread or contact spread infections and dangerous toxin exposures, in order to ensure isolation and other infection control measures, or decontamination can be carried out.

INFECTIOUS DISEASES / HAZMAT		
DISEASES / EXPOSURE	**TO BE PLACED AT**	**INITIAL ACTIONS**
COVID / Pandemic Influenza and other emerging respiratory viruses	Isolation (Negative Pressure)	Patient / Relatives wear surgical mask Wash hands with alcohol
Active Tuberculosis, untreated	Isolation (Negative Pressure)	Patient wear surgical mask
Meningococcaemia	Isolation (Negative Pressure)	Patient / Relatives wear surgical mask Wash hands with alcohol
CRE, MRSA, other multi-drug resistant infections	Isolation Room	Patient wear surgical mask Wash hands with alcohol
EBOLA and other re-emerging viruses	Isolation Room	Patient wear surgical mask Wash hands with alcohol
Organophosphates and similar compounds	Decontamination	Removal of clothes External shower decontamination
Chemical exposure to Eyes, ENT	Any external area	Immediate and continuing wash-off
HAZMAT - chemical, dry or liquid	Decontamination	Removal of clothes Removal of any dry contaminant External shower decontamination for liquid contaminants
HAZMAT - inhaled	Isolation (Negative Pressure)	Identify potential exposure Early Airway support Consider early Antidote

INFECTIOUS DISEASES / HAZMAT		
DISEASES / EXPOSURE	**TO BE PLACED AT**	**INITIAL ACTIONS**
HAZMAT - radioactive	Decontamination	Removal of clothes Removal of any dry contaminant External shower decontamination Radiation survey performed urgently
Note: In all of the scenarios above, senior clinicians must be involved early on. All staff must wear appropriate PPE. All movement of patients should be restricted to reduce risk to others.		

- Ensures safety of all persons in the vicinity by seeking urgent measures to resolve highly aggressive or potentially violent patients, or persons, before allowing them to proceed into the ED

AGGRESSIVE / POTENTIALLY VIOLENT PERSONS	
CONDITIONS	**POTENTIAL ACTIONS**
Aggressive Persons	Verbal de-escalation measures / Safety of other patients, persons Activation of Trained Personnel / KIV Activation of Police Physical Restraint measures Medications eg. Olanzepine (rapid onset Tolanz), Midazolam (intra-nasal, IM)
Potentially Violent	Verbal de-escalation measures / Safety of other patients, persons Activation of Trained Personnel / Activation of Police Code GREY activation Physical Restraint measures / Holding Room Medications eg. Olanzepine (rapid onset Tolanz), Midazolam (intra-nasal, IM) followed by IV sedatives
Violent Persons / Weapons	Verbal de-escalation measures / Safety of other patients, persons Activation of Trained Personnel / Immediate Activation of Police Code GREY activation Physical Restraint measures / Holding Room / Police Holding Cell Medications eg. Olanzepine (rapid onset Tolanz), Midazolam (intra-nasal, IM) followed by IV Sedatives
Note: In all of the scenarios above, senior clinicians must be involved early on. Activation of trained teams are essential (protocols and drills are needed).	

- Facilitates the placement and movement of patients brought in by ambulances, patients requiring the One-Stop Crisis Center (OSCC), OKT brought by the Police etc.

- The Primary Triage Officer assigns Triage Levels for Levels 1, 2 and 3 only and immediately diverts these patients to the designated treatment areas. Patients who do not satisfy the criteria for these Triage Levels proceed to Registration followed by Secondary Triage.
- In a small group of patients with presentations that are non-urgent and non-emergency, which can be better addressed in other outpatient services, the patients may be triaged-away. It is necessary to ensure their vital signs are normal and provide them with a note recording down their complaints and vital signs readings.

SECONDARY TRIAGE

- The Secondary Triage Officer performs additional assessment of patients who did not initially qualify for Levels 1, 2, 3 at Primary Triage. Patients may still be assigned these levels if warranted by abnormalities of vital signs, initial tests or if they have high risk complaints.
- Specifically, the Secondary Triage Officer performs the following actions
    - Measures vital signs (BP, HR, RR, SpO2, Temp, GCS, Pain Score)
    - Performs initial tests for ECG, and Glucose estimation
    - Assesses the patients complaints and identifies modifiers which most appropriately describe their symptoms. If modifiers do not differentiate between two triage levels, the higher triage level modifier should be selected.
- The Secondary Triage Officer can assign triage levels from Level 2 - 5. The final triage level assigned takes into consideration all of the selected parameters ie. Primary Triage, Vital Signs, Complaints List and Initial Tests.

VITAL SIGNS (ADULT)				
LOOK FOR	**LEVEL 2 - EMERGENCY**	**LEVEL 3 - URGENT**	**LEVEL 4 - EARLY CARE**	**LEVEL 5 - ROUTINE**
VITAL SIGNS • BP • HR • RR • SpO2	• SBP < 90 • HR > 120 • RR > 30 • BP > 220/130 with symptoms • SpO2 < 92%	• HR 100 - 120 • RR 20 - 30 • BP > 220/130 No symptoms • BP > 180/110 Mild symptoms • SpO2 92 - 94%	• Vital Signs within normal limits • BP > 180/110 No symptoms	• Vital Signs within normal limits
VITAL SIGNS • Temp • GCS • Pain Score	• Temp > 39 or < 36 • Appears Septic, Ill • Immunocompromised • Severe Pain (8 - 10) • GCS < 13 or drop > 2	• Temp 37.5 - 39 C • Pain Score 4 - 7 • Appears unwell	• History of Fever • No documented fever	• No Fever • No Pain
ECG • 12-lead ECG	• Wide Complex Tachycardia • Narrow Complex Tachycardia > 150 / min • Bradycardia < 40 • ST elevations or depressions	• Atrial Fibrillation > 100 • Frequent ectopics • Blocks / Sinus Pauses • Tall Tented T waves	• No ECG findings; continuing chest pain	• Normal ECG • No ST-T wave changes
GLUCOSE • Levels • Symptoms	• < 2.5 mmol/L and symptoms • > 18 mmol/L and symptoms	• < 2.5 mmol/L no symptoms • > 18 mmol/L no symptoms	• 2.5 - 4.0 mmol/L • 12 - 18 mmol/L	• Normal Limits

COMPLAINTS LIST (ADULT)				
ABDOMINAL PAIN	• Bleeding PR or PO • Tense Rigid Abdomen • Pain Score 8 - 10	• Elderly > 65 • Pain Score 4 - 7 • Very sudden onset • Associated Back Pain • Possibly Pregnant	• Colicky Pain only • Vomiting, repeated	• Chronic or repeated episodes • Pain reduced / subsided
ALLERGY / ANAPHYLAXIS	• Face / Tongue oedema • Unable to swallow • Speaking difficulty • Near-fainting	• Skin Rash / Blisters • Abdominal pain • Vomit / Diarrhoea • Chemical / Toxin	• Pain main symptom	• Comfortable • Local Swelling • Itchiness
ALTERED MENTAL STATE	• Associated Seizures • Neuro Deficits • Agitated	• Confused • Glucose < 2.5	• Improved • Psychiatric history • Drug Use history	• Comfortable • No current symptoms
BURNS SCALDS	• Inhalational • Lightning related • Electrical • Chemical • Facial Thermal Burns • Major Burn Area > 15%	• Major Burn area < 15% • Involving hands, feet, joints, perineum • Circumferential burns	• Pain main symptom	• None
CHEST / ABDO TRAUMA	• Penetrating type • High velocity • SpO2 < 95% • Respiratory distress	• Increased work of breathing • Likely rib fractures • Possible Pelvic Injury • Significant external bruising	• High risk mechanisms • Elderly • Anticoagulant use • Pregnancy	• Mild symptoms
CHEST PAIN	• New Onset < 6 H • Arrhythmias on ECG • On-going chest pain • Profuse sweating • STEMI / NSTEMI / UA (referral)	• Onset > 6 H • Reduced chest pain • ECG non-conclusive • Risk assessment high / moderate	• Persisting mild pain • ECG normal • Risk assessment low	• No further pain • Cause unlikely cardiac • ECG normal
DEHYDRATION	• Severe with signs of shock and altered mental state	• Severe with dry mucous membranes and tachycardia	• Fully conscious • Cannot take orally	• Able to take orally
DENGUE, SUSPECTED	• Fever onset 3 - 6 days • Lethargy / Near-fainting • SBP < HR • SBP - DBP < 30	• Fever onset 3 - 6 days • Abdominal pain • Persistent vomiting • FBC - HCT > 45 (M); HCT > 40 (F)	• No Warning Signs • Elderly • Pregnant • CCF / CKD / CLD • Obese • Immunocompromised	• No Warning Signs
DIARRHOEA VOMITING	• Fresh blood PR • Fresh blood haematemesis • Altered consciousness	• Bloody diarrhoea • Black stools • Coffee ground vomitus • Anticoagulant use	• Persisting vomiting • Unable to tolerate orally	• Single episode • Small qty • Stable • Mild Symptoms • Tolerating orally

COMPLAINTS LIST (ADULT)				
DIZZINESS / GIDDINESS / VERTIGO	• Altered conscious level • Neurological Deficit	• Visual / Speech difficulty • Ataxia / Gait difficulty	• Behavioral change	• Symptoms only
EAR / ENT	• Possibly airway obstruction	• Active Nose Bleeding • Difficulty Swallowing • Tracheostomy	• Foreign Body ENT	• All other presentations
ENVIRON-MENTAL	• Inhalation of Chemical Fumes • High Voltage Electrical • Near-drowning post-resuscitation • Heat Stroke Temp > 39	• Heat related injuries • Household electrical injury • HAZMAT Skin exposure post-decontamination	• Persisting symptoms	• Mild or recovered
EYE / VISION	• Penetrating Eye Injury • Chemical Exposure Eye • Direct Trauma Eye	• Sudden Vision Loss • Painful Red Eye • Foreign body Eye • Post-op < 1 week • Associated Severe Headache		• All other presentations
FALL	• Altered conscious level • Neurological Deficit	• Limb injury / deformity • Neuro deficit • Vascular injury • > 6 m height • > 3 m height or more than 2x height of child	• Pain main symptom	• Mobilizing well • Mild symptoms
FEVER	• Skin Rash / Blisters • Altered Mental State • Associated Seizures • Immunocompromised • QSOFA / SIRS	• Fever > 5 days (child) • Limb / Joint Swelling • Headache • Toxin / Drug reactions • Poor oral intake	• Elderly > 65	• Not currently febrile • Tolerating orally • Mobilizing independently
FOLLOW-UP / RETURN VISIT		• Tight Cast • Immunocompromised • Post-chemotherapy • Post-daycare surgery • Return visit > 2 times	• Recurring / worsening symptoms	
GENITO-URINARY	• Severe scrotal pain, non traumatic	• Frank haematuria • Acute Urinary Retention		• Mobilizing well • Mild symptoms
GYNAE-COLOGY	• Massive Vaginal Bleeding • Pain Score > 7	• Known Gyn pathology with worsening symptoms • Pain Score > 4		• Mobilizing well • Mild symptoms
HEADACHE	• Altered mental state • Neuro deficits • Pain Score > 7 • Sudden onset • Assoc neck pain	• Visual / Speech difficulty • Ataxia / Gait difficulty • Pain Score > 4	• Behavioral change • Aura / Unilateral • Vomiting • Associated Fever	• Symptoms only

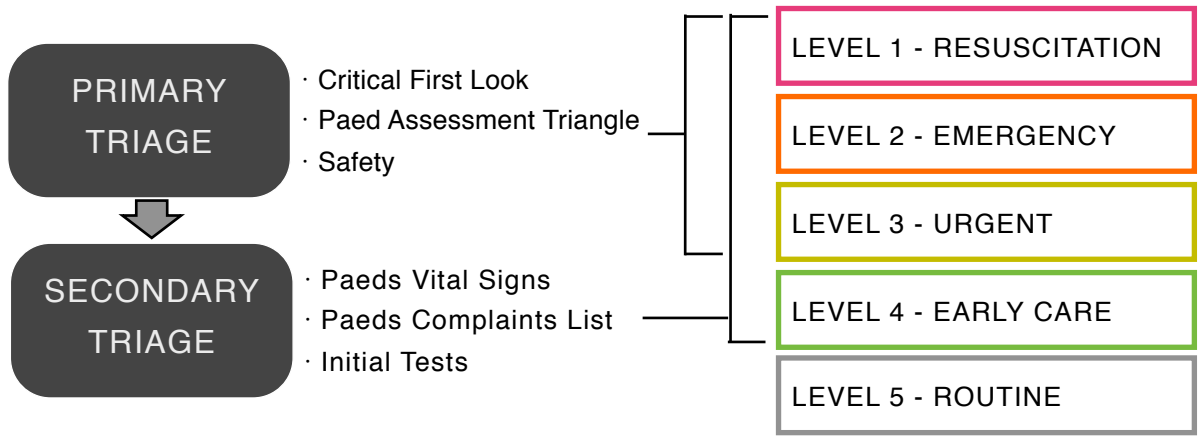
COMPLAINTS LIST (ADULT)				
LETHARGY WEAKNESS	• Airway reflexes lost • Unable to swallow, speak • Post exposure to drugs, bites, stings, toxins, environment • Acute Stroke < 3 H	• Associated Syncope, Breathless, Fever • Acute Stroke > 3 H • Immunocompromised • Skin rashes / blisters	• CKD / CLD • Dehydration • Elderly • Delirium / Abnormal behaviour	• Chronic or repeated episodes • Obeying commands
LIMB PAIN / SWELLING	• Cold, painful, dusky limb • CRT > 2 sec, pulse not felt	• Generalized oedema • Not able to bear weight	• Bilateral lower limb oedema	• Mobilizing well • Mild symptoms
LOW BACK PAIN		• Associated Abdo Pain • Neuro Deficits • Loss of Urinary / Bowel control	• Colicky Pain • Blunt Trauma • Fall • Elderly	• Chronic symptoms • No associated symptoms
PALPITATIONS	• Associated ECG abnormalities • Associated vital sign abnormalities • Ongoing chest pain, breathlessness, altered mental state.	• Associated syncope, chest pain	• Elderly > 65	• Mild symptoms
PREGNANCY RELATED (EARLY < 20 WEEKS)		• Active PV Bleeding • BP > 140 / 90	• Likely Abortion • Persistent Vomiting • Urinary Symptoms	• Not pregnancy related symptoms
PREGNANCY RELATED (LATE > 20 WEEKS TO 6 WEEKS POST PARTUM)	• Seizures • Active Labour • Massive PV Bleeding • Septic appearance • Head / Neck / Torso Trauma	• Limb Trauma • Active PV Bleeding • Lower Abdo Pain / Cramping • BP > 140 / 90 • Diagnosed Pregnancy Complications	• Persistent Vomiting • Urinary Symptoms	• None
PSYCHIATRIC	• Airway threatened • Associated overdose	• Risk of Self-Harm • Need for Sedation • Need for Restraint • Paeds Disruptive Behaviour	• Currently calm • Non-suicidal	• None
REFERRALS	• Ischaemic Limb • Vascular Injuries • Aortic Aneurysms • Febrile Neutropenia			
RESPIRATORY	• Abnormal sounds • Slow breaths, poor respiratory effort • Respiratory distress • Airway Foreign Body • Breathless, Change of Voice	• Wheezing, known asthmatic • Hyperventilation, SpO2 < 98% • Difficulty in swallowing	• Hyperventilation, SpO2 > 98%	• Mild URTI symptoms

COMPLAINTS LIST (ADULT)				
SCROTAL PAIN / PENILE TRAUMA	• Severe Pain (8 - 10) • Sudden Onset	• Moderate Pain (5 - 7) • Persistent Vomiting • Colicky Pain	• LIkely trauma	• Mild Symptoms
SEIZURES	• Ongoing seizures • Overdose / Poisoning* • Skin Rashes* • Trauma associated • Neck Stiffness	• First episode seizure • Persistent Post-Ictal Drowsiness • Sodium / Glucose abnormalities • Neuro deficits • Headache / Fever • Anticoagulant use	• Epilepsy history • Full recovery	• Mobilizing well • Mild symptoms • Medication review
SOB	• Stridor • Altered conscious level • Increased work of breathing, tired • Agitation, anxious • On-going chest pain	• Rapid breaths • Wheeze, expiratory rhonchi; airway intact • PEFR > 250 L/min	• Mild / minimal • RR normal • Associated other symptoms	• Comfortable • RR Normal • SpO2 > 98% • No other symptoms
SYNCOPE	• Altered conscious level • Neurological Deficit • Noted arrhythmias • Skin purpura or rashes • Abnormal limb movements	• Improved conscious levels • Neuro Deficit > 12 H	• Full recovery • No deficits	• Full recovery • No deficits • History of syncope
TRAUMA, HEAD NECK	• Penetrating type • High velocity • Active Bleeding • Visual / Hearing Impact • Altered Mental State	• Scalp wounds only • Retrograde amnesia • Neck pain • Distracting pain	• Fully conscious • Brief LOC • Elderly > 65	• Mild symptoms
TRAUMA, LIMB	• Mangled Limb • Amputation proximal to wrist • Ongoing haemorrhage • Proximal long bone fractures • Possible vascular injury	• Distal amputation • Dislocations • Open fractures • Possible nerve / tendon injury • Complications of immobilization • Hand injuries	• Small bone fractures likely • Pulses felt • Moving fingers / toes	• Mild symptoms • Unlikely fractures
WOUNDS / SKIN	• Arterial bleeding • Degloving injuries • Multiple penetrating • Burns / chemical	• Associated nerve, tendon, open fractures • Continuing venous bleeding	• Wound complications • Surgical complications • New onset symptoms	• Mild symptoms

PAEDIATRIC TRIAGE

- Paediatric Triage is performed similarly; but with different parameters relevant to paediatric patients. Generally, paediatric patients are triaged higher to reduce potential wait times and to facilitate their care processes.
- Specific Paediatric Treatment areas or zones are recommended; with medical devices and materials specific for paediatric patients made readily available.

OVERALL TRIAGE PROCESS IN PAEDIATRICS



- Rapid Assessment of Paediatric patients is performed using Critical First Look and the Paediatric Assessment Triangle in younger children. Children identified with danger signs must be moved to Resuscitation, immediate Emergency Care or Urgent attention.

Triage	Level 1 Resuscitation	Level 2 Emergency	Level 3 Urgent
APPEARANCE			
Tone	• Limp or Flaccid	• Weak / Limited Movement	• Movement or Vigorously resisting examination • Good Muscle Tone
Interactiveness	• Unresponsive • Lethargic	• Uninterested to surrounding or play	• Alert • Attentiveness to surroundings • Interest to play or reach for item
Consolability	• No cry • Very weak cry	• Crying or agitated that is unrelieved by reassurance	• Ability to be consoled or comforted by parent or caregiver
Look / Gaze	• Blank stare	• Gaze fixed to a face	• Looking around
Speech / Cry	• No speech • No cry	• Weak crying • High pitched	

Triage	Level 1 Resuscitation	Level 2 Emergency	Level 3 Urgent
WORK OF BREATHING			
Abnormal Airway Sounds	• Snoring, muffled or hoarseness in speech • Stridor, grunting or wheezing	• Difficulty in swallowing • Wheezing • Drooling	
Abnormal Positioning	• Sniffing position, tripod position	• Unable to walk • Refusal to lie down	
Retractions	• Head bobbing for infants	• Supraclavicular, intercostal or substernal retractions • Increased work of breathing	• Tachypnoea alone
Flaring		• Nasal flaring on inspiration • Accessory muscles	
CIRCULATION			
Pallor		• Pale mucous membranes / sole / palm	
Mottling, Cyanosis	• Patchy or bluish skin discolouration		
Capillary Refill Time	• Cold Peripheries • CRT > 5 secs	• CRT > 2 secs	

- Children without danger signs identified by the Paediatric Assessment Triangle at Primary Triage should proceed to Registration and Secondary Triage. Children should not be routinely triaged-away.
- At Secondary Triage, children may be given priority to early assessment. They may be triaged to Levels 1 - 4 as needed. Generally, children, especially those below 8 years old should not be triaged at Level 5 - Routine. Infants, below 1 years old should be at Level 4 or higher.
- At Secondary Triage, assessment of children is performed by measurement of vital signs, some initial tests and biometric measurements, and considerations for their presenting symptoms (as listed in Complaints List (Paediatrics).

VITAL SIGNS (PAEDIATRICS)					
VITAL SIGNS	**AGE GROUP**	**LEVEL 1 RESUSCITATION**	**LEVEL 2 EMERGENCY**	**LEVEL 3 URGENT**	**LEVEL 4 EARLY CARE**
RESPIRATORY RATE (breaths/min)	< 3 months	• > 60 bpm • < 20 bpm	• > 50 bpm	• 45 - 50 bpm • 20 - 25 bpm	• 25 - 40 bpm
	< 1 year	• > 60 bpm • < 15 bpm	• > 50 bpm	• 40 - 50 bpm • 15 - 20 bpm	• 20 - 40 bpm
	< 8 years	• > 60 bpm • < 12 bpm	• > 45 bpm	• 30 - 45 bpm • 12 - 20 bpm	• 20 - 30 bpm
	< 12 years	• > 60 bpm • < 12 bpm	• > 40 bpm	• 25 - 40 bpm • 12 - 15 bpm	• 15 - 25 bpm
HEART RATE (beats/min)	< 3 months	• > 180 bpm • < 80 bpm	• 80 - 100 bpm	• 160 - 180 bpm • 100 - 120 bpm	• 120 - 160 bpm
	< 1 year	• > 180 bpm • < 80 bpm	• 80 - 100 bpm	• 150 - 180 bpm • 100 - 110 bpm	• 110 - 150 bpm
	< 8 years	• > 180 bpm • < 60 bpm	• 150 - 180 bpm • 60 - 80 bpm	• 130 - 150 bpm	• 80 - 130 bpm
	< 12 years	• > 180 bpm • < 60 bpm	• 150 - 180 bpm	• 120 - 150 bpm • 60 - 70 bpm	• 70 - 120 bpm
SYST BLOOD PRESSURE SBP (mmHg)	< 1 year	• SBP < 60 mmHg	• 60 - 70 mmHg	• > 100 mmHg	• 70 - 100 mmHg
	< 5 years	• SBP < 70 mmHg	• 70 - 90 mmHg	• > 110 mmHg	• 90 - 110 mmHg
	< 12 years	• SBP < 80 mmHg	• 80 - 90 mmHg	• > 130 mmHg	• 90 - 130 mmHg
SpO2 (%)	All ages	• <92%	• 92 - 94%	• 94 - 96%	• > 96%
Temperate (C) (Axillary)	All ages	• > 40 • < 36	• 39 - 40C	• 37.5 - 39 C • 36.0 - 36.5	• 36.5 - 37.5 C
Pain Score	Child > 5 y	• Pain Score > 7	• Pain Score > 4	• Little pain	• No pain

COMPLAINTS LIST (PAEDIATRICS)				
COMPLAINTS (PAEDS)	**LEVEL 1 RESUSCITATION**	**LEVEL 2 EMERGENCY**	**LEVEL 3 URGENT**	**LEVEL 4 EARLY CARE**
ABDOMINAL PAIN	• Lethargy • Toxic appearance • Bleeding PR or PO • Bilious / Faeculent Vomiting • Red Currant Jelly stools • Not passing stool / flatus • Abdominal Mass • Jaundiced	• Febrile • Projectile Vomiting • Severe Pain > 7	• Colicky Pain • Urinary symptoms • Pain Score > 4 • Moderate dehydration	• Intermittent • Active • Taking Orally
ALLERGY / ANAPHYLAXIS	• Stridor • Face / Tongue oedema • Unable to swallow • Speaking difficulty • Near-fainting	• Skin Rash / Blisters • Abdominal pain • Vomit / Diarrhoea • Chemical / Toxin / CBRNE • Hornet stings • Severe Pain > 7	• Pain main symptom • Pain Score > 4	• Comfortable • Local Swelling • Itchiness
ALTERED MENTAL STATE	• Associated Seizures • Neuro Deficits • Lethargy • Agitated	• Confused • Glucose low (Neonates < 2.6, Paeds < 4.0)	• Improved • Previous history of Neuro disorder	• Comfortable • No current symptoms
BURNS SCALDS	• Inhalational • Lightning related • Electrical • Chemical • Facial Thermal Burns • Major Burn Area > 10%	• Involving hands, feet, joints, perineum • Circumferential burns • Severe Pain > 7	• Burns < 10% BSA • Pain Score > 4	• Sunburns only
CHEST / ABDO TRAUMA	• Penetrating type • High velocity • SpO2 < 95% • Respiratory distress	• Increased work of breathing • Likely rib fractures • Possible Pelvic Injury • Significant external bruising	• High risk mechanisms • Bleeding Disorders	• Mild symptoms • Low-risk mechanisms
CHEST PAIN	• New Onset • Ongoing chest pain • Near fainting • Respiratory Distress	• Associated Fever • Associated Lethargy	• Localized • Trauma, blunt • Low risk mechanism	
CRYING INFANT	• Unresponsive / Lethargic • Not feeding • Floppy / weak cry • Cold peripheries • Temp > 38 • Skin rashes*	• Inconsolable on arrival by parents • Inappropriate history • Prolonged crying > 2 H	• Intermittent episodes • Afebrile • Warm peripheries • Feeding normally	• Active • Comfortable
DEHYDRA-TION	• Severe with signs of shock and altered mental state	• Severe with dry mucous membranes and tachycardia	• Fully conscious • Cannot take orally	• Able to take orally

COMPLAINTS LIST (PAEDIATRICS)

COMPLAINTS (PAEDS)	LEVEL 1 RESUSCITATION	LEVEL 2 EMERGENCY	LEVEL 3 URGENT	LEVEL 4 EARLY CARE
DENGUE, SUSPECTED	• Fever onset 3 - 6 days • Lethargy / Near-fainting • Respiratory Distress • Shock	• Fever onset 3 - 6 days • Abdominal pain • Persistent vomiting • Inter-facility transfers	• No Warning Signs • Underlying chronic diseases • Referred cases • Infants < 1 year	• No Warning Signs • No co-morbids
DIARRHOEA VOMITING	• Fresh blood PR • Fresh blood haematemesis • Altered consciousness • Bilious / Faeculent Vomiting •	• Bloody diarrhoea • Black stools • Coffee ground vomitus • Anticoagulant use	• Persisting vomiting • Unable to tolerate orally	• Single episode • Small qty • Stable • Mild Symptoms • Tolerating orally
EAR / ENT	• Possibly airway obstruction • Respiratory Distress	• Active Nose Bleeding • Difficulty Swallowing • Tracheostomy • Severe Pain > 7 • Hoarse Voice	• Foreign Body ENT • Pain Score > 4	• All other presentations
ENVIRON-MENTAL	• Inhalation of Chemical Fumes • Near-drowning post-resuscitation • Heat Stroke Temp > 39 • Lethargy	• Heat related injuries • Any electrical exposure • HAZMAT Skin exposure post-decontamination	• Persisting symptoms	• Mild or recovered
EYE / VISION	• Penetrating Eye Injury • Chemical Exposure Eye • Direct Trauma Eye	• Sudden Vision Loss • Painful Red Eye • Foreign body Eye • Associated Severe Headache		• All other presentations
FALL	• Altered conscious level • Neurological Deficit	• Limb injury / deformity • Vascular injury • > 3 m height or more than 2x height of child • Pain Score > 7	• Pain main symptom • Pain Score > 4	• Mobilizing well • Mild symptoms
FEVER	• Skin Rash / Blisters • Altered Mental State • Lethargic / TOxic • Associated Seizures • Immunocompromised • QSOFA / SIRS • Severe dehydration • Respiratory Distress	• Fever > 5 days (child) • Limb / Joint Swelling • Headache • Toxin / Drug reactions • Infant < 3 months	• Poor oral intake • Moderate dehydration	• Not currently febrile • Not dehydrated • Tolerating orally • Mobilizing independently
FOLLOW-UP / RETURN VISIT		• Tight Cast • Immunocompromised • Post-chemotherapy	• Post-daycare surgery • Return visit 2 times • Recurring / worsening symptoms	• Any return visit to any healthcare facility

COMPLAINTS LIST (PAEDIATRICS)				
COMPLAINTS (PAEDS)	**LEVEL 1 RESUSCITATION**	**LEVEL 2 EMERGENCY**	**LEVEL 3 URGENT**	**LEVEL 4 EARLY CARE**
GAIT ABNORMAL / NOT MOVING LIMBS	• Altered conscious level • Neurological Deficit • Neck stiffness	• Painful Limb or Joint • Associated Fever • Dusky colour • CRT > 2 secs	• Unilateral weakness	• Intermittent episodes • Afebrile • Warm peripheries
GENITO-URINARY	• Severe scrotal pain, non traumatic (< 6 Hours)	• Frank haematuria • Abnormal coloured urine	• Penile / Scrotal swelling, painless	• Mobilizing well • Mild symptoms
HEADACHE	• Altered mental state • Neuro deficits • Pain Score > 7 • Sudden onset • Assoc neck pain	• Visual / Speech difficulty • Ataxia / Gait difficulty • Pain Score > 4	• Behavioral change • Aura / Unilateral • Vomiting • Associated Fever	• Symptoms only
LETHARGY	• Airway reflexes lost • Unable to swallow, speak • Post exposure to drugs, bites, stings, toxins, environment	• Associated Syncope, Breathless, Fever • Features dehydration • Underlying chronic diseases • Skin rashes / blisters	• Vomiting / profuse diarrhoea; moderate dehydration • Any co-morbids	• Chronic or repeated episodes • No dehydration • Obeying commands
LIMB / JOINT PAIN / SWELLING	• Cold, painful, dusky limb • CRT > 2 sec, pulse not felt	• Generalized oedema • Not able to bear weight / Limited ROM • Inflammed joint • Associated Fever	• Bilateral LL oedema • Tender swelling	• Mobilizing well • Mild symptoms
RESPIRATORY	• Abnormal Sounds • Incessant Cough • Cyanotic • Unable to swallow • Foreign body (Airway) • Tripod position • Previous Intubation / ICU care	• Swallowed foreign body • Overdose, Drugs, Allergy, Injury-linked • Poor feeding	• Mild URTI symptoms • Tolerating orally	• None
SEIZURES	• Ongoing seizures • Overdose / Poisoning* • Skin Rashes* • Trauma associated • Neck Stiffness	• Persistent Post-Ictal Drowsiness • Na / Glucose abnormalities • Neuro deficits • Headache / Fever • Anticoagulant use	• First episode seizure • Epilepsy history • Full recovery	• Mobilizing well • Mild symptoms • Medication review
TRAUMA, HEAD NECK	• Penetrating type • High velocity • Active Bleeding • Visual / Hearing Impact • Altered Mental State	• Scalp wounds only • Retrograde amnesia • Neck pain • Distracting pain	• Fully conscious • Brief LOC only	• No symptoms

COMPLAINTS LIST (PAEDIATRICS)				
COMPLAINTS (PAEDS)	**LEVEL 1 RESUSCITATION**	**LEVEL 2 EMERGENCY**	**LEVEL 3 URGENT**	**LEVEL 4 EARLY CARE**
TRAUMA, LIMB	• Mangled Limb • Amputation proximal to wrist • Ongoing haemorrhage • Proximal long bone fractures • Possible vascular injury	• Distal amputation • Dislocations • Open fractures • Possible nerve / tendon injury • Complications of immobilization • Hand injuries	• Small bone fractures likely • Pulses felt • Moving fingers / toes	• Mild symptoms • Unlikely fractures
WOUNDS / SKIN	• Arterial bleeding • Degloving injuries • multiple penetrating • burns / chemical	• associated nerve, tendon, open fractures • continuing venous bleeding	• wound complications • surgical complications • new symptoms	• Mild symptoms

THE "MYTRIAGE APP"

- The ***MyTriage App®*** is used to assist in the training of triage officers at the Primary and Secondary Triage counters. It has 3 general modes
  - *Primary Triage mode* - to be used solely at Primary Triage
  - *Secondary Triage mode* - to be used solely at Secondary Triage, after completing the review by Primary Triage
  - *Combined Mode* - to be used when Primary and Secondary Triage are performed by a sole healthcare provider; or whenever Triage is repeated
- The ***MyTriage App®*** is designed to be used for all age groups (adults above 12 years old, school-going children ages 6 - 12, pre-school children ages 1 - 5, infants ages 3 months to 1 year, and neonates and infants below 3 months old).
- The ***MyTriage App®*** will provide a triage recommendation (only to MTC Levels 1 - 3) when adequate critical criteria are fulfilled at Primary Triage; otherwise it will advise the healthcare provider to direct the patient to Secondary Triage. At Secondary Triage, the app will provide a triage recommendation (to MTC Levels 2 - 5) based on the information provided.
- The ***MyTriage App®*** is validated for use, and shall be regularly updated and improved in order to further improve its efficacy. The accuracy of triage is dependent on the information provided, the clinical assessment of the patient, and the proper use of the app. It is expected that the app is used primarily as a training tool, and to aid in providing triage recommendations when needed.
- The ***MyTriage App®*** is available for free with mobile devices using both the Android and iOS platforms. The use of this app is restricted to trained healthcare providers.
- The ***MyTriage App®*** provides solely a guide and should not be used in place of sound clinical judgment.