

[HOSPITAL / HEALTH AUTHORITY NAME]

PAEDIATRIC EMERGENCY ASSESSMENT AND THE SERIOUSLY ILL CHILD PATHWAY

Protocol 40: Age-Specific Recognition, PEWS Escalation, ABCDE Stabilization, Fever and Sepsis, Respiratory Distress, Shock, Dehydration, Safeguarding, Transfer, and Safe Disposition

DRAFT FOR EMERGENCY MEDICINE, PAEDIATRICS, NURSING, ANAESTHESIA / CRITICAL CARE, PHARMACY, LABORATORY, RADIOLOGY, SAFEGUARDING, MENTAL HEALTH, EMS, AND PAEDIATRIC TRANSFER SERVICES

STATUS: This is a draft clinical-governance document. It must be adapted to local age boundaries, staffing, PEWS charts, paediatric resuscitation equipment, formularies, antimicrobial guidance, laboratory and imaging capacity, safeguarding law, consent requirements, referral networks, and inter-island / tertiary-transfer capability before implementation.

SERIOUSLY ILL CHILD RULE: A low PEWS, normal blood pressure, temporary response to treatment, or reassuring first examination must never override dangerous physiology, abnormal behaviour, repeated attendance, clinician concern, or a parent / caregiver saying that the child is getting worse. Stabilize first, escalate early, and reassess after every intervention.

Document control	Details
Document owner	Emergency Department / Medical Services Directorate / Nursing Services / Clinical Governance
Clinical leads	Emergency Medicine; Paediatrics; Anaesthesia / Critical Care; Nursing; Pharmacy; Laboratory; Radiology; Safeguarding
Applies to	Infants, children and young people presenting to the Emergency Department, normally from 29 days through 17 years; neonates receive immediate stabilization with Protocol 41 activated.
Interfaces	Protocol 1 Patient Journey; Protocol 2 Triage; Protocol 3 Resuscitation / Sepsis / Shock; Protocol 17 Altered Mental Status; Protocol 19 Seizures; Protocol 20 Meningitis / Intracranial Emergency; Protocol 26 Vomiting / Diarrhoea / Dehydration; Protocol 27 Glycaemic Emergencies; Protocol 29 Poisoning; Protocol 30 Anaphylaxis; Protocols 31–37 Injury / Exposure; Protocol 41 Neonatal Emergencies; Protocol 43 Safeguarding; Protocol 48 Airway; Protocol 50 Sedation.
Version / status	Draft 1.0 for local multidisciplinary validation
Review cycle	After any paediatric death, unplanned ICU transfer, delayed recognition of deterioration, medication or fluid event, failed transfer, safeguarding incident, major guideline change, or at least every 2 years.
Required approval	Emergency Department; Paediatrics; Nursing; Anaesthesia / ICU; Pharmacy; Laboratory; Radiology; Safeguarding; Mental Health; EMS / Transfer; Clinical Governance.

1. Purpose

To provide a standardized emergency-department pathway for rapid recognition, age-appropriate assessment, immediate stabilization and repeated reassessment of infants, children and young people who may be seriously ill or deteriorating. The protocol integrates danger-sign triage, a locally approved Paediatric Early Warning System (PEWS), ABCDE resuscitation, fever and sepsis assessment, respiratory and circulatory support, hydration management, safeguarding, family partnership, specialist escalation, transfer and safe disposition.

The aims are to reduce avoidable harm from under-triage, delayed resuscitation, false reassurance from a single observation or test, dosing and fluid errors, missed safeguarding concerns, unsafe discharge and fragmented responsibility during admission or transfer.

2. Scope

This protocol begins at pre-alert or first contact and continues through discharge, observation, admission, theatre / procedure, critical care, specialist or interfacility transfer, safeguarding placement or death. It is an overarching assessment pathway and must be used with the relevant condition-specific protocol.

The usual age scope is 29 days to the local upper paediatric age limit. Neonates aged 28 days or younger and recently discharged preterm infants require immediate stabilization and activation of Protocol 41. Young people aged 16–17 years should receive developmentally appropriate care; local policy determines whether paediatric or adult specialty pathways lead management.

3. Core policy statements

- Every child shall receive rapid visual assessment on arrival, full age-appropriate vital signs, pain assessment, weight in kilograms, PEWS calculation using the locally approved chart, and documented reassessment. Missing observations are not a score of zero.

- ABCDE stabilization, glucose testing, monitoring, vascular access, senior escalation and preparation for definitive care occur in parallel. Treatment of life threats must not wait for registration, complete history, imaging, laboratory confirmation or transfer acceptance.
- PEWS supports recognition and response but does not replace clinical judgment. Any staff concern, parental concern, abnormal behaviour, repeated attendance, escalating oxygen need, worsening work of breathing, poor perfusion or altered consciousness overrides a low score.
- Blood pressure may remain normal until late shock. Tachycardia, prolonged capillary refill, weak pulses, mottling, oliguria, altered mental state and rising lactate require action before hypotension develops.
- All medicines and fluids are prescribed by measured weight in kilograms whenever possible. High-risk medicines, infusions and emergency calculations require an independent check and a standardized paediatric dosing resource.
- Children must be examined and communicated with in a developmentally appropriate, trauma-informed and family-centred manner while preserving adolescent privacy and confidentiality within legal and safeguarding limits.
- Every discharge requires improving or stable physiology, controlled symptoms, adequate hydration or feeding plan, reliable supervision, named follow-up, ownership of pending results and written return precautions understandable to the caregiver and young person.

4. Definitions and severity framework

Term	Operational definition / response
Seriously ill child	A child with threatened or actual airway, breathing, circulatory, neurological or metabolic failure; severe infection; major dehydration; time-critical surgical disease; significant trauma; poisoning; or clinician / caregiver concern for rapid deterioration.
Emergency sign	ETAT-style sign requiring immediate treatment: obstructed or absent breathing, severe respiratory distress, central cyanosis, shock, coma / markedly reduced consciousness, active convulsion, or severe dehydration with circulatory compromise.
Priority sign	Feature requiring urgent assessment ahead of routine care, including very young infant, abnormal temperature, trauma, pallor, poisoning, severe pain, respiratory distress, restlessness / irritability / lethargy, urgent referral, malnutrition / oedema, or burns.
PEWS	A paediatric early warning system combining age-specific observations and concern with a defined escalation response. It is a system of recognition, communication and action, not only a numerical score.
Compensated shock	Impaired tissue perfusion with preserved blood pressure; often tachycardia, prolonged capillary refill, cool or mottled skin, weak peripheral pulses, reduced urine or altered behaviour.
Decompensated shock	Shock with hypotension, worsening mental state, central pulse weakness, bradycardia, severe acidosis or impending / established cardiac arrest.
Clinical dehydration	Fluid deficit causing reduced intake, thirst, dry mucosa, reduced urine, tachycardia, sunken eyes, decreased skin turgor or altered behaviour without shock.
Safeguarding concern	Actual or suspected abuse, neglect, exploitation, trafficking, domestic violence exposure, self-harm, unsafe supervision, fabricated illness, sexual harm or any circumstance in which discharge may place the child at risk.

5. Roles and accountability

Role	Minimum responsibility
Triage / receiving nurse	Rapid visual assessment; danger and priority signs; complete observations, pain, glucose when indicated, weight, PEWS and immediate escalation; repeat observations after intervention or any concern.
ED clinician	Lead ABCDE stabilization, differential diagnosis, targeted investigations, treatment, reassessment, consultation and disposition; document uncertainty and activate linked pathways.
Paediatric clinician	Provide early senior review, age-specific diagnosis and treatment, admission / observation decision, family communication and transfer leadership.
Anaesthesia / critical care	Support difficult airway, ventilation, shock, vasoactive treatment, procedural sedation, critical transport and PICU consultation.
Pharmacy	Maintain paediatric emergency formulary, weight-based dosing tools, infusion standards, antidotes and independent high-risk medication checks.

Role	Minimum responsibility
Laboratory / radiology	Prioritize time-critical samples and imaging; use paediatric reference ranges and radiation-minimizing pathways; directly communicate critical results.
Safeguarding / social work	Advise on immediate safety, mandatory reporting, documentation, forensic preservation, safe discharge and placement.
Transfer coordinator / EMS	Obtain accepting clinician, determine transport level, equipment, medications, escort and contingency plan; avoid preventable delay.
Team leader / scribe	Allocate roles, use closed-loop communication, record times, weight, doses, fluids, response and decisions; trigger debrief or incident review when indicated.

6. Required readiness

Readiness domain	Minimum local requirement
Environment	Child-appropriate resuscitation area, warming, caregiver space, privacy, safeguarding interview area and safe mental-health observation capability.
Equipment	Age / size-organized airway and vascular equipment; bag-mask devices; oxygen delivery; suction; defibrillator with paediatric mode / pads; IO; infusion pumps; warming; glucose / ketone testing; paediatric BP cuffs.
Cognitive aids	Current paediatric life-support algorithms, local PEWS charts, emergency drug and infusion chart, weight-estimation method, sepsis pathway, transfer checklist and safeguarding contacts.
Medicines / fluids	Pre-agreed paediatric emergency medicines, balanced isotonic crystalloid, 0.9% sodium chloride, 10% glucose, blood-product access, antimicrobials and condition-specific emergency packs.
Workforce	At least one clinician and nurse each shift competent in paediatric initial assessment and resuscitation, with named senior paediatric and anaesthetic escalation routes.
Transfer	24-hour receiving paediatric / PICU contacts, retrieval or transport arrangements, paediatric transport equipment, documentation and backup plan for weather / inter-island delay.

7. Pre-alert, triage, and danger-sign recognition

Question / sign	Operational response
Airway obstruction, apnoea, gasping, stridor at rest, drooling or inability to handle secretions	Resuscitation area; immediate airway positioning, suction, oxygen / ventilation support and senior anaesthetic / paediatric activation.
Severe respiratory distress, central cyanosis, silent chest, exhaustion or SpO ₂ below local emergency threshold	Immediate oxygen, monitoring and disease-specific treatment; prepare bag-mask ventilation and escalation to advanced respiratory support.
Shock signs: prolonged capillary refill, weak pulses, mottling, cool extremities, altered behaviour, oliguria or hypotension	Immediate ABCDE, glucose, IV / IO access, cause-directed resuscitation, senior paediatric / critical-care review and transfer readiness.
Coma, markedly reduced interaction, focal deficit or active / recurrent convulsion	Airway protection, oxygenation / ventilation, glucose, seizure treatment, neuroprotective care and activation of neurological / meningitis / poisoning pathways.
Severe dehydration, inability to drink, persistent vomiting, sunken eyes with lethargy, or shock	Immediate perfusion assessment; oral / NG rehydration if safe and not shocked; IV / IO resuscitation if shock or enteral treatment fails.
Age under 3 months with fever $\geq 38^{\circ}\text{C}$, hypothermia, poor feeding, apnoea, colour change or abnormal behaviour	High-risk pathway; immediate senior paediatric review, sepsis assessment and low threshold for admission / transfer.
Non-blanching rash, neck stiffness, bulging fontanelle, severe limb pain, cold hands / feet, or rapidly progressive illness	Treat as possible meningococcal disease / meningitis / sepsis; antibiotics and transfer must not be delayed for lumbar puncture or imaging.
Parent / caregiver says "not acting normally," "getting worse," or has returned during the same illness	Repeat full assessment and senior review. Document the concern and do not discharge until the discrepancy is resolved or explicitly safety-managed.
Injury pattern, delay in presentation, inconsistent history, poor supervision, intoxicated caregiver or unsafe home	Treat medical needs and activate safeguarding; separate interviews when appropriate; do not discharge until a safe plan is confirmed.

TRIAGE OVERRIDE: Any emergency sign, rapidly worsening child, clinician concern, parental concern, repeat presentation, abnormal PEWS trend, or inability to obtain reliable observations bypasses routine waiting and triggers monitored senior assessment.

8. The first 10 minutes

1. Move the child to the appropriate monitored area and call for senior ED and paediatric help. Add anaesthesia / critical care, surgery, safeguarding, blood bank and transfer services according to physiology and likely diagnosis.
2. Perform a rapid visual “across-the-room” assessment: appearance and interaction, work of breathing, colour / circulation to skin, position, cry / speech, caregiver interaction and obvious injury or rash.
3. Complete ABCDE while treating each problem. Attach pulse oximetry and ECG when critically ill; measure respiratory rate, heart rate, blood pressure with correct cuff, temperature, capillary refill and mental state.
4. Check point-of-care glucose early in every seriously ill child, altered child, seizure, infant with poor feeding, suspected poisoning or prolonged illness. Check ketones when diabetes / metabolic illness is possible.
5. Obtain measured weight in kilograms without delaying resuscitation. When impossible, use the locally approved length- or age-based emergency estimate and replace it with a measured weight as soon as safe.
6. Provide oxygen for hypoxaemia or critical illness and support ventilation promptly. Use two-person bag-mask ventilation when needed; do not delay escalation for repeated ineffective attempts.
7. Establish IV access; use IO access early when the child is critically ill and IV access is not rapidly achieved. Draw only time-critical samples and do not delay treatment for blood collection.
8. Treat shock according to cause with 10 mL/kg isotonic crystalloid boluses and reassessment after each bolus; use blood early for haemorrhage and smaller, cautious aliquots when cardiogenic shock or fluid overload is possible.
9. Give time-critical therapy: antibiotics for high-risk sepsis / meningococcal disease, IM adrenaline for anaphylaxis, bronchodilator therapy for severe asthma, anticonvulsant for prolonged seizure, antidote when indicated, and source control / surgical activation.
10. Recalculate PEWS after initial treatment, explain the plan to the child and caregiver, assign named responsibility and document times, doses, response and unresolved threats.

9. PEWS, observation quality, and escalation

- Use one locally approved PEWS chart matched to age. Record the individual parameters and the total score; never record only the total.
- PEWS escalation must specify who reviews, within what time, what monitoring is required and what happens if there is no response. A score without a response pathway is unsafe.
- Escalate for any single extreme parameter even if the total score is low. Oxygen requirement, apnoea, altered consciousness, persistent tachycardia, hypotension, severe pain and clinician / family concern require direct action.
- Trend matters more than an isolated value. Plot repeated observations after each intervention, at the interval required by acuity, and before discharge, admission or transfer.
- Record confounders such as fever, crying, pain, medication, sleep, neurodisability, chronic hypoxaemia and baseline physiology, but do not automatically attribute abnormal observations to them.
- An “unable to measure” parameter in a sick child is a reason for escalation, not a normal result.

PEWS / concern state	Minimum response
Immediate danger sign or peri-arrest physiology	Resuscitation team response now; continuous monitoring; senior paediatric and anaesthetic / critical-care presence; prepare definitive airway, vasoactive support and transfer.
High or rapidly rising score / single extreme parameter	Immediate senior bedside review; ABCDE treatment; observations at least every 5–15 minutes until stable; identify destination and transport needs early.
Moderate score or persistent abnormal observations	Prompt clinician review, targeted treatment and repeat PEWS within a defined short interval. Escalate if no objective improvement.
Low score but family / clinician concern, repeat attendance or atypical behaviour	Senior review and explicit diagnostic reconciliation. Do not use the number to dismiss concern.
Improving score	Continue treatment and monitoring until sustained improvement, diagnosis-specific criteria and safe disposition requirements are met.

10. ABCDE assessment and immediate treatment

10.1 Airway

- Look and listen for obstruction, apnoea, snoring, gurgling, stridor, hoarse or weak cry, drooling, facial / neck swelling, burns, trauma and reduced airway tone.
- Open the airway with age-appropriate positioning; use jaw thrust when trauma is suspected. Suction visible secretions and remove only visible foreign material. Do not perform blind finger sweeps.
- Use airway adjuncts and two-person bag-mask ventilation with oxygen when required. Confirm effective chest movement, oxygenation and capnography when available.
- Stridor with drooling, tripod position, toxic appearance or rapidly progressive swelling requires minimal agitation, senior airway help and controlled transfer to a definitive airway setting.

10.2 Breathing

- Assess respiratory rate, effort, recession, grunting, head bobbing, nasal flaring, symmetry, air entry, wheeze / crackles / stridor, speech or feeding, SpO₂ and fatigue.
- Give oxygen to achieve the condition-specific target, commonly 94–98% in critical illness, unless a different target is documented for chronic respiratory or cyanotic heart disease.
- Treat the cause while supporting breathing: severe asthma, bronchiolitis, pneumonia, anaphylaxis, foreign body, pneumothorax, metabolic acidosis or neuromuscular weakness.

- Escalate before exhaustion. A falling respiratory rate, quiet chest, reduced effort, bradycardia, rising CO₂ or worsening consciousness in a distressed child may indicate impending arrest rather than improvement.

10.3 Circulation

- Assess central and peripheral pulses, heart rate and rhythm, capillary refill, skin temperature / colour, blood pressure, mental state, urine output, liver edge, lung signs and bleeding.
- Control external haemorrhage, obtain IV / IO access and send targeted tests. Use warmed fluids and active temperature management.
- For hypovolaemic, distributive or obstructive shock, give 10 mL/kg balanced isotonic crystalloid over about 5–10 minutes and reassess. Repeat only while perfusion improves and there is no fluid overload. Early vasoactive support and critical-care advice are required when repeated boluses are needed.
- In suspected cardiogenic shock, congenital heart disease, severe malnutrition or renal failure, use smaller cautious aliquots, expert guidance and early vasoactive / ventilatory support. In haemorrhagic shock, prioritize blood products and source control.

10.4 Disability

- Assess AVPU / GCS, pupils, posture, tone, focal neurology, seizures, irritability, inconsolability, interaction, fontanelle in infants and glucose.
- Treat hypoglycaemia using the locally approved threshold and dose; a common emergency dose is 10% glucose 2 mL/kg IV / IO, followed by reassessment and a plan to prevent recurrence.
- Treat a convulsive seizure lasting 5 minutes or recurrent seizures without recovery as status epilepticus under Protocol 19. Protect oxygenation, temperature and glucose while preparing second-line therapy.
- Consider sepsis / meningitis, poisoning, trauma, hypoxia, metabolic disease, DKA, intracranial pathology and non-accidental injury. Do not sedate an unexplained altered child without an airway and diagnostic plan.

10.5 Exposure and environment

- Fully expose as needed while preventing hypothermia and preserving dignity. Examine skin, rash, bruising, injuries, hydration, oedema, abdomen, joints, back and perineum when clinically indicated.
- Use a glass test only as an adjunct for rash; a non-blanching rash with fever or systemic illness is a medical emergency. A blanching rash does not exclude sepsis.
- Look for devices, medical-alert information, medication patches, bite / sting marks and signs of neglect or poor growth. Re-cover and warm promptly.

11. Fever, suspected infection, and sepsis

Clinical state	Emergency-department response
Age under 3 months with temperature $\geq 38^{\circ}\text{C}$ or abnormal temperature plus illness signs	High-risk assessment by an experienced paediatric clinician; full observations / PEWS, sepsis and meningitis evaluation, age-specific cultures / investigations and low threshold for parenteral antibiotics, admission or transfer.
Age 3–6 months with temperature $\geq 39^{\circ}\text{C}$	At least intermediate risk; assess appearance, perfusion, respiratory status, hydration, source, comorbidity and caregiver concern; senior review when abnormal.
Toxic appearance, shock, altered consciousness, non-blanching rash, neck stiffness, bulging fontanelle or focal neurological sign	Immediate sepsis / meningitis pathway, IV / IO access, antibiotics and critical-care / transfer activation. Do not delay antibiotics for lumbar puncture or imaging.
High-risk suspected sepsis without shock	Obtain cultures and lactate when this will not delay treatment; give locally approved empiric antibiotics within the high-risk time target; reassess frequently and seek source control.
Fever ≥ 5 days or compatible mucocutaneous / cardiovascular features	Consider Kawasaki disease and other inflammatory syndromes; arrange paediatric assessment and targeted investigations. Consider earlier when features are strong.
Immunocompromised, asplenic / sickle cell, central line or oncology patient	Treat fever as high risk; obtain cultures, start pathway-specific antibiotics promptly and involve the responsible specialty early.
Well-appearing child with apparent viral illness	Use age-specific risk assessment, urine / other testing when indicated, avoid unnecessary antibiotics, and discharge only with clear safety-netting and reliable follow-up.

- Do not use height of fever or response to antipyretics alone to distinguish serious from non-serious illness. Antipyretics are for distress, not normalization of temperature.
- Assess vaccination status, travel, sick contacts, recent antibiotics, devices, comorbidities and epidemiological risks. Apply isolation and public-health notification requirements early.
- Lumbar puncture is deferred when there is cardiorespiratory instability, signs of raised intracranial pressure, focal neurology, uncontrolled seizure, severe coagulopathy or local contraindication; treatment continues while the child is stabilized.

12. Respiratory distress

Pattern / red flag	Priority action
Upper-airway obstruction: stridor at rest, drooling, muffled voice, tripod position, sudden choking	Keep child calm with caregiver, give oxygen as tolerated, avoid unnecessary throat examination, call expert airway help, and activate foreign-body / anaphylaxis / ENT pathway.

Pattern / red flag	Priority action
Life-threatening asthma: silent chest, cyanosis, poor effort, exhaustion, confusion, hypotension or SpO ₂ <92% with severe attack	Continuous monitoring, oxygen to 94–98%, repeated / continuous inhaled bronchodilator therapy, systemic steroid, adjunct therapy and immediate PICU / anaesthetic involvement.
Bronchiolitis with apnoea, severe recession, exhaustion, poor feeding / dehydration or persistent hypoxaemia	Minimal handling, nasal suction when secretions impair breathing / feeding, oxygen and enteral / IV fluids as needed; escalate for apnoea or ventilatory support. Avoid routine bronchodilator, steroid, antibiotic or chest radiograph unless another diagnosis is suspected.
Pneumonia / sepsis with hypoxaemia, grunting, focal signs or shock	Oxygen, antimicrobial pathway, perfusion support, imaging only when it changes management, and admission / transfer based on severity.
Sudden unilateral signs, trauma or deterioration on positive-pressure ventilation	Consider tension pneumothorax and decompress immediately when clinically diagnosed; do not wait for imaging.
Neuromuscular weakness, severe obesity, metabolic acidosis or reduced consciousness	Recognize that respiratory failure may occur without dramatic recession; measure ventilation where available and escalate early for airway support.

RESPIRATORY FATIGUE RULE: A child who becomes quieter, less tachypnoeic or less agitated while oxygen requirement, CO₂, cyanosis, air entry or consciousness worsens is deteriorating, not settling.

13. Shock and impaired perfusion

Shock type / clue	Immediate priorities
Hypovolaemic / dehydration	Stop losses, isotonic crystalloid 10 mL/kg with reassessment, early enteral rehydration once perfusion is restored, and correction of electrolyte / glucose disturbance.
Septic / distributive	Cultures if feasible without delay, early antibiotics, 10 mL/kg reassessed boluses, source control, vasoactive support when fluid response is inadequate, and critical-care transfer.
Haemorrhagic / trauma	Direct pressure / tourniquet or pelvic stabilization as indicated, blood products early, tranexamic acid under trauma protocol, minimize crystalloid and obtain definitive surgical control.
Anaphylactic	IM adrenaline immediately under Protocol 30, repeat at 5-minute intervals when needed, oxygen, 10 mL/kg crystalloid and early refractory-anaphylaxis / critical-care pathway.
Cardiogenic / obstructive	ECG / ultrasound when available, cautious 5 mL/kg aliquots only when indicated, early vasoactive support and cause-specific treatment such as pneumothorax decompression or tamponade / arrhythmia management.
Endocrine / metabolic	Check glucose, ketones, electrolytes, cortisol risk, toxins and temperature. Activate DKA, adrenal crisis, poisoning or metabolic pathway; fluid strategy may differ substantially.

- Reassess after every bolus: heart rate, capillary refill, pulses, blood pressure, mental state, urine, lactate trend, liver edge, crepitations and work of breathing.
- A total of 40–60 mL/kg may be needed in the first hour for some hypovolaemic or distributive states, but persistent shock after 30–40 mL/kg, earlier fluid intolerance or suspected myocardial dysfunction requires vasoactive support and critical-care advice rather than automatic further fluid.
- Use bedside ultrasound as an adjunct when skilled staff are available, but do not delay time-critical treatment or allow a single scan to overrule the clinical trend.

14. Dehydration, vomiting, and diarrhoea

Severity	Typical findings	Management principle
No clinical dehydration	Alert, normal perfusion, moist mucosa, usual urine or only mild reduction	Continue breast / usual feeds and fluids; provide low-osmolarity ORS for ongoing losses; safety-net for reduced urine, lethargy, persistent vomiting or blood.
Clinical dehydration	Thirst, dry mucosa, sunken eyes, reduced tears / urine, tachycardia, irritability or lethargy but no shock	Low-osmolarity ORS 50 mL/kg over 4 hours plus maintenance, given frequently in small amounts; use NG route if oral intake is inadequate and there is no contraindication; reassess repeatedly.
Shock	Poor perfusion, weak pulses, prolonged refill, altered consciousness, hypotension or severe oliguria	IV / IO isotonic crystalloid 10 mL/kg with reassessment; investigate cause and electrolytes; transition to controlled deficit correction after shock resolves.
Hypernatraemia / severe electrolyte disturbance	Neurological signs, doughy skin, marked thirst, irritability, abnormal sodium or prolonged illness	Senior paediatric management with slow controlled correction, strict monitoring and seizure precautions. Avoid rapid unplanned free-water or sodium shifts.

Severity	Typical findings	Management principle
Possible surgical / metabolic cause	Bilious vomiting, severe focal pain / distension, peritonism, bloody stool, headache / raised ICP signs, DKA features, poisoning or testicular pain	Stop routine gastroenteritis pathway; activate surgical, neurological, diabetic, toxicological or urological assessment.

- Continue breastfeeding. Do not routinely use fruit juice, fizzy drinks or high-sugar beverages for rehydration.
- Document intake, emesis, stool, urine, weight change and cumulative fluids. Reassess abdominal findings and diagnosis when vomiting persists or hydration does not improve.
- Use IV maintenance and replacement fluids only with a written prescription, electrolyte plan, monitoring interval and daily / repeated weight when admitted.

15. Altered consciousness, seizures, and acute neurological danger

Finding	Action
Active seizure ≥5 minutes or repeated seizures without recovery	Protocol 19 status pathway; airway / oxygenation, glucose, first-line benzodiazepine, second-line preparation and early senior / critical-care support.
Reduced consciousness without seizure	ABCDE, glucose, oxygenation / ventilation, temperature, pupils and trauma assessment; consider sepsis / meningitis, poisoning, metabolic disease, DKA, hypoxia, intracranial disease and non-accidental injury.
Focal deficit, unequal pupils, abnormal posturing, persistent severe headache or signs of raised intracranial pressure	Neuroprotective care, avoid hypotension / hypoxia, urgent imaging / specialist discussion and transfer; do not perform lumbar puncture until safe.
Febrile seizure with complete recovery	Assess age, duration, focality, recurrence, source of fever and meningitis / sepsis risk. Complex features, incomplete recovery, age outside typical range or clinician concern require further evaluation.
Infant with irritability, high-pitched cry, poor feeding, apnoea or bulging fontanelle	Treat as possible serious infection / intracranial disease even without classic meningism; urgent senior review and sepsis / meningitis pathway.

16. Other high-risk presentations and special populations

Population / presentation	Additional requirement
Child with complex medical needs, technology dependence or baseline abnormal observations	Establish baseline from caregiver / care plan, contact usual team early, continue essential equipment and medications, and avoid attributing deterioration solely to chronic disease.
Sickle cell disease	Fever, chest pain, hypoxaemia, neurological deficit, priapism or severe anaemia is high risk. Activate Protocol 45 and involve paediatrics / haematology early.
Diabetes / possible DKA	Check glucose and ketones, assess dehydration and cerebral-injury signs, and activate Protocol 27. Do not use the routine dehydration pathway for DKA fluid calculation.
Poisoning / intoxication	Secure airway and glucose, identify substance / dose / time, call poison service, consider safeguarding and activate Protocol 29. Adolescents require mental-health assessment after medical stabilization.
Trauma / burns / drowning	Use paediatric trauma, burn and exposure protocols in parallel. Prevent hypothermia, use weight-based blood / fluid and consider non-accidental injury.
Obesity or undernutrition	Actual weight is used for many drugs but dosing weight may differ for selected agents; consult pharmacy. Severe malnutrition changes shock and refeeding management and requires expert guidance.
Pregnant adolescent	Provide confidential, non-stigmatizing pregnancy assessment and activate obstetric / gynaecological pathways while maintaining safeguarding and consent standards.
Communication, sensory or neurodevelopmental difference	Use caregiver knowledge, communication aids, quiet environment and reasonable adjustments; pain or deterioration may present as behavioural change.

17. Safeguarding, consent, and adolescent care

- Safeguarding is part of every paediatric assessment. Consider abuse or neglect when the history, developmental ability, injury pattern, delay in presentation, caregiver behaviour or repeated attendance is inconsistent or concerning.
- Treat urgent medical needs first while preserving evidence. Record the child's and caregiver's words verbatim, use body maps / photographs only under approved policy, avoid repeated questioning and contact the safeguarding lead promptly.
- Speak with the child or young person alone for part of the assessment when developmentally appropriate and safe. Explain confidentiality and its limits before asking about self-harm, sexual activity, violence, exploitation, substance use or home safety.

- Assess the young person's decision-making ability for the specific decision. Seek parental responsibility / legal advice when needed, but do not delay life-saving treatment when consent cannot be obtained in time.
- Do not discharge a child to an intoxicated, violent, unsafe or absent caregiver. A parent refusing necessary treatment, attempting to remove a high-risk child or disputing discharge requires senior clinical, safeguarding and legal escalation.
- Unaccompanied adolescents, children leaving before completion, repeated missed appointments and caregiver disagreement with the plan require documented senior review and a safe follow-up strategy.

SAFE DISCHARGE RULE: Clinical stability does not make a discharge safe when supervision, transport, medication access, communication, housing, safeguarding or follow-up is unreliable. Resolve the practical risk or choose admission / protected transfer.

18. Investigations, imaging, and medication safety

- Investigations are targeted to the differential and severity. Do not perform broad panels in place of repeated clinical assessment, and do not delay time-critical treatment for sampling.
- Interpret results with age-specific reference ranges. A normal early white count, CRP, lactate, chest radiograph or ultrasound does not exclude evolving serious illness.
- Use radiation-minimizing paediatric imaging pathways and ultrasound when appropriate. Necessary imaging must not be withheld when the result will change urgent management.
- Record allergy, weight, indication, dose in mg and mL, concentration, route, maximum dose, time and response. Avoid trailing zeros and ambiguous decimal notation.
- Use independent checks for resuscitation drugs, opioids, sedatives, insulin, concentrated electrolytes, vasoactive infusions and weight-based fluid calculations.
- Before sedation, restraint or painful procedures, use Protocol 50, appropriate analgesia, consent / assent, monitoring, rescue equipment and post-procedure recovery criteria.

19. Reassessment and observation

Trigger	Required reassessment
After every airway, oxygen, bronchodilator, fluid, glucose, anticonvulsant, analgesic, antipyretic, antibiotic or antidote intervention	Repeat the affected ABCDE domain, full vital signs / PEWS as appropriate, pain and adverse effects; document objective response and next step.
Persistent abnormal observations	Senior review, repeat examination and diagnostic reconsideration. Do not normalize or copy forward observations without verifying them.
No improvement within the expected interval	Escalate level of care, add specialist / critical-care input, reconsider diagnosis and treatment, and prepare transfer rather than simply extending observation.
Clinical improvement	Confirm sustained trend, oral intake / urine where relevant, ability to ambulate or interact at baseline, caregiver confidence and diagnosis-specific discharge criteria.
Before any transition	Complete a fresh set of observations / PEWS, confirm responsible receiving clinician or caregiver, reconcile medicines, pending results and contingency plan.

20. Consultation, escalation, and paediatric transfer

- Consult paediatrics early for any emergency sign, high / rising PEWS, infant under 3 months with fever, persistent hypoxaemia, shock, altered consciousness, suspected sepsis / meningitis, complex disease, safeguarding concern or diagnostic uncertainty.
- Contact the receiving paediatric / PICU service before deterioration makes transport unsafe. Stabilization and transfer planning occur together; do not wait for every investigation to return.
- The sending clinician remains responsible until an explicit handover and transfer of responsibility occur. Record accepting clinician, destination, transport team, estimated departure, treatment targets and escalation plan if delayed.
- Transport must match risk: airway and ventilation capability, oxygen reserve, vascular access, monitoring, warming, emergency medicines, fluids / blood, pumps, restraint / safeguarding needs and appropriately skilled escort.
- Provide a structured handover covering age, weight, baseline, illness timeline, ABCDE findings and trend, PEWS, treatment / doses / response, investigations, allergies, safeguarding, family communication and outstanding actions.

TRANSFER DELAY RULE: Weather, bed, retrieval or transport delay is a clinical risk. Reassess at defined intervals, continue definitive treatment locally, escalate to the receiving consultant and document contingency thresholds for intubation, vasoactive support, blood, surgery or alternate destination.

21. Disposition criteria

Disposition	Minimum criteria
Resuscitation / ICU / urgent tertiary transfer	Actual or threatened airway / ventilation failure, shock, vasoactive need, high or rising PEWS, recurrent apnoea, status epilepticus, severe neurological abnormality, major trauma / burn, need for emergency surgery or local capability exceeded.

Disposition	Minimum criteria
Admission	Persistent abnormal observations, oxygen / IV therapy, inability to maintain hydration / feeding, significant infection risk, complex comorbidity, uncontrolled pain, diagnostic uncertainty, repeat attendance, safeguarding or unreliable follow-up.
ED observation / short stay	Defined low-to-moderate risk condition with expected improvement, explicit review intervals, treatment milestone, named clinician and maximum duration; convert to admission or transfer if milestones are not met.
Discharge	Stable and improving age-appropriate observations, low / resolved PEWS concerns, adequate breathing and perfusion, alertness at baseline, oral intake / urine appropriate, pain controlled, no unresolved high-risk diagnosis or safeguarding concern, and reliable caregiver / follow-up.
Departure before completion	Immediate senior risk review, capacity / parental responsibility and safeguarding assessment, explanation of risks, attempt to resolve barriers, written advice and follow-up / welfare action under Protocol 51.

22. Communication with the child and family

- Introduce the team, explain what is happening and use the child's preferred name, communication method and developmental level. Include the caregiver without speaking over an adolescent who can participate.
- Invite the caregiver to state the child's normal behaviour and the single feature that worries them most. Repeat this question after treatment and before discharge.
- Explain uncertainty honestly: what serious conditions were considered, what has been excluded, what remains possible, what change should trigger immediate return and who will review pending results.
- Use teach-back. Ask the caregiver or young person to repeat the medication plan, hydration plan, warning signs and follow-up arrangement in their own words. Provide an interpreter rather than relying on children or relatives for complex information.
- After resuscitation, critical transfer or death, offer a private explanation, psychosocial / spiritual support, opportunity for questions and clear contact for later follow-up.

23. Documentation and handover

- ☐ Arrival, triage, first clinician, senior paediatric review, treatment, consultation, decision and departure times.
- ☐ Age, developmental stage, measured / estimated weight in kg, allergies, baseline conditions, devices and current medicines.
- ☐ Full serial observations, correct BP cuff, oxygen / respiratory support, pain, glucose, PEWS parameters / score and escalation response.
- ☐ Caregiver and child concerns, repeat attendance, safeguarding screen and private adolescent assessment when appropriate.
- ☐ ABCDE findings, working diagnosis, dangerous alternatives considered, uncertainty and linked protocols activated.
- ☐ Every medicine and fluid: indication, mg and mL, concentration, route, time, checker, cumulative volume and response.
- ☐ Investigations, age-specific interpretation, critical results, pending tests and named owner.
- ☐ Consultant / receiving clinician names, advice, acceptance, transport capability and contingency plan.
- ☐ Reassessment before transition, disposition rationale, follow-up, written advice, teach-back and responsible adult receiving the child.

24. Quality indicators and audit

Indicator	Suggested measure
Complete paediatric observations	Percentage with respiratory rate, heart rate, SpO ₂ , temperature, blood pressure when indicated, mental state, pain, weight and PEWS recorded within acuity target.
Danger-sign response	Median time from arrival to resuscitation-area placement and senior review for children with emergency signs.
PEWS response reliability	Percentage of threshold breaches with the required documented escalation and repeat observations within the defined interval.
Weight and medication safety	Percentage of emergency medicines prescribed from measured / approved estimated weight; high-risk drugs independently checked; medication errors reviewed.
Sepsis / meningitis care	Time to antibiotics for high-risk suspected sepsis; blood culture before antibiotics when this does not delay treatment; source-control escalation documented.
Shock care	Bolus volume, reassessment and cumulative fluid documented; early vasoactive / critical-care escalation when persistent shock or fluid intolerance occurs.
Family concern	Percentage with caregiver concern documented and addressed; complaints and deterioration events involving dismissed concern reviewed.
Transfer safety	Acceptance, escort, equipment, monitoring, treatment targets and structured handover documented before departure.
Discharge safety	Final observations / PEWS, hydration / feeding, named follow-up, pending-result ownership, written return advice and teach-back documented.

Indicator	Suggested measure
Outcome review	All paediatric deaths, arrests, unplanned ICU transfers, return admissions within 72 hours, delayed safeguarding referrals and serious incidents receive multidisciplinary review.

25. Training and implementation

- All ED staff require induction and recurrent competency assessment in paediatric triage, PEWS, ABCDE, basic life support, airway / bag-mask ventilation, IO access, weight-based medication safety, fever / sepsis, safeguarding and transfer.
- Run multidisciplinary simulation for the shocked infant, severe asthma / bronchiolitis, meningococcal sepsis, prolonged seizure, anaphylaxis, difficult paediatric airway, safeguarding conflict and delayed inter-island transfer.
- Use bedside cognitive aids and standardized equipment layout. Debrief after resuscitations and convert system problems into assigned actions with completion dates.
- Engage children, young people and caregivers in reviewing environment, communication, discharge materials and accessibility.

26. Local configuration checklist

Local element	Complete before approval
Paediatric age boundary and neonatal interface	_____
Approved PEWS charts, thresholds and escalation response	_____
24-hour paediatric consultant / registrar contact	_____
Anaesthesia / critical-care and PICU referral contact	_____
Paediatric retrieval / inter-island transfer destination and backup	_____
Weight-estimation system and emergency dosing resource	_____
Approved sepsis / meningitis antimicrobials and time targets	_____
Paediatric fluid, glucose, vasoactive and blood pathways	_____
Respiratory support capability: HFNC / NIV / ventilation	_____
Safeguarding lead, child-protection agency and after-hours route	_____
Adolescent consent, confidentiality and mental-health pathway	_____
Staff training, simulation, audit owner and next review date	_____

27. References and source framework

The local validation group should review the most recent versions of the following sources and reconcile them with national policy, local epidemiology, formulary, professional scope and service capability.

Source	Use in this protocol
Resuscitation Council UK. Paediatric Life Support, 2025 Guidelines; Paediatric emergency algorithms and resources, February 2026.	ABCDE assessment, oxygenation, paediatric life support, 10 mL/kg fluid boluses with reassessment, shock, hypoglycaemia, asthma and emergency calculations.
Royal College of Paediatrics and Child Health. Facing the Future: Standards for Children and Young People in Emergency Care, 5th edition, 2025.	Emergency-care environment, workforce, triage, PEWS, safeguarding, complex needs, safe transfers, death and quality standards.
RCPCH / NHS England / RCN. UK Paediatric Early Warning Systems and SPOT resources.	PEWS as a recognition-and-response system, observation quality, escalation, communication and family concern.
World Health Organization. Paediatric emergency triage, assessment and treatment: care of critically ill children, 2016; ETAT training materials.	Emergency and priority signs, rapid triage, oxygen, shock, severe dehydration and seizures, particularly in resource-variable settings.
NICE NG254. Suspected sepsis in under 16s: recognition, diagnosis and early management, 2025; reviewed March 2026.	Sepsis risk, face-to-face assessment, escalation, antibiotics, oxygen, fluids, source control, monitoring and information.
NICE NG143. Fever in under 5s: assessment and initial management, 2019; reviewed April 2025.	Age-specific fever risk, traffic-light assessment, Kawasaki disease, antipyretic principles and safety-netting.
NICE NG240. Bacterial meningitis and meningococcal disease: recognition, diagnosis and management, 2024.	Recognition, immediate treatment, lumbar-puncture safety, transfer and follow-up.
NICE NG29. Intravenous fluid therapy in children and young people in hospital, updated 2020.	Assessment, resuscitation, maintenance / replacement prescription, electrolyte monitoring and fluid safety.
NICE CG84. Diarrhoea and vomiting caused by gastroenteritis in under 5s.	Low-osmolarity ORS, 50 mL/kg over 4 hours for clinical dehydration, ongoing losses and reassessment.
NICE NG9. Bronchiolitis in children, updated 2021; BTS / NICE / SIGN asthma pathway, 2024.	Respiratory severity, oxygen, admission / discharge criteria and avoidance of ineffective routine treatment.
RCPCH intercollegiate safeguarding competencies and local child-protection law / policy.	Recognition, documentation, reporting, consent, confidentiality and safe placement.

Evidence governance note

- Local approval must reconcile any difference between international guidance, national law, local antimicrobial resistance, available monitoring and transfer capability.
- Exact medicine doses, concentrations and infusion recipes should be maintained in a separately controlled paediatric emergency formulary / order set with pharmacy and paediatric sign-off.
- Age-specific physiological ranges and PEWS thresholds must come from the locally approved chart; reference values in annexes are recognition aids, not standalone discharge criteria.
- The protocol should be rechecked after publication of materially relevant RCUK, WHO, NICE, RCPCH or national guidance and after any serious paediatric incident.

Annex A. One-page paediatric emergency workflow

Step	Action
1. Recognize	Rapid visual assessment: appearance / interaction, work of breathing, colour / perfusion. Identify ETAT emergency / priority signs, age under 3 months, repeat attendance, parent concern and safeguarding.
2. Escalate	Move emergency signs to resuscitation. Call senior ED + paediatrics; add anaesthesia / ICU, surgery, blood bank, safeguarding and transfer according to threat.
3. Stabilize	ABCDE; oxygen / ventilation, monitors, glucose, weight, IV / IO, cause-directed fluids / blood / medication, warming and pain relief. Treat before diagnostic certainty.
4. Score and trend	Record complete age-specific observations and PEWS. Single extreme parameter, rising score or concern overrides the total. Repeat after every intervention.
5. Identify pathway	Fever / sepsis / meningitis; respiratory distress; shock; dehydration; seizure / altered state; trauma / burn; poisoning; allergy; DKA; surgical disease; safeguarding.
6. Treat now	Antibiotics, adrenaline, bronchodilator, anticonvulsant, glucose, fluid / blood, antidote, decompression or operative source control as indicated. Do not wait for all tests.
7. Reassess	Repeat ABCDE, observations / PEWS, pain, urine / hydration, treatment response, diagnosis and family concern. Escalate non-response.
8. Decide destination	ICU / tertiary transfer, admission, defined observation, or discharge only when physiology, symptoms, supervision, follow-up and safety-net are reliable.
9. Handover	Age, weight, baseline, illness timeline, ABCDE / PEWS trend, doses / cumulative fluids, tests, safeguarding, family communication, pending actions and contingency plan.

Annex B. Age-specific physiological recognition guide

Use the locally approved PEWS chart for definitive thresholds. These values are broad recognition aids only; fever, pain, crying, sleep, medication, fitness and chronic disease affect observations. The child's baseline and trend remain essential.

Age band	Approximate resting HR / min	Approximate resting RR / min	Low systolic BP: urgent concern
1–3 months	110–160	30–50	<50 mmHg or signs of poor perfusion
3–12 months	100–160	25–45	<60–70 mmHg or signs of poor perfusion
1–4 years	90–150	20–40	<70–75 mmHg or signs of poor perfusion
5–9 years	70–130	18–30	<75–80 mmHg or signs of poor perfusion
10–12 years	60–120	16–25	<80–90 mmHg or signs of poor perfusion
13–17 years	60–100	12–20	<90 mmHg or signs of poor perfusion

- Hypotension is late. Treat abnormal perfusion and mental state even when blood pressure is above the listed threshold.
- Bradycardia in a sick child is commonly pre-terminal and demands immediate oxygenation / ventilation assessment. Start compressions when HR is below 60/min with poor perfusion despite effective oxygenation / ventilation, following the paediatric life-support algorithm.
- Use the correct BP cuff: bladder width about 40% of arm circumference and length covering 80–100% of the arm.

Annex C. PEWS escalation record

Required field	Entry
Date / time / location	_____
Age band / approved chart	_____
Respiratory rate / effort / SpO ₂ / oxygen	_____
Heart rate / capillary refill / BP / perfusion	_____
Temperature / mental state / pain / urine	_____

Required field	Entry
Parent / clinician concern	_____
Individual parameter scores / total PEWS	_____
Threshold breached / escalation required	_____
Person contacted / time / response time	_____
Intervention / objective response	_____
Repeat PEWS time / result	_____
Next monitoring interval / destination	_____

Annex D. Hydration and fluid safety checklist

- ☐ Measured weight in kg; pre-illness weight when known; percentage weight loss calculated when reliable.
- ☐ Intake, vomiting, stool, urine and ongoing abnormal losses documented.
- ☐ Perfusion distinguished from dehydration; shock treated first with reassessed isotonic boluses.
- ☐ ORS route selected: oral, syringe / spoon or NG; low-osmolarity solution; 50 mL/kg over 4 hours plus maintenance for clinical dehydration when appropriate.
- ☐ IV fluid prescription states fluid type, rate, indication, deficit / maintenance / replacement components, glucose / electrolyte plan and review time.
- ☐ Cumulative bolus volume and signs of overload documented after each bolus.
- ☐ Sodium, potassium, glucose, renal function and acid–base status checked when IV therapy, severe illness or electrolyte risk is present.
- ☐ DKA, severe malnutrition, cardiac / renal disease and hypernatraemia recognized as special fluid pathways.
- ☐ Transition to enteral fluids / feeding and discharge hydration plan documented.

Annex E. Paediatric transfer checklist

- ☐ Accepting hospital, service, consultant and direct contact confirmed.
- ☐ Reason for transfer, urgency and treatment ceiling / goals clear.
- ☐ Age, measured / estimated weight, allergies, baseline and safeguarding status stated.
- ☐ Airway / ventilation plan; oxygen supply and battery duration exceed expected journey plus contingency.
- ☐ IV / IO access secured; infusions labeled; sufficient medicines, fluids / blood and pumps provided.
- ☐ Monitoring level and appropriately skilled escort match risk; resuscitation equipment size-checked.
- ☐ Latest ABCDE, observations / PEWS, glucose, urine, pain and response documented immediately before departure.
- ☐ Copies of notes, charts, results, images, medication record, consent and safeguarding information travel securely.
- ☐ Caregiver travel / communication plan and destination details provided.
- ☐ Plan for deterioration, weather / transport delay and alternate destination documented.
- ☐ Formal handover completed and responsibility transfer recorded.

Annex F. Minimum discharge and return-safety information

Domain	Information to provide and document
Working diagnosis	What is most likely, what dangerous alternatives were considered and what remains uncertain.
Medicines	Name, dose in mg and mL, timing, duration, next dose, device technique, adverse effects and what not to combine.
Hydration / feeding	ORS / usual feeds, practical amounts and frequency, expected urine output and what to do after vomiting / diarrhoea.
Return immediately	Breathing difficulty, blue / pale / mottled colour, apnoea, seizure, difficult waking, confusion, non-blanching rash, severe / increasing pain, persistent vomiting, bilious vomit, blood, no urine, poor feeding, dehydration, rapidly worsening illness or caregiver concern.
Follow-up	Named service / clinician, date / time, transport plan, how to obtain urgent help and ownership of pending results.
Understanding	Interpreter used when needed; caregiver / young person completed teach-back; written material supplied in accessible language.

END OF PROTOCOL 40 — DRAFT 1.0 FOR LOCAL MULTIDISCIPLINARY VALIDATION