

# EMERGENCY DEPARTMENT MONITORING AND REASSESSMENT PROTOCOL

## Protocol 7: Observation, Treatment-Response Review, Detection of Deterioration, and Escalation

### DRAFT FOR CLINICAL, NURSING, GOVERNANCE, AND PATIENT-SAFETY REVIEW

Document owner	Emergency Department / Nursing Services / Clinical Governance
Policy number	ED-PRO-007
Version	Draft 1.0
Related policies	ED-PRO-001: ED Patient Journey; ED-PRO-002: Triage and Retriage; ED-PRO-003: Resuscitation and Initial Stabilization; ED-PRO-004: Clinical Assessment and Documentation; ED-PRO-005: Investigations, Critical Results, and Results Tracking; ED-PRO-006: Medication Safety and Administration
Effective date	[To be inserted after approval]
Review date	[12 months after implementation, then every 2-3 years or sooner after serious incident, major evidence update, technology change, or service redesign]
Approved by	[Medical Executive / Nursing Executive / Clinical Governance / Patient Safety Committee / Hospital Board]
Applies to	All staff who observe, monitor, reassess, treat, transport, hand over, or make disposition decisions for patients in the Emergency Department and associated waiting, observation, overflow, resuscitation, and transfer areas
Supersedes	[Insert previous observation, monitoring, deterioration, or reassessment policy, if applicable]

**Important:** This protocol establishes the monitoring and reassessment system. It does not replace clinical judgment, triage, resuscitation algorithms, specialty pathways, approved early-warning charts, procedural-sedation standards, blood-transfusion policy, or condition-specific treatment protocols. All proposed intervals and escalation thresholds require local validation.

**Monitoring is an active clinical process: observe, interpret, intervene, reassess, communicate, and document. A monitor displaying numbers without an accountable clinician and response plan is not safe monitoring.**

## 1. Purpose

To ensure that every patient in the Emergency Department receives monitoring and reassessment proportionate to clinical risk, that deterioration or failure to improve is recognized early, and that abnormal findings trigger timely clinical review, treatment, escalation, and safe disposition.

## 2. Scope

This protocol applies from first clinical contact until the patient physically leaves the Emergency Department or responsibility is formally accepted by another clinical service. It covers patients in the waiting room, triage area, treatment spaces, resuscitation room, observation area, corridors or overflow areas, diagnostic departments, and during internal or interfacility transport.

## 3. Core policy statements

- Every patient shall have a documented baseline clinical assessment and physiological observations appropriate to age, presentation, treatment, and risk, unless immediate resuscitation makes recording temporarily impracticable.
- Monitoring frequency and modality shall be prescribed or assigned according to the patient's current risk, not merely the original triage category or physical location.
- Abnormal observations, concerning trends, staff concern, patient or caregiver concern, and failure to improve shall trigger reassessment even when an aggregate score is low.
- Automated monitoring supplements but never replaces direct clinical observation, examination, and communication with the patient.
- After any significant intervention, medication, procedure, or change in condition, the patient shall be reassessed within a clinically appropriate timeframe and the response documented.
- No patient shall remain in an ED waiting, treatment, or boarding area without a named clinical team, an active plan, and a defined reassessment interval.
- Escalation shall be based on the most concerning of: current physiology, trend, clinical appearance, trajectory, treatment response, specific red flags, early-warning score, or clinician/patient/caregiver concern.
- Deterioration shall not be normalized because the department is crowded, the patient is awaiting a bed, or the abnormality is attributed to age, anxiety, intoxication, pain, disability, or chronic disease without assessment.
- Monitoring devices and alarms shall be correctly applied, individualized where appropriate, audible/visible, and linked to a staff response process.
- Disposition requires a final clinical reassessment, review of recent vital signs and treatment response, and confirmation that the receiving environment can provide the required monitoring.

## 4. Definitions

Term	Operational definition
Monitoring	Planned repeated or continuous observation of physiology, symptoms, behaviour, function, treatment, devices, and other risks to detect change and guide care.
Reassessment	A purposeful repeat evaluation that compares the patient's current condition with baseline and prior findings, interprets response and trajectory, and updates the plan.
Clinical deterioration	A worsening in physiology, mental state, symptoms, function, examination, laboratory/imaging findings, or overall clinical impression that may indicate increasing risk of serious harm.

Term	Operational definition
Early-warning system	A locally approved observation, scoring, and escalation system that combines physiological and clinical triggers to identify deterioration and define response.
Trend	The direction and rate of change across serial observations; a clinically important trend may exist even when individual values remain within a reference range.
Continuous monitoring	Uninterrupted electronic measurement and display of selected parameters, with alarms and direct clinical oversight; it does not imply uninterrupted bedside presence unless specifically required.
Intermittent observations	Measurements performed at defined intervals or in response to change, using a complete or focused observation set.
Treatment-response reassessment	Evaluation performed after an intervention to determine benefit, lack of effect, adverse effect, or need for further treatment or escalation.
Diagnostic timeout	A structured pause when the patient is not improving, deteriorates, or the course does not fit the working diagnosis, to reconsider threats, assumptions, tests, and disposition.
Boarding	Continued care of a patient in the ED after a decision to admit or transfer has been made while awaiting the next care location.
Escalation	Communication and action that increases clinical review, staffing, monitoring, treatment, location, or specialist/critical-care involvement in response to risk.
Track-and-trigger system	A system that records observations over time and activates a graded clinical response when predefined single-parameter or aggregate criteria are met.

## 5. Roles and accountability

Role	Minimum accountability
ED medical lead	Owens the clinical monitoring framework, approves escalation pathways, coordinates audit, and ensures alignment with condition-specific and critical-care protocols.
Nursing lead / shift coordinator	Assigns observation responsibilities and patient location, maintains surveillance capacity, escalates crowding or staffing risk, and confirms continuity at handover.
Responsible clinician	Defines monitoring and reassessment needs, interprets trends, reviews response, updates diagnosis and plan, and makes escalation and disposition decisions.
Assigned nurse	Performs and documents observations and direct clinical surveillance; validates abnormal readings; recognizes trends; acts within scope; communicates deterioration; confirms response.

Role	Minimum accountability
Triage nurse	Maintains waiting-area surveillance and retriage according to Protocol 2; escalates any new red flag, abnormality, or concern.
Resuscitation team leader	Sets monitoring priorities during and after resuscitation, confirms treatment targets, and assigns explicit post-stabilization review responsibility.
Health care assistant / technician	Performs delegated measurements only when trained and authorized; immediately communicates abnormal findings; does not independently interpret or close escalation.
Receiving / consulting team	Acknowledges referrals, provides timely review, states monitoring and escalation requirements, and accepts responsibility explicitly at transfer.
Biomedical / clinical engineering	Maintains devices, preventive maintenance, electrical safety, calibration, alarm function, and repair processes.
Patient / caregiver	Reports worsening, new symptoms, or concern and participates in monitoring and teach-back where able; concern must be heard and clinically assessed.
Clinical governance / quality	Reviews deterioration events, unplanned critical-care transfers, cardiac arrests, monitoring omissions, and corrective-action effectiveness.
Hospital executive	Provides adequate staffing, observation spaces, functional equipment, alarm infrastructure, training, and escalation pathways.

## 6. Monitoring and reassessment pathway

Stage	Required action
1. Establish baseline	Record current symptoms, appearance, airway/breathing/circulation, mental state, vital signs, pain, and relevant focused measures.
2. Assign risk level	Use triage category, physiology, clinical concern, diagnosis, treatment, comorbidity, age, trajectory, and environment.
3. Set the plan	Document what will be monitored, how, by whom, at what interval, and what findings require action.
4. Observe and validate	Measure accurately; inspect the patient; confirm abnormal readings manually or by alternative method when feasible without delaying care.
5. Interpret trend	Compare with baseline, prior values, expected response, and patient-specific targets.
6. Act and escalate	Treat immediate threats; communicate using a structured format; increase monitoring or move location when required.
7. Reassess response	Repeat relevant clinical assessment after treatment, procedure, movement, or change.

Stage	Required action
8. Update plan	Revise diagnosis, investigations, treatment, monitoring intensity, and disposition.
9. Handover ownership	Communicate current status, trend, due observations, triggers, devices, pending actions, and named responsibility.
10. Confirm safe disposition	Complete final reassessment and ensure the next setting can meet monitoring needs.
<b>The observation interval is a maximum planned interval, not permission to wait when the patient looks worse or raises concern.</b>	

## 7. Baseline assessment and minimum observation set

- Complete baseline observations as soon as clinically feasible after triage and whenever the patient enters a new phase of care.
- At minimum for most patients: respiratory rate, oxygen saturation, pulse/heart rate, blood pressure, temperature, level of consciousness or new confusion, pain score, and need for supplemental oxygen.
- For infants and children, use age-appropriate ranges and an approved paediatric observation/early-warning chart; include work of breathing, perfusion, behaviour, hydration, and caregiver concern.
- Add focused measures according to presentation: capillary glucose, ECG rhythm, end-tidal carbon dioxide, urine output, fetal heart assessment, neurological observations, pupil response, limb neurovascular status, bleeding, sedation score, withdrawal score, peak flow, or other condition-specific parameters.
- Record the method and context when they alter interpretation, including oxygen device/flow, patient position, cuff site/size, manual versus automated measurement, temperature route, activity, crying, agitation, or recent medication.
- When a baseline parameter cannot be obtained, document why, what alternative assessment was used, and when it will be retried.

## 8. Assignment of monitoring intensity

Level	Typical patient state	Minimum monitoring approach
Level A - Resuscitation / critical	Active or threatened airway, breathing, circulation, neurological, obstetric, toxicological, or other life threat; post-arrest; rapidly changing physiology.	Continuous appropriate electronic monitoring plus direct observation; blood pressure and focused reassessment at short intervals set by the team leader; immediate clinician presence.
Level B - High risk / unstable	Serious abnormal physiology, high-risk presentation, significant treatment in progress, sedation, transfusion reaction risk, potential rapid deterioration, or recent stabilization.	Continuous or very frequent focused monitoring; complete observation sets at locally approved short intervals; senior review and explicit escalation triggers.
Level C - Moderate risk / active treatment	Abnormal but not immediately life-threatening findings, ongoing IV therapy, repeated medication, uncertain diagnosis, or need to demonstrate response.	Intermittent complete observations and focused reassessment at locally approved intervals; increased frequency after interventions or change.

Level	Typical patient state	Minimum monitoring approach
Level D - Low current risk	Stable physiology, low-risk pathway, minor injury/illness, or awaiting a simple test with no high-risk features.	Periodic observation based on presentation and waiting time; symptom review; final observations/reassessment before discharge when clinically indicated.
Level E - Waiting-area surveillance	Not yet in a treatment space or returned to waiting area.	Protocol 2 retriage schedule, visible surveillance, easy patient access to staff, and immediate reassessment for worsening or concern.

**Local validation note:** Annex D proposes default maximum intervals for local approval. Clinicians may increase frequency or intensity at any time; reducing monitoring below the default requires a documented clinical rationale and a safe environment.

## 9. Measurement standards and equipment safety

- Use two patient identifiers and ensure observations are entered into the correct record and encounter.
- Use equipment appropriate to patient size and condition, including correct blood-pressure cuff, paediatric sensors, temperature device, ECG leads, and capnography interface.
- Inspect skin, circulation, pressure areas, lines, drains, airway devices, and sensor sites at clinically appropriate intervals.
- Validate values that are inconsistent with the patient's appearance, prior trend, waveform quality, or device limitations; do not dismiss an abnormality solely as artifact.
- For an unexpectedly abnormal automated blood pressure, repeat promptly using correct technique and consider manual confirmation.
- Count respiratory rate accurately rather than relying only on monitor-derived values. Directly assess work of breathing, speech/cry, air entry, and fatigue.
- Ensure monitor alarms are active, audible/visible, appropriately set, and not routinely silenced. Alarm changes require a clinical reason and handover.
- Remove faulty equipment from service, label it, report it, and use an alternative device; do not continue care with unreliable equipment when safer options exist.
- Maintain infection-prevention procedures for reusable devices and patient-contact surfaces.

## 10. Adult physiological track-and-trigger system

- The hospital shall approve one standardized adult physiological track-and-trigger system for use across the ED and inpatient interface.
- The system should include respiratory rate, oxygen saturation, oxygen supplementation, systolic blood pressure, pulse, temperature, and level of consciousness/new confusion, with a graded response pathway.
- If NEWS2 is adopted, use the current official chart and implementation guidance without locally altering its scoring components; locally define response roles, locations, and timelines.
- An aggregate score shall never override a single extreme parameter, clinical concern, high-risk diagnosis, rapidly worsening trend, or patient-specific escalation criterion.
- Patients with chronic baseline abnormalities may have individualized targets only after senior clinical assessment; the reason and alternative triggers must be documented and handed over.
- Early-warning scoring is not validated as a substitute for condition-specific assessment in pregnancy, children, spinal cord injury, or other special populations; use approved relevant systems.

## 11. Paediatric monitoring and family concern

- Use an approved age-banded paediatric early-warning system and observation chart; adult thresholds must not be applied to children.
- Record respiratory rate, work of breathing, oxygen saturation and oxygen therapy, heart rate, blood pressure when indicated/obtainable, temperature, perfusion, consciousness/behaviour, hydration, pain, and relevant urine output.
- The child's interaction, consolability, feeding, colour, tone, cry, fatigue, and caregiver report are clinically important observations.
- Any caregiver statement that the child is worse, "not themselves," unusually sleepy, working harder to breathe, or difficult to wake shall prompt reassessment regardless of score.
- Recheck weight in kilograms when dosing or fluid decisions depend on it and the recorded value is absent, estimated, or inconsistent.
- Escalate early when observation is difficult because agitation, developmental difference, disability, or equipment limitations prevent reliable measurement; direct clinical assessment becomes more important, not less.

## 12. Waiting-room, corridor, and overflow monitoring

- Patients outside standard treatment spaces remain under ED clinical responsibility and must have a visible location, assigned staff responsibility, triage plan, and access to assistance.
- Do not place a patient needing continuous monitoring, oxygen-dependent observation, frequent reassessment, privacy-sensitive care, or immediate intervention in an unsuitable waiting or corridor location except during unavoidable surge with explicit senior risk mitigation.
- Reassess waiting patients at Protocol 2 intervals and immediately for worsening pain, breathing difficulty, faintness, bleeding, confusion, new weakness, seizure, repeated vomiting, inability to wait safely, or patient/caregiver concern.
- Document missed or delayed observations and escalate recurrent inability to meet the schedule as an operational patient-safety risk, not an individual clerical omission.
- When crowding makes monitoring unsafe, activate the departmental escalation plan, redistribute staff and spaces, seek senior/hospital command support, and prioritize patients by risk.

## 13. Continuous monitoring

- Continuous monitoring shall be used when the patient's condition, treatment, sedation, device, or transport risk requires immediate detection of change.
- The order or clinical plan should state the monitored parameters and patient-specific targets or alarm limits when different from defaults.
- Continuous ECG monitoring does not replace a diagnostic 12-lead ECG when indicated; pulse oximetry does not measure ventilation; capnography does not replace direct airway and breathing assessment.
- Alarm fatigue shall be reduced through correct sensor application, clinically appropriate limits, prompt response, equipment maintenance, and avoidance of non-actionable monitoring.
- An alarm must prompt assessment of the patient first, then the equipment. Never silence an alarm without determining the cause and ensuring safety.
- At transfer or handover, communicate rhythm, oxygen support, alarm limits, recent events, line/device status, battery and supply needs, and who will observe during movement.

## 14. Mandatory treatment-response reassessment

Intervention / event	Minimum reassessment focus
Airway or oxygen intervention	Airway patency, respiratory effort/rate, oxygen saturation, ventilation where measured, mental state, device position, skin/pressure effects, and escalation need.
Fluid bolus or haemodynamic treatment	Pulse, blood pressure, perfusion, respiratory signs, urine output where relevant, mental state, fluid overload, bleeding, and next volume/vasoactive decision.
Analgesic	Pain score and function, respiratory status, sedation, nausea, blood pressure, adverse effect, and need for further analgesia or diagnostic review.
Bronchodilator / respiratory therapy	Work of breathing, respiratory rate, air entry, oxygenation, speech/feeding, pulse, peak flow where appropriate, and fatigue.
Insulin / glucose treatment	Capillary glucose at protocol interval, mental state, symptoms, potassium/ketone monitoring where indicated, oral intake, and recurrence risk.
Antihypertensive / rate control	Blood pressure, pulse/rhythm, symptoms, perfusion, neurological status, and adverse effect at drug-appropriate intervals.
Antibiotic / sepsis care	Physiology, perfusion, mental state, urine output, lactate or other markers where indicated, source-control needs, reaction, and trajectory.
Sedation / restraint	Airway, ventilation, oxygenation, circulation, consciousness/sedation score, agitation, injuries, positioning, circulation, and need for continued restriction.
Procedure	Procedure-specific complications, pain, bleeding, neurovascular status, sedation recovery, and post-procedure instructions/monitoring.
Blood product	Identity and baseline checks, vital signs at locally approved intervals, symptoms/signs of reaction, response, and fluid status.
Movement / transport / return from imaging	Clinical status, devices, oxygen, lines, pain, new events, and whether monitoring intensity remains appropriate.
Any deterioration or rescue intervention	Repeat ABCDE assessment, senior review, diagnostic timeout, updated plan, and escalation/disposition decision.

## 15. Symptom, function, and focused monitoring

- Pain shall be reassessed after treatment and at disposition using an age- and communication-appropriate scale; persistent or worsening pain may signal failed treatment or missed diagnosis.
- Mental status shall be trended using a consistent method, such as AVPU or Glasgow Coma Scale where appropriate, plus assessment for new confusion, agitation, drowsiness, or inability to protect the airway.
- Respiratory monitoring includes rate, work, air entry, fatigue, speech/feeding, oxygen requirement, saturation trend, and ventilation when indicated.
- Circulatory monitoring includes pulse, blood pressure, perfusion, skin signs, bleeding, mental state, urine output where relevant, and response to fluid/blood/vasoactive therapy.



- Neurological monitoring after head injury, stroke concern, seizure, intoxication, or sedation should include the approved focused observation set and explicit escalation triggers.
- Limb injuries, casts, dressings, arterial lines, and vascular procedures require serial neurovascular assessment when indicated.
- High-risk metabolic, toxicological, anticoagulation, obstetric, and infectious presentations require the relevant condition-specific monitoring pathway in addition to general observations.

## 16. Recognition of deterioration or failure to improve

Trigger	Required response
Immediate life threat or red flag	Call for help; begin ABCDE/resuscitation; move to an appropriate area; activate Protocol 3.
Single extreme observation or acute neurological change	Validate rapidly if feasible without delay; urgent clinician review; initiate treatment and continuous/frequent monitoring.
Rising early-warning score or worsening trend	Increase monitoring; notify responsible clinician; seek senior review according to local response matrix.
New oxygen need, increasing work of breathing, or falling saturation	Immediate respiratory assessment, treatment, and escalation; consider ventilation failure and capnography/ABG as indicated.
Hypotension, poor perfusion, bleeding, or recurrent syncope	Urgent circulation assessment, haemorrhage/shock pathway, access, tests/treatment, and senior review.
New confusion, reduced consciousness, seizure, focal deficit, or severe agitation	Check glucose and ABCDE; protect airway and patient; urgent clinician review and relevant pathway.
Persistent symptoms despite expected treatment	Repeat examination; diagnostic timeout; review results, medication, diagnosis, complications, and disposition.
Staff, patient, or caregiver concern	Prompt bedside reassessment even if measured observations or score are reassuring.
Unable to complete required monitoring	Escalate the clinical and operational risk; move patient, add staff/equipment, or change plan rather than silently accepting the gap.

## 17. Escalation and graded clinical response

- Use the locally approved escalation matrix, which shall define who is contacted, expected response, backup escalation, and actions when the first responder is unavailable.
- Communicate using ISBAR or another approved structured method: identification, situation, background, assessment/trend, and explicit recommendation/request.
- State the concern, current observations, trend, oxygen/support, treatment already given, response, and what is needed now.
- The receiver shall acknowledge the message, clarify the response plan and timeframe, and identify who remains responsible meanwhile.
- If the patient continues to deteriorate or the response is delayed/inadequate, escalate to the next senior clinician, resuscitation/critical-care team, ED lead, or hospital command according to urgency.
- Nurses and other staff may bypass hierarchy when they believe delay threatens life or serious harm.
- Document time of trigger, notification, person contacted, advice, arrival/review time, action, and response.

**Concern may be escalated on clinical judgment alone. Staff do not need to wait for a score to cross a threshold when the patient appears seriously unwell.**

## **18. Diagnostic timeout and senior review**

- Initiate a diagnostic timeout when the patient worsens, fails to improve as expected, develops a new symptom/sign, requires repeated rescue treatment, has discordant results, or remains in the ED beyond the locally approved review interval.
- Restate the problem representation and timeline; repeat focused ABCDE and examination; review observations and medication/intervention chronology.
- Ask what life-threatening diagnosis, complication, treatment harm, or contextual factor could have been missed.
- Review all available results, pending tests, sample/imaging quality, and whether the result fits the patient.
- Consider bias from anchoring, premature closure, attribution to intoxication/mental illness, age, frequent attendance, or a prior diagnosis.
- Update the differential, treatment, consultation, monitoring intensity, and disposition; document the senior decision.

## **19. Observation, prolonged ED stay, and boarding**

- An admitted, observed, or transfer-awaiting patient remains under active ED care until formal handover and physical transfer are complete.
- Create an ongoing care plan covering diagnosis, treatments, nutrition/fluids, medication reconciliation, monitoring frequency, pressure care, mobility/falls, toileting, infection precautions, and psychosocial needs.
- Complete scheduled senior clinical reviews at locally approved intervals and whenever the patient exceeds an expected pathway duration.
- Review whether the current physical location, staffing, oxygen, suction, monitoring, and emergency response are adequate.
- Repeat medication and pending-result reconciliation at shift change and before transfer.
- Boarding shall not reduce monitoring intensity or delay time-critical inpatient treatment. Escalate unsafe boarding through the hospital capacity plan.

## **20. Monitoring during procedures, imaging, and transport**

- Before movement, confirm clinical stability, required monitoring, oxygen and equipment, competent escort, medication/infusion needs, destination readiness, and contingency plan.
- Patients requiring continuous or frequent monitoring shall remain monitored during transport with equipment suitable for the journey and destination.
- The escort shall know the patient's condition, recent trend, treatment, escalation plan, and how to obtain emergency assistance.
- After return or arrival, repeat a focused assessment, reconnect monitoring, confirm devices/lines/oxygen, document any event, and hand over responsibility explicitly.
- Do not send an unstable patient to diagnostic testing when the anticipated benefit does not justify movement risk or when stabilization/escort resources are inadequate; seek senior review and alternative arrangements.

## 21. Special populations and circumstances

Population / circumstance	Additional requirements
Pregnancy / postpartum	Use obstetric early-warning and fetal assessment pathways where available; account for pregnancy physiology; escalate bleeding, hypertension, pain, dyspnoea, neurological symptoms, or fetal concern early.
Older adult / frailty	Do not normalize subtle deterioration; monitor cognition, function, pain, hydration, falls, pressure risk, medication effects, and atypical presentation.
Disability / communication barrier	Establish baseline and preferred communication; involve caregiver/interpreter where appropriate; adapt observation methods; avoid attributing change to disability.
Behavioural emergency / intoxication	Monitor airway, ventilation, circulation, temperature, glucose, injuries, consciousness, agitation, restraint effects, withdrawal/toxicity, and medication response; ensure direct observation appropriate to risk.
Immunocompromised / infection risk	Use early sepsis assessment and isolation precautions; deterioration may occur with muted signs.
Palliative or treatment-limited care	Document goals, ceilings, symptom-monitoring plan, escalation boundaries, and family communication; continue comfort-focused reassessment.
Patient declining monitoring	Assess capacity and reasons, explain risks, offer alternatives, treat reversible barriers, document refusal, and escalate when serious harm is possible.
Mass casualty / surge	Use approved disaster documentation and prioritization; simplify only through the authorized surge plan; maintain repeat assessment because category may change.

## 22. Handover and transfer of monitoring responsibility

- Every handover shall include current diagnosis/concern, acuity, latest full observations, trend, early-warning score if used, oxygen/support, pain/sedation, treatment response, devices/infusions, pending actions/results, and explicit triggers.
- Identify the next observation or reassessment due and who is responsible.
- At shift change, visually review high-risk, boarded, secluded, restrained, sedated, oxygen-dependent, and continuously monitored patients at the bedside where feasible.
- Responsibility transfers only when the receiving clinician or nurse acknowledges acceptance; electronic referral or bed allocation alone does not complete handover.
- If transfer is delayed, the sending team continues monitoring and treatment.

## 23. Final reassessment and disposition

- Before discharge, admission, or transfer, complete and document a final clinical reassessment appropriate to the presentation and interventions.
- Review the latest vital signs and compare with baseline; explain and document any persistent abnormality.
- Confirm symptom trajectory, pain/function, oral intake/mobility where relevant, mental state/capacity, treatment response, and new or unresolved concerns.
- Ensure all required results are reviewed or assigned under Protocol 5 and medicines reconciled under Protocol 6.

- Do not discharge solely because a test is negative when physiology, examination, trajectory, or ability to cope remains concerning.
- Confirm that the destination and transport can meet continuing monitoring and treatment needs and that return precautions are specific and understood.

## 24. Documentation standards

- Chart observations at the time measured, with date/time, method/context where relevant, oxygen device/flow, and identity of recorder.
- Document the assigned monitoring level and next due observation/reassessment or link it clearly to the approved pathway.
- Record trends and clinical interpretation, not numbers alone, when findings are abnormal or changing.
- Document every significant reassessment, treatment response, deterioration trigger, communication, escalation, review, and change of plan.
- Never pre-chart observations. Correct errors through a traceable amendment or addendum.
- If an observation or reassessment is delayed or omitted, record the reason, patient assessment, risk mitigation, escalation, and recovery plan.
- Electronic auto-population or monitor integration must be clinically validated before sign-off; artifact and values from the wrong patient/encounter must be corrected immediately.

## 25. Incident review and learning

- Report serious or near-miss events involving missed deterioration, absent or delayed observations, alarm failure, communication delay, unsuitable location, equipment malfunction, or failure to reassess.
- Review unplanned cardiac arrests, emergency intubations, rapid transfers to critical care, death after recent discharge, and unexpected deterioration during transport or boarding for monitoring-system factors.
- Use a systems approach: staffing, workload, environment, equipment, workflow, escalation culture, documentation, supervision, and policy design.
- Assign corrective actions, owners, deadlines, and measures of effectiveness; share learning across shifts and departments.

## 26. Quality indicators and audit

Indicator	Suggested measure
Baseline observation completion	Percentage of eligible ED encounters with a complete age-appropriate baseline observation set recorded.
Monitoring plan	Percentage of moderate/high-risk patients with documented monitoring intensity or next review time.
Timely repeat observations	Percentage of sampled patients receiving observations within the locally approved interval.
Treatment-response reassessment	Percentage of sampled high-risk interventions with documented response and adverse-effect review.
Escalation reliability	Percentage of escalation triggers followed by documented communication, response, and action within local target.
Final reassessment	Percentage of discharges/transfers with final clinical reassessment and recent observations documented.

Indicator	Suggested measure
Waiting/boarding safety	Rate of overdue observations, deterioration events, and serious incidents in waiting, corridor, overflow, or boarded patients.
Unplanned deterioration	Rate and review of cardiac arrest, emergency airway, rapid critical-care transfer, or death where earlier deterioration may have been detectable.
Alarm/equipment safety	Monitoring-device or alarm incidents, repair turnaround, and completion of preventive maintenance.
Learning actions	Percentage of corrective actions completed and sustained by the target date.

## 27. Training, competency, and implementation

- All ED clinical staff shall receive induction and periodic training in observation technique, trend interpretation, adult and paediatric early-warning systems, structured escalation, and documentation.
- Competency shall include manual respiratory rate, blood pressure technique and cuff selection, pulse oximetry limitations, ECG/monitor setup, capnography where used, neurological assessment, paediatric observations, and alarm management.
- Use simulation for deterioration, sepsis/shock, respiratory failure, behavioural sedation, paediatric concern, transfusion reaction, and transport events.
- Before go-live, configure observation charts/electronic fields, escalation contacts, local intervals, response expectations, equipment, and downtime processes; test on day and night shifts.
- Provide audit feedback by shift and area, and support staff to report unsafe workload or inability to meet monitoring requirements.
- Review the protocol after 3 months, 6 months, and 12 months of implementation, then according to the approved review cycle.

## Annex A. One-page ED monitoring and reassessment workflow

Step	Bedside action
1. LOOK	Assess appearance, airway, breathing, circulation, mental state, pain, bleeding, mobility, and immediate threats.
2. MEASURE	Record age-appropriate baseline observations and focused parameters.
3. CLASSIFY	Assign monitoring intensity from critical/continuous to low-risk/intermittent.
4. PLAN	State parameters, interval, targets, responsible staff, and escalation triggers.
5. TREND	Compare with baseline and previous values; validate unexpected readings.
6. ACT	Treat threats and escalate concern; do not wait for a score when the patient looks unwell.
7. REASSESS	After interventions, procedures, transport, or any change, assess response and adverse effects.
8. RETHINK	If not improving, perform diagnostic timeout and senior review.
9. HAND OVER	Communicate current status, trend, support, next due review, and explicit triggers.
10. DISPOSE SAFELY	Final reassessment; destination can meet monitoring needs; document responsibility transfer.
<b>LOOK - MEASURE - CLASSIFY - PLAN - TREND - ACT - REASSESS - RETHINK - HAND OVER - DISPOSE SAFELY</b>	

## Annex B. Minimum baseline observation and reassessment dataset

Domain	Minimum data
Identification	Two identifiers, encounter, location, date/time, observer.
Clinical context	Chief concern, triage category, working diagnosis/risk, recent intervention, monitoring level.
Breathing	Respiratory rate, work of breathing, oxygen saturation, oxygen device/flow, ventilation measure if indicated.
Circulation	Pulse/heart rate, rhythm if monitored, blood pressure, perfusion, bleeding, temperature.
Disability	AVPU/GCS or relevant mental status, new confusion, pupils/focal findings where indicated, glucose when indicated.
Symptoms/function	Pain, dyspnoea, nausea, mobility, oral intake, behaviour or caregiver concern as relevant.
Focused measures	Urine output, fetal heart, capnography, peak flow, neurovascular status, sedation, withdrawal, or pathway-specific measure.
Trend/interpretation	Comparison with baseline/prior set; expected versus actual response; clinical concern.
Action	Treatment, escalation, clinician contacted, advice, location change, revised monitoring.
Next review	Parameter(s), due time/interval, trigger, responsible person/team.

## Annex C. Monitoring intensity assignment guide

Question	Yes: increase intensity / escalate
Is there an immediate ABCDE threat or rapidly changing physiology?	Level A and Protocol 3.
Is any single observation severely abnormal or is an early-warning trigger met?	Level A/B; urgent clinician review.
Is the patient receiving sedation, vasoactive treatment, repeated rescue medication, blood product, NIV, or another high-risk intervention?	Level A/B and pathway-specific monitoring.
Is the diagnosis uncertain, the patient not improving, or repeated treatment required?	At least Level B/C; diagnostic timeout and senior review.
Could the patient deteriorate rapidly because of diagnosis, age, comorbidity, pregnancy, poisoning, bleeding, sepsis, or social/communication factors?	Increase level and define explicit triggers.
Is the current location or staffing unable to deliver the required monitoring?	Move patient / add resources / escalate operational risk.
Is the patient stable, improving, low risk, and awaiting a simple step?	Level D only with defined review and final reassessment.



## Annex D. Proposed default maximum observation intervals for local approval

Monitoring level	Proposed default maximum interval	Important qualification
Level A - Resuscitation / critical	Continuous relevant monitoring; focused reassessment repeatedly during active care; blood pressure commonly every 3-5 minutes when unstable or during resuscitative intervention.	Team leader sets and documents the actual interval; direct observation and immediate response required.
Level B - High risk / unstable	Complete observations commonly every 15 minutes until a clear stable trend, then no less frequently than every 30 minutes unless senior clinician specifies otherwise.	Use more frequent or continuous monitoring for physiology, treatment, or procedure risk.
Level C - Moderate risk / active treatment	Complete observations commonly every 30-60 minutes, with earlier focused checks after interventions.	Interval depends on diagnosis and therapy; reassess at any change.
Level D - Low current risk	Commonly every 1-2 hours during prolonged ED stay, plus symptom check and final reassessment.	May be shorter for pathway or waiting-time risk; may be individualized by clinician.
Level E - Waiting area	Use Protocol 2 triage intervals and immediate reassessment for worsening or concern.	Triage category does not prevent up-triage or earlier review.
Boarded / observation patient	At least the locally approved acute-care interval plus scheduled medical review; never less frequent solely because admission was decided.	Adopt ward/observation standard only after explicit responsibility and suitable environment.

**Approval warning:** These are proposed operational defaults, not universal evidence-based mandates. The hospital must validate them against staffing, physical layout, monitoring equipment, escalation capability, Protocol 2, and specialty pathways. Any condition-specific standard that requires more frequent monitoring takes precedence.

## Annex E. Adult early-warning system local configuration

Configuration item	Local decision
Approved adult track-and-trigger system (e.g., NEWS2 or alternative)	
Official chart / electronic build and version control	
Single-parameter emergency triggers	
Aggregate-score response bands	
Nursing actions within scope	
Clinician response target by trigger level	
Backup escalation if no response	
Patient-specific target authorization and documentation	
Exclusions / special populations	
Handover and transfer display	
Audit owner and review frequency	

## Annex F. Paediatric monitoring and PEWS configuration

Configuration item	Local decision
Approved age bands and official PEWS charts	
Age-specific observation parameters	
Caregiver concern trigger and escalation wording	
Single-parameter emergency triggers	
PEWS response bands and clinician response times	
Observation frequency by PEWS/risk	
Children with baseline abnormalities / complex needs	
Weight documentation and dosing safeguards	
Paediatric resuscitation / retrieval contacts	
Education, competency, and audit owner	
<b>Do not copy adult thresholds into a paediatric chart. Adopt a complete, age-specific system with its associated escalation response.</b>	

## Annex G. Treatment-response reassessment checklist

- ☐ Confirm patient, intervention, dose/device, and time completed.
- ☐ Repeat the relevant symptom score and focused examination.
- ☐ Repeat the parameters most likely to show benefit or harm.
- ☐ Compare with pre-intervention baseline and treatment target.
- ☐ Identify improvement, no change, deterioration, or adverse effect.
- ☐ Confirm lines, devices, oxygen, dressings, and procedure site.
- ☐ Decide: continue, repeat, modify, stop, investigate, consult, or escalate.
- ☐ Update monitoring level and next reassessment time.
- ☐ Document findings, interpretation, action, and responsible clinician.
- ☐ Explain the updated plan to the patient/caregiver where feasible.

## Annex H. Deterioration escalation record

Field	Record
Date/time and location	
Trigger / concern	
Current observations and trend	
Early-warning score, if used	
Oxygen / airway / circulatory support	
Focused ABCDE findings	
Immediate treatment given	
Person contacted and time	
Request / recommendation	
Response advice and expected arrival/review	
Actual review time and clinician	
Updated diagnosis / plan	
New monitoring level and next review	
Further escalation if response delayed or deterioration continued	

## Annex I. Pain, sedation, and behavioural monitoring prompts

Situation	Monitor and document
Analgesia	Baseline and post-treatment pain/function; respiratory rate; oxygenation; blood pressure; nausea; sedation; adverse effect; next plan.
Opioid or sedating medication	Airway, respiratory rate/effort, oxygenation, sedation score, blood pressure, falls risk, cumulative dose, reversal readiness.
Procedural sedation	Approved sedation policy: continuous relevant monitoring, ventilation assessment/capnography where required, dedicated observer, recovery criteria, discharge readiness.
Chemical restraint	Airway/ventilation, oxygenation, circulation, temperature, glucose, consciousness, agitation, injury, QT/rhythm risk where relevant, repeated physical review.
Physical restraint / seclusion	Direct observation appropriate to risk; airway, breathing, circulation, position, limb perfusion, pressure injury, distress, hydration/toileting, ongoing necessity, release trials.
Intoxication / withdrawal	Consciousness, airway/ventilation, glucose, temperature, injuries, toxidrome/withdrawal score, seizures, agitation, response, capacity, suicide/safeguarding risk.

## Annex J. Continuous monitoring and alarm safety checklist

- ☐ Correct patient and indication for monitoring.
- ☐ Correct device, leads/sensors, size, placement, waveform, and skin condition.
- ☐ Oxygen device/flow and support documented.
- ☐ Alarm limits clinically appropriate, active, audible/visible, and handed over.
- ☐ Baseline rhythm/values reviewed and artifact excluded.
- ☐ Patient can be observed and staff can respond to alarms promptly.
- ☐ Batteries, cables, power, oxygen, and consumables adequate.
- ☐ Parameter trends reviewed, not only current values.
- ☐ Alarm events assessed at the patient first and documented when clinically important.
- ☐ Monitoring need reviewed after stabilization, transfer, and disposition.

## Annex K. ED observation / boarding safety round

Round item	Completed / findings
Patient identity, location, responsible team, and disposition status	
Latest observations, trend, monitoring level, and next due review	
Airway/oxygen/monitoring equipment and alarm status	
Pain, mental status, mobility/falls, pressure care, hydration/nutrition, toileting	
Medication reconciliation, last/next time-critical dose, infusions	
Pending investigations/results and named owner	
Consultations, escalation triggers, and delayed actions	
Infection precautions, safeguarding, communication needs	
Suitability of current location and staffing	
Patient/caregiver update and concerns	

## Annex L. Transport monitoring checklist

- ☐ Destination and receiving staff ready; transfer necessity and timing confirmed.
- ☐ Pre-transport ABCDE assessment and current observations documented.
- ☐ Required monitoring and oxygen/support continue throughout journey.
- ☐ Competent escort assigned with clear responsibility.
- ☐ Airway/resuscitation equipment, medication, infusion volume, batteries, and contingency reserve available.
- ☐ Lines, tubes, drains, dressings, splints, and monitoring cables secured.
- ☐ Recent trend, treatment, allergies, risks, and emergency plan communicated.
- ☐ Event during transport documented and escalated.
- ☐ On arrival/return: reassess, reconnect, verify devices, and complete handover.

## Annex M. Monitoring and reassessment audit tool

Audit item	Yes	No	N/A	Notes / evidence
Complete age-appropriate baseline observations recorded				
Oxygen device/flow and relevant context recorded				
Monitoring level / next review time evident				
Observation interval met or delay risk-managed				
Abnormal result validated/interpreted and acted upon				
Treatment response reassessed and documented				
Trend considered, not only isolated values				
Escalation trigger communicated with closed-loop response				
Diagnostic timeout/senior review when not improving				
Continuous monitor and alarms safely configured				
Handover includes trend, support, next due review, triggers				
Final reassessment before disposition				
Destination capable of required monitoring				
Patient/caregiver concern documented and addressed				



## Annex N. Local configuration table

Item requiring local approval	Approved arrangement
Adult track-and-trigger system and response matrix	
Paediatric PEWS and response matrix	
Obstetric early-warning system, if applicable	
Monitoring intensity levels and maximum intervals	
Waiting-room and triage intervals	
Single-parameter emergency triggers	
Clinician response targets and backup escalation	
Patient/caregiver concern escalation route	
Continuous monitoring indications and alarm defaults	
Procedural sedation monitoring standard	
Behavioural restraint/seclusion monitoring standard	
Blood-product monitoring intervals	
High-risk medication monitoring requirements	
Observation/boarding medical review intervals	
Transport monitoring and escort requirements	
Equipment maintenance, cleaning, and failure process	
Electronic chart, auto-upload validation, and downtime process	
Monitoring incident review criteria	
Audit schedule, sample size, and accountable committee	

## Annex O. References and source tools

**World Health Organization. Emergency Care Toolkit.**

<https://www.who.int/teams/integrated-health-services/clinical-services-and-systems/emergency-and-critical-care/emergency-care-toolkit>

**World Health Organization / International Committee of the Red Cross. Basic Emergency Care: approach to the acutely ill and injured.** <https://www.who.int/publications-detail-redirect/basic-emergency-care-approach-to-the-acutely-ill-and-injured>

**World Health Organization. Standardized Clinical Forms for emergency care.**

<https://www.who.int/tools/standardized-clinical-forms>

**World Health Organization. Emergency care health topic and ongoing critical-care monitoring principles.**

<https://www.who.int/health-topics/emergency-care>

**World Health Organization. Medical Emergency Checklist.** <https://www.who.int/publications/i/item/who-medical-emergency-checklist>

**Royal College of Physicians. National Early Warning Score (NEWS) 2.** <https://www.rcp.ac.uk/resources/national-early-warning-score-news-2/>

**Royal College of Physicians. NEWS2 additional implementation guidance.** <https://www.rcp.ac.uk/resources/news2-additional-implementation-guidance/>

**National Institute for Health and Care Excellence. Acutely ill adults in hospital: recognising and responding to deterioration (CG50).** <https://www.nice.org.uk/guidance/cg50>

**NHS England. National Paediatric Early Warning System (PEWS).**

<https://www.england.nhs.uk/get-involved/cyp/pews/>

**Royal College of Paediatrics and Child Health. UK Paediatric Early Warning Systems.**

<https://www.rcpch.ac.uk/resources/UK-paediatric-early-warning-systems>

**Agency for Healthcare Research and Quality Patient Safety Network. Improving timeliness of emergency department care and the role of reassessment.** <https://psnet.ahrq.gov/web-mm/some-patients-cant-wait-improving-timeliness-emergency-department-care>

**Local triage, resuscitation, sepsis, trauma, stroke, sedation, transfusion, restraint, transport, maternity, paediatric, critical-care, and early-warning policies.** [Insert local sources]

*Reference note: External guidance supports the principles in this draft. Before approval, reconcile all observation parameters, intervals, escalation thresholds, staff scopes, and equipment requirements with national law, local resources, approved charts, and specialty pathways.*

## Local approval and sign-off

Role	Name	Signature	Date
Emergency Department Medical Lead			
Emergency Department Nursing Lead			
Critical Care / Anaesthesia Lead			
Paediatric Lead			
Obstetric Lead, if applicable			
Clinical Engineering / Biomedical Lead			
Clinical Governance / Patient Safety Lead			
Medical Executive			
Nursing Executive			
Hospital Administrator / Board Representative			

**Before approval, complete Annexes D-F and N, test the escalation pathway on day and night shifts, confirm monitoring and alarm coverage in all ED locations, and verify that staffing can reliably deliver the approved observation intervals.**