[HOSPITAL / HEALTH AUTHORITY NAME]

SYNCOPE, COLLAPSE, AND TRANSIENT LOSS OF CONSCIOUSNESS PATHWAY

Protocol 21: Rapid Recognition, Risk Stratification, Targeted Investigation, Monitoring, Referral, and Safe Disposition

DRAFT FOR EMERGENCY MEDICINE, INTERNAL MEDICINE, CARDIOLOGY, ELECTROPHYSIOLOGY, NEUROLOGY, PAEDIATRICS, OBSTETRICS, GERIATRICS, ANAESTHESIA, CRITICAL CARE, PHARMACY, LABORATORY, RADIOLOGY, EMS, TRANSFER, AND CLINICAL-GOVERNANCE REVIEW

IMMEDIATE SAFETY RULE: A collapse or blackout is a symptom, not a diagnosis. Treat ongoing abnormal consciousness, shock, hypoxaemia, chest pain, breathlessness, focal neurological deficit, severe headache, major bleeding, pregnancy-related instability, significant injury, exertional or supine syncope, palpitations immediately before collapse, abnormal ECG, or known structural heart disease as a possible time-critical emergency. Stabilize and treat the dangerous cause before applying a syncope risk score or considering discharge.

STATUS: This is a draft clinical-governance document. Exact triage categories, ECG interpretation standards, cardiac-monitoring duration, troponin strategy, orthostatic measurement method, echocardiography and ambulatory-monitoring access, transfer criteria, paediatric and pregnancy pathways, driving restrictions, occupational advice, and use of any risk score must be approved locally before implementation. Staff must follow current resuscitation, arrhythmia, acute coronary syndrome, pulmonary embolism, stroke, seizure, haemorrhage, trauma, and safeguarding protocols whenever those conditions are suspected.

Document control	Details
Document owner	Emergency Department / Medical Services Directorate / Nursing Services / Clinical Governance
Clinical leads	Emergency Medicine; Internal Medicine; Cardiology / Electrophysiology; Neurology; Paediatrics; Geriatrics
Supporting departments	Obstetrics; Anaesthesia / Critical Care; Pharmacy; Laboratory; Radiology; EMS; Patient Transport / Transfer Coordination
Applies to	All staff involved in recognition, triage, stabilization, assessment, investigation, treatment, monitoring, referral, transfer, admission, discharge, and follow-up of patients with syncope, collapse, presyncope, unexplained falls, or suspected transient loss of consciousness
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Related protocols	Protocol 1 - Emergency Department Patient Journey; Protocol 17 - Altered Mental Status; Protocol 18 - Stroke/TIA; Protocol 19 - Seizures; Protocol 20 - Acute Severe Headache; Protocol 22 - Acute Arrhythmias; plus local ACS, PE, haemorrhage, trauma, pregnancy, paediatric, and resuscitation pathways

1. Purpose

To provide a structured emergency-department pathway for patients with syncope, collapse, presyncope, unexplained falls, or suspected transient loss of consciousness. The protocol prioritizes immediate stabilization, recognition of serious underlying disease, accurate event reconstruction, universal ECG assessment, targeted investigation, explicit risk classification, reliable follow-up, and safe disposition.

2. Scope

This protocol applies from first clinical contact through discharge, observation, admission, or transfer. It covers adults, adolescents, and children, with dedicated sections for older adults, pregnancy/postpartum, athletes, and patients with implanted cardiac devices. It does not replace condition-specific pathways when cardiac arrest, persistent altered consciousness, stroke, seizure, major

trauma, acute coronary syndrome, pulmonary embolism, aortic disease, sepsis, haemorrhage, ectopic pregnancy, or poisoning is suspected.

3. Core policy statements

- All patients with suspected syncope or transient loss of consciousness shall receive an ABCDE assessment, complete vital signs, focused neurological and cardiovascular assessment, and a 12-lead ECG reviewed by a competent clinician.
- Bedside glucose shall be checked immediately when consciousness has not fully recovered, diabetes or hypoglycaemia is possible, symptoms persist, or the history is uncertain. Many departments may choose glucose testing for all TLoC presentations.
- A witness account, EMS record, video, or telephone collateral history shall be sought whenever available. The event description is a diagnostic test and must be documented with the same care as an ECG.
- High-risk features or an identified serious condition require monitored care, senior review, targeted treatment, and appropriate consultation, admission, or transfer. A risk score shall never override instability, clinical concern, an abnormal ECG, or a dangerous diagnosis.
- Routine broad blood testing, head CT, EEG, carotid imaging, echocardiography, or toxicology screening is not required for every patient. Investigations shall be selected to answer a specific clinical question.
- Orthostatic blood pressure and pulse measurements shall be performed when postural hypotension is suspected and when standing is safe. Symptoms and measurement technique must be recorded.
- Patients discharged after TLoC shall receive an explanation of diagnostic certainty, written return precautions, follow-up arrangements, medicine and hydration advice, and driving, work, sport, bathing, climbing, and machinery restrictions appropriate to the suspected cause and local law.
- Unexplained collapse in an older adult shall not automatically be labelled a mechanical fall. Amnesia for syncope, polypharmacy, occult bleeding, arrhythmia, and injury must be considered.

4. Definitions

Term	Operational definition
Syncope	Transient loss of consciousness caused by transient global cerebral hypoperfusion, with rapid onset, short duration, and spontaneous complete recovery.
Transient loss of consciousness (TLoC)	A self-limited loss of consciousness with loss of postural tone and amnesia for the period. Causes include syncope, epileptic seizure, psychogenic events, metabolic disturbance, intoxication, and trauma.
Collapse	A descriptive term for sudden loss of postural control or apparent loss of responsiveness. It does not establish whether consciousness was lost or why the event occurred.
Presyncope / near-syncope	Symptoms suggesting impending syncope without complete loss of consciousness, such as light-headedness, dimming vision, weakness, or diaphoresis. Serious cardiac or haemorrhagic causes may still be present.
Reflex syncope	Neurally mediated syncope, including vasovagal and situational syncope, caused by inappropriate vasodilation and/or bradycardia.
Postural hypotension	A sustained fall in blood pressure on standing, usually at least 20 mmHg systolic or 10 mmHg diastolic, with or without symptoms, after an appropriate supine-to-standing assessment.
Cardiac syncope	Syncope due to arrhythmia, structural heart disease, cardiopulmonary obstruction, or another cardiac mechanism.
Unexplained syncope	Syncope for which no sufficiently secure cause is identified after the initial ED assessment.
Serious outcome	Death, clinically important arrhythmia, myocardial infarction, structural cardiac disease, pulmonary embolism, major haemorrhage, stroke, or another condition requiring urgent treatment or hospital-level care.

5. Roles and accountability

Role	Minimum responsibility
Triage / first-contact nurse	Identify instability, incomplete recovery, injury, pregnancy, bleeding, chest pain, dyspnoea, focal deficit, exertional or supine event, abnormal pulse, known heart disease, and recurrent episodes; obtain observations; escalate immediately.

Role	Minimum responsibility
Primary ED clinician	Lead ABCDE, establish whether TLoC occurred, obtain collateral history, review ECG personally, perform focused examination, select investigations, classify risk, document reasoning, and own disposition.
Senior ED decision-maker	Review high-risk, diagnostically uncertain, recurrent, injured, paediatric, pregnant, older/frail, or socially unsafe cases; authorize discharge when uncertainty remains; coordinate consultation and transfer.
Nursing team	Provide monitoring, IV access, orthostatic observations when safe, injury prevention, medication administration, serial reassessment, and immediate escalation of recurrent symptoms or rhythm change.
Cardiology / electrophysiology	Advise on abnormal ECG, suspected arrhythmic or structural syncope, device interrogation, echocardiography, ambulatory monitoring, exercise testing, pacing, and inherited cardiac conditions.
Neurology / paediatrics / geriatrics / obstetrics	Support seizure or neurological differentials, age-specific assessment, frailty/falls evaluation, pregnancy-related causes, and specialty disposition.
Laboratory / radiology	Prioritize clinically indicated tests, communicate critical results directly, and support targeted imaging rather than routine low-yield testing.
EMS / transfer team	Provide event and rhythm-strip details, maintain monitoring and safety during transfer, communicate recurrence or deterioration, and complete direct handover.

6. Pathway activation and triage

Category	Operational criteria
RED / immediate resuscitation	Persistent reduced consciousness; airway or breathing compromise; shock; active major bleeding; sustained tachyarrhythmia or bradyarrhythmia; chest pain with instability; suspected massive PE, aortic catastrophe, ruptured ectopic pregnancy, intracranial haemorrhage, sepsis, or major trauma; recurrent syncope with haemodynamic compromise.
ORANGE / very urgent	Syncope during exertion or while supine; palpitations immediately before event; no prodrome; abnormal ECG or pulse; known heart failure, cardiomyopathy, significant valve disease, congenital heart disease, prior ventricular arrhythmia, or implanted device; new dyspnoea, murmur, family history of sudden death at a young age, severe anaemia/bleeding concern, pregnancy/postpartum risk, focal deficit, severe headache, or significant injury.
YELLOW / urgent	Stable patient with unexplained TLoC, recurrent episodes, postural symptoms, medication-related risk, older age/frailty, persistent weakness, dehydration, mild injury, or incomplete diagnostic confidence despite normal initial observations.
GREEN / routine	Only after clinician confirmation of a classic uncomplicated vasovagal or situational episode, complete recovery, normal examination and ECG, no high-risk history, safe social context, and reliable follow-up. The triage label must not substitute for physician assessment.

DO NOT MISS: Brief limb jerking, urinary incontinence, or a short period of unresponsiveness can occur during syncope. Conversely, rapid apparent recovery does not exclude arrhythmia, pulmonary embolism, haemorrhage, ectopic pregnancy, aortic stenosis, hypertrophic cardiomyopathy, or inherited channelopathy.

7. First 10 minutes: parallel action

Action	Required practice
Place and protect	Move unstable or high-risk patients to resuscitation or monitored care. Prevent falls, remove hazards, assess cervical spine and trauma when indicated, and do not permit unassisted standing.

Action	Required practice
Reconstruct the event	Record time, posture, activity, trigger, prodrome, palpitations, colour, breathing, movements, duration, injury, recovery, confusion, and focal symptoms. Obtain EMS rhythm strips and witness/video information.
Monitor and access	Complete observations. Apply continuous ECG, pulse oximetry, and frequent BP monitoring for high-risk or symptomatic patients. Establish IV access when treatment, blood sampling, or deterioration is possible.
Immediate tests	Obtain a 12-lead ECG promptly and compare with prior tracings. Check glucose when indicated. Obtain pregnancy testing in people with pregnancy potential when the result affects diagnosis or treatment.
Treat the cause	Activate condition-specific pathways for arrhythmia, ACS, PE, major haemorrhage, ectopic pregnancy, stroke, seizure, sepsis, anaphylaxis, poisoning, or trauma. Do not wait for completion of the syncope checklist.
Reassess	Repeat mental status, pulse, BP, rhythm, neurological findings, symptoms, and injury assessment after intervention or any recurrence. Record who is responsible for the next review.

8. Immediate stabilization: ABCDE

8.1 Airway and breathing

- Open and protect the airway, suction as required, provide oxygen for hypoxaemia, and ventilate if breathing is inadequate. Persistent reduced consciousness is not simple syncope and requires Protocol 17.
- Assess for pulmonary embolism, pneumothorax, aspiration, anaphylaxis, asthma, carbon monoxide, and other respiratory causes when breathlessness, hypoxaemia, pleuritic pain, or exposure history is present.
- After collapse in pregnancy beyond mid-gestation, use left uterine displacement or lateral positioning when haemodynamically unstable.

8.2 Circulation

- Check central and peripheral pulses, rhythm regularity, capillary refill, BP in both arms when aortic disease is suspected, and signs of heart failure or major blood loss.
- Treat unstable bradyarrhythmia or tachyarrhythmia under the approved resuscitation/arrhythmia pathway. Apply defibrillation/pacing pads early when deterioration is possible.
- Use cautious IV fluid for hypovolaemia or postural hypotension, modified for heart failure, renal failure, pregnancy, and older/frail patients. Control active haemorrhage and activate transfusion pathways when indicated.

8.3 Disability

- Document GCS or age-appropriate mental status, pupils, speech, facial and limb function, gait when safe, and post-event confusion. Persistent focal deficit activates Protocol 18; severe headache or meningism activates Protocol 20; seizure concern activates Protocol 19.
- Check glucose immediately for persistent symptoms, diabetes, pregnancy, paediatric presentations, or diagnostic uncertainty. Treat hypoglycaemia without delaying evaluation of the precipitating cause.
- A prolonged postictal state, lateral tongue bite, sustained tonic-clonic activity, focal onset, or recurrent unprovoked events increases the likelihood of seizure but does not exclude a cardiac trigger.

8.4 Exposure and injury

- Inspect for head, face, neck, thoracic, abdominal, pelvic, and limb injury; rash; bleeding; melaena; pregnancy-related bleeding; dehydration; infection; needle marks; medication patches; and environmental exposure.
- Check temperature. Consider occult infection, adrenal crisis, heat illness, toxic exposure, and carbon monoxide according to context.
- Provide analgesia, wound care, tetanus, and trauma imaging based on injury criteria. Do not perform head CT solely because syncope occurred.

9. Was this syncope, another TLoC, or no loss of consciousness?

Pattern	Features supporting the pattern
Likely syncope	Brief loss of postural tone and responsiveness; rapid onset; spontaneous complete recovery; pallor; sweating/warmth; nausea; visual dimming; precipitating posture, pain, emotion, micturition, cough, swallowing, or dehydration. Brief myoclonic jerks may occur.

Pattern	Features supporting the pattern
Likely cardiac syncope	During exertion or supine; abrupt without prodrome; palpitations immediately before collapse; chest pain/dyspnoea; known structural heart disease; abnormal ECG; family history of sudden death; injury due to sudden fall.
Likely epileptic seizure	Lateral tongue bite; head turning; unusual posturing; prolonged rhythmic jerking; cyanosis; prolonged confusion; déjà vu/jamais vu; witnessed focal onset; recurrent unprovoked events. Incontinence alone is not diagnostic.
Psychogenic event possible	Prolonged apparent unresponsiveness, frequent attacks, tightly closed eyes, fluctuating motor activity, preserved colour or normal physiology during a recorded event. Diagnosis requires positive features and exclusion of dangerous causes; do not use as a label of convenience.
Fall without clear TLoC	Trip/slip history, preserved awareness, immediate recall, mechanical hazard, or progressive weakness. In older adults, amnesia and absent witnesses may conceal syncope, so cardiovascular evaluation may still be required.
Metabolic/toxic/other	Hypoglycaemia, hypoxia, intoxication, medication effect, cataplexy, vertigo, drop attack, concussion, sleep disorder, or prolonged altered consciousness. These are not syncope and need the relevant pathway.

10. Life-threatening causes and mimics

Domain	Conditions to actively consider
Electrical cardiac	Ventricular tachycardia, torsades/long QT, high-grade AV block, sick sinus syndrome, pre-excitation, Brugada pattern, rapid atrial arrhythmia, pacemaker/ICD malfunction.
Structural/cardiopulmonary	Acute coronary syndrome, severe aortic stenosis, hypertrophic cardiomyopathy, pulmonary embolism, pulmonary hypertension, tamponade, acute heart failure, aortic dissection.
Haemorrhagic/volume loss	GI bleed, ruptured ectopic pregnancy, postpartum haemorrhage, ruptured aneurysm, occult trauma, severe dehydration, adrenal crisis.
Neurological	Subarachnoid or intracerebral haemorrhage, basilar or other stroke with focal findings, seizure, intracranial mass, severe autonomic failure.
Metabolic/toxic/infectious	Hypoglycaemia, hypoxaemia, electrolyte disturbance, drug-induced QT prolongation, antihypertensive/diuretic effect, intoxication, carbon monoxide, sepsis.
Special contexts	Pregnancy/postpartum, exertional event in athlete, inherited arrhythmia family, eating disorder, congenital heart disease, implanted cardiac device, anticoagulant use, frailty with recurrent falls.

11. Focused history and collateral information

- Before: posture; activity; exertion; prolonged standing; heat; dehydration; pain/emotion; micturition, defecation, cough, swallowing, or neck movement; chest pain; dyspnoea; palpitations; nausea; sweating; visual or auditory dimming; aura; headache; focal symptoms.
- During: sudden or gradual loss of tone; eye position; pallor or cyanosis; breathing; pulse if checked; tonic stiffening; number and duration of jerks; head turning; tongue bite location; incontinence; injury; duration of unresponsiveness.
- After: immediate orientation versus confusion; fatigue; headache; chest symptoms; focal weakness; vomiting; persistent dizziness; time to normal speech, behaviour, and walking.
- Past history: previous episodes and frequency; structural heart disease, heart failure, ischaemia, arrhythmia, valve disease, congenital disease, pulmonary hypertension, PE, stroke, epilepsy, diabetes, bleeding, anaemia, renal disease, autonomic disease, pregnancy, and implanted devices.
- Medicines and substances: antihypertensives, diuretics, nitrates, alpha-blockers, insulin, hypoglycaemics, QT-prolonging or sodium-channel-blocking drugs, sedatives, opioids, alcohol, stimulants, cocaine, supplements, recent dose changes, and missed medicines.
- Family history: sudden unexplained death, drowning, single-vehicle crash, inherited arrhythmia, cardiomyopathy, epilepsy, or pacemaker/defibrillator at a young age.
- Social and safety context: driving, occupation at height or with machinery, sport, bathing/swimming, living alone, caregiver support, medication access, food/fluid security, and ability to attend follow-up.

12. Focused examination

Examination	Required elements
Observations	Pulse rate and regularity, BP, respiratory rate, oxygen saturation, temperature, pain score, mental status. Repeat after symptoms, treatment, standing, or recurrent events.
Cardiovascular	Murmur, heart sounds, displaced apex, signs of heart failure, pulse deficits, carotid bruit only as a vascular finding rather than an explanation for syncope, and device pocket/identity when present.
Respiratory	Work of breathing, asymmetry, crackles, wheeze, pleuritic findings, hypoxaemia, and signs of PE or pulmonary hypertension.
Neurological	Cranial nerves, speech, limb power/sensation, coordination, gait when safe, postictal state, parkinsonism, peripheral/autonomic neuropathy, and cognitive baseline.
Volume/bleeding	Mucosal pallor, dehydration, abdominal tenderness or pulsatile mass, melaena/haematemesis history, vaginal bleeding, pregnancy findings, and trauma survey as indicated.
Orthostatic assessment	When safe, rest supine; record BP and pulse; repeat after standing for at least 1 minute and preferably through 3 minutes according to local policy. Record symptoms. Stop if severe symptoms, instability, or fall risk develops.
Functional/safety	Baseline mobility, frailty, vision, footwear, injury, ability to stand, home support, and medication management, especially in older adults.

ORTHOSTATIC CAUTION: A postural BP drop can coexist with arrhythmia, bleeding, infection, or structural heart disease. Finding postural hypotension does not end the evaluation when high-risk features are present.

13. ECG and rhythm assessment

A 12-lead ECG is required for all suspected syncope/TLoC unless an immediately life-threatening condition prevents it. The treating clinician must review the tracing, not rely solely on automated interpretation, and compare with prior ECGs when available.

ECG finding	Concern / action
Bradycardia or AV block	Inappropriate persistent sinus bradycardia, Mobitz II, complete heart block, alternating bundle-branch block, pauses, or device failure require monitoring and urgent cardiac review.
Tachyarrhythmia / ectopy	Sustained atrial or ventricular arrhythmia, frequent ventricular ectopy, nonsustained VT, or pre-excited atrial fibrillation requires monitored management and specialist input.
Conduction / QRS	Complete bundle-branch block, bifascicular block, QRS >130 ms, pre-excitation, epsilon wave, or other features of cardiomyopathy/channelopathy increase cardiac risk.
QT abnormality	Markedly prolonged or short QT, especially with QT-active medicines, electrolyte disturbance, or family history, requires correction of causes, monitoring, and specialist advice.
Brugada / inherited pattern	Type 1 Brugada pattern or concerning right-precordial changes, especially with fever or family history, requires urgent expert review.
Ischaemia / structural clues	ST/T abnormalities, pathological Q waves, LVH with strain, right-heart strain, or patterns suggesting HCM, ARVC, PE, or acute ischaemia guide targeted evaluation.
Normal ECG	Reduces but does not eliminate cardiac risk. Exertional/supine syncope, structural heart disease, palpitations, family history, or recurrent unexplained events still require appropriate evaluation.

14. Targeted investigations

Investigation	Use
Glucose	Immediate for persistent altered state, diabetes, pregnancy, children, suggestive symptoms, or uncertain history; treat abnormality and identify why it occurred.
CBC / haemoglobin	Suspected bleeding, anaemia, infection, pregnancy complication, malignancy, or significant trauma; not routine in a clearly benign faint.
Electrolytes / renal function	Dehydration, vomiting/diarrhoea, renal disease, diuretic use, QT abnormality, arrhythmia, poor intake, eating disorder, or medication toxicity.
Troponin	Suspected ACS, ischaemic symptoms/ECG, known significant heart disease, or use within a locally approved adult risk tool. A single untargeted troponin must not replace clinical assessment.
Pregnancy test	When pregnancy is possible and the result affects evaluation of ectopic pregnancy, haemorrhage, PE, imaging, or medication.
D-dimer / CTPA	Only through an approved PE probability pathway. Syncope alone is not an indication for indiscriminate PE testing.
Echocardiography / POCUS	Murmur, heart failure, known or suspected structural disease, tamponade, RV strain, severe volume loss, or unexplained high-risk syncope. POCUS is adjunctive and does not replace formal imaging when needed.
Head CT / neuroimaging	Focal deficit, persistent altered consciousness, severe headache, seizure concern with specific indications, significant head trauma, or another intracranial syndrome. Not routine for uncomplicated syncope.
EEG / neurological testing	Not routine in TLoC. Arrange when clinical features strongly suggest seizure or another neurological disorder.
Carotid imaging	Not routine for syncope without focal neurological findings. Carotid stenosis rarely explains isolated TLoC.
Toxicology / drug levels / COHb	Only when exposure, overdose, adherence, or treatment decisions justify testing.
Device interrogation / ambulatory ECG	Implanted device, suspected intermittent arrhythmia, recurrent unexplained syncope, or symptom-frequency-based monitoring plan after specialist discussion.

15. Risk stratification after initial evaluation

Risk group	Typical features and disposition direction
High risk	Serious cause identified or strongly suspected; instability; exertional/supine event; no prodrome with injury; palpitations immediately before event; abnormal ECG; structural heart disease; heart failure; new murmur; family sudden death; severe anaemia/bleeding; new dyspnoea; persistent neurological findings; recurrent events in ED. Admit, transfer, or monitored observation with urgent specialist input.
Intermediate risk	Unexplained syncope with age/frailty, recurrent episodes, uncertain history, moderate ECG or comorbidity concern, postural hypotension with complex disease, or limited follow-up. Senior review, observation and/or rapid specialty pathway; avoid unsupported discharge.
Low risk	Classic vasovagal or situational trigger and prodrome, complete recovery, normal observations, examination and ECG, no significant heart disease or family history, no dangerous associated symptom, safe mobility and social context. Discharge may be appropriate with education and follow-up.
Not syncope	A specific seizure, metabolic, toxic, traumatic, psychiatric, or neurological diagnosis is more likely. Use the relevant pathway and do not apply syncope scores.

RISK-SCORE RULE: Use a locally approved adult syncope score only after the clinician has confirmed probable syncope, completed the ED assessment, and found no immediate serious diagnosis. Scores are not validated for children, persistent altered consciousness, definite seizure, intoxication, major trauma, or a clearly identified dangerous cause.

16. Optional Canadian Syncope Risk Score (adult support tool)

The Canadian Syncope Risk Score (CSRS) may support disposition for adults aged 16 years or older with true syncope after ED evaluation when no serious outcome has already been identified. Local approval, calculator validation, and clinician training are required.

Variable	Points
Predisposition to vasovagal symptoms	-1
History of heart disease	+1
Any ED systolic BP <90 or >180 mmHg	+2
Troponin above the 99th percentile	+2
Abnormal QRS axis < -30 degrees or >100 degrees	+1
QRS duration >130 ms	+1
Corrected QT interval >480 ms	+2
ED diagnosis: vasovagal syncope	-2
ED diagnosis: cardiac syncope	+2

Total score	Validation risk category / observed 30-day serious outcome
-3 to -2	Very low; approximately 0.2% in the multicentre validation cohort.
-1 to 0	Low; approximately 0.7%.
1 to 3	Medium; approximately 8%.
4 to 5	High; approximately 19%.
6 to 11	Very high; approximately 51%.

- No score permits discharge when clinical instability, an abnormal rhythm, major injury, unreliable follow-up, or a specific serious diagnosis is present.
- Very-low and low-risk patients may generally be considered for discharge when all other safety criteria are met. Medium risk requires individualized senior review and a reliable monitoring/follow-up plan. High and very-high risk generally require monitored hospital care or a clearly equivalent specialist pathway.
- Troponin should not be ordered merely to calculate a score when there is no clinical or locally approved risk-stratification indication.

17. Suspected cardiac syncope

- Place the patient on continuous monitoring, obtain repeat ECGs when symptoms or rhythm change, correct hypoxia and electrolyte abnormalities, and stop potentially causative medicines when safe.
- Activate Protocol 22 for unstable or significant arrhythmia. Obtain cardiology/electrophysiology advice for conduction disease, inherited arrhythmia patterns, exertional or supine syncope, structural heart disease, recurrent unexplained events, or device concerns.
- Arrange echocardiography when structural disease is suspected. Exertional syncope requires restriction from exercise and sport until specialist assessment; urgent exercise testing may be appropriate only after dangerous structural disease has been considered.
- For implanted pacemaker or ICD patients, obtain device details and interrogation as soon as practicable. A normal spot ECG does not exclude device or intermittent rhythm problems.
- Choose ambulatory monitoring according to event frequency and risk: short Holter for frequent symptoms, longer external/event monitoring for less frequent symptoms, and implantable monitoring for selected recurrent unexplained events after specialist review.

18. Reflex and situational syncope

- Diagnose an uncomplicated vasovagal faint only when the event has the expected posture, provoking factor, and prodrome, with no alternative high-risk feature, normal examination and ECG, and complete recovery.

- Situational syncope may occur with micturition, defecation, coughing, swallowing, pain, venepuncture, or other reproducible triggers. Confirm that the pattern is consistent and that structural or arrhythmic disease is not suggested.
- Treat injury, dehydration, pain, or nausea. Explain early warning symptoms and advise the patient to sit or lie down immediately, elevate legs when possible, and avoid the identified trigger or unsafe setting.
- Physical counter-pressure manoeuvres may help selected patients with a recognizable prodrome, but they are unsuitable when balance, pregnancy, frailty, or injury risk makes them unsafe.
- Recurrent episodes affecting quality of life or causing injury require primary-care or specialist review. Tilt testing is not a routine ED test and is not first-line when a classic diagnosis is already secure.

19. Postural hypotension and volume depletion

- Confirm the history is postural and that no competing dangerous cause is present. Record supine-to-standing BP, pulse, timing, and symptoms using a safe standardized method.
- Review fluid loss, bleeding, fever, autonomic disease, adrenal insufficiency, prolonged bed rest, alcohol, and medications including diuretics, vasodilators, alpha-blockers, nitrates, antihypertensives, dopaminergic agents, and sedatives.
- Treat the underlying cause. Give oral or IV fluid when appropriate, but individualize for heart failure, renal disease, cirrhosis, and pregnancy. Correct electrolyte abnormalities and address anaemia or bleeding.
- Do not make abrupt long-term medication changes without a clear plan. Document which prescriber will review doses and BP targets. Persistent symptoms despite nondiagnostic measurements require further cardiovascular/autonomic assessment.
- Before discharge, confirm safe standing and walking, falls risk, assistance at home, and advice on rising slowly, hydration, heat, meals, and compression strategies when appropriate.

20. Seizure and neurological alternatives

Feature	More consistent with syncope	More consistent with seizure
Trigger / posture	Standing, heat, pain, emotion, dehydration, micturition/cough	Often unprovoked; may occur in any posture; focal aura possible
Prodrome	Sweating, warmth, nausea, visual dimming, light-headedness	Déjà vu/jamais vu, focal sensory/psychic symptoms
Colour	Pallor common	Cyanosis may occur
Movements	Few brief, irregular jerks after loss of tone	Prolonged rhythmic jerking, tonic posturing, head/eye deviation
Tongue injury	Tip injury possible, uncommon	Lateral tongue bite more suggestive
Recovery	Rapid orientation, though fatigue can occur	Prolonged confusion, headache, myalgia
Important caution	Convulsive syncope exists	Arrhythmia can cause seizure-like activity; ECG remains required

- Persistent focal deficit, severe headache, meningism, or ongoing altered consciousness requires urgent neurological evaluation and imaging under Protocols 17, 18, or 20.
- Do not order routine EEG for every blackout. Refer suspected first seizure or recurrent unprovoked seizure according to Protocol 19 and local neurology pathways.
- TIA rarely causes isolated loss of consciousness. Do not label isolated syncope as TIA without focal posterior-circulation or other neurological evidence.

21. Injury, haemorrhage, metabolic, toxic, and psychogenic events

- Assess and treat injuries independently of the presumed cause of collapse. Anticoagulation, head strike, persistent headache/vomiting, focal findings, or high-energy trauma lowers the threshold for imaging under trauma criteria.
- Look for occult GI bleeding, ruptured ectopic pregnancy, postpartum haemorrhage, retroperitoneal bleeding, ruptured aneurysm, and severe anaemia when symptoms, pregnancy status, anticoagulation, abdominal findings, or shock suggest them.
- Check for hypoglycaemia, electrolyte disturbance, hypoxia, carbon monoxide, medication toxicity, intoxication, withdrawal, and eating-disorder complications when clinically indicated.
- Psychogenic pseudosyncope or functional seizures should be considered only when positive clinical features are present and serious causes have been reasonably excluded. Communicate the diagnosis respectfully and arrange appropriate follow-up rather than implying that symptoms are fabricated.
- Safeguarding, domestic violence, self-harm, substance use, and neglect may be revealed by recurrent unexplained collapse or inconsistent injury. Follow local safeguarding procedures.

22. Special populations

22.1 Older adults, frailty, and unexplained falls

- Assume an unwitnessed unexplained fall may have been syncope when the patient cannot recall the event. Obtain collateral history, medication list, baseline cognition, and prior ECGs.

- Assess postural hypotension, arrhythmia, aortic stenosis, carotid sinus syndrome, bleeding, infection, dehydration, medication burden, gait, vision, and home safety. A normal initial examination does not remove the need for careful risk review.
- Avoid indiscriminate admission solely for age, but do not discharge without safe mobility, support, follow-up, and ownership of medication and falls review.

22.2 Pregnancy and postpartum

- Consider normal vasodilation and vena-caval compression, but actively exclude ectopic pregnancy, haemorrhage, pulmonary embolism, arrhythmia, aortic disease, preeclampsia/eclampsia, sepsis, and cardiomyopathy.
- Use maternal stabilization first, pregnancy testing and obstetric review when relevant, and left uterine displacement for significant instability later in pregnancy. Necessary imaging and treatment should not be withheld solely because of pregnancy.
- Postpartum syncope with dyspnoea, chest pain, headache, hypertension, bleeding, or neurological features requires urgent specialty evaluation.

22.3 Children and adolescents

- Most paediatric syncope is benign, but all children with suspected syncope require a detailed event/family history, examination, and 12-lead ECG interpreted for age.
- Red flags include exertional or supine syncope, sudden event without prodrome, palpitations/chest pain, abnormal cardiac examination or ECG, congenital/structural heart disease, Kawasaki history, sensorineural deafness, eating disorder, stimulant use, and sudden unexplained death in a young relative.
- Use weight-based treatment and paediatric observation standards. Children with cardiac concern require paediatric/cardiology discussion; athletes with exertional syncope must not return to sport until cleared.

22.4 Athletes and safety-critical occupations

- Exertional syncope is cardiac until adequately assessed. Restrict sport, strenuous exercise, swimming alone, climbing, driving, flying, diving, and safety-critical work as appropriate until specialist clearance.
- Ask about performance-enhancing substances, stimulants, supplements, rapid weight loss, dehydration, and family history. A normal resting ECG alone does not clear the athlete.

22.5 Pacemaker, ICD, or known inherited cardiac condition

- Obtain device type, indication, implant centre, recent checks, shocks, and magnet exposure. Review prehospital and device data and arrange interrogation.
- Discuss unexplained syncope urgently with cardiology/electrophysiology even if the ED ECG and device pulse are normal.

23. Monitoring, observation, and reassessment

- Use continuous ECG monitoring for instability, abnormal ECG, suspected arrhythmia, structural heart disease, recurrent symptoms, significant electrolyte abnormality, or high-risk unexplained syncope.
- Observation should have explicit goals: symptom recurrence, rhythm capture, repeat ECG/troponin when indicated, orthostatic reassessment, hydration, echocardiography, device interrogation, specialist review, or safe mobilization. Observation without a question is not a plan.
- Reassess after fluid, medication, food, ambulation, or recurrent symptoms. Record rhythm and obtain a repeat ECG during or immediately after recurrence whenever possible.
- Assign ownership for telemetry review, imaging over-read, ambulatory monitoring, and all pending tests. A patient must not be discharged with an unowned abnormal or pending result.
- Escalate immediately for recurrent syncope, chest pain, dyspnoea, new neurological finding, persistent hypotension, significant arrhythmia, worsening injury, or failure to return to baseline.

24. Consultation, escalation, and transfer

Consult / destination	Indications
Cardiology / electrophysiology	Abnormal ECG; exertional/supine syncope; structural heart disease; heart failure; significant murmur; family sudden death; device patient; recurrent unexplained events; suspected inherited arrhythmia; need for pacing, echo, or ambulatory monitoring.
Neurology	Strong seizure features, persistent neurological symptoms, recurrent unexplained events with neurological concern, or uncertain syncope-seizure distinction after cardiac assessment.
Paediatrics / paediatric cardiology	Any child with cardiac red flags, abnormal ECG/examination, persistent symptoms, significant injury, or uncertainty beyond local competence.
Obstetrics / maternal medicine	Pregnancy or postpartum collapse with pain, bleeding, dyspnoea, hypertension, headache, neurological symptoms, or haemodynamic concern.
Critical care / receiving tertiary centre	Unstable rhythm, shock, airway support, serious structural/cardiopulmonary cause, recurrent deterioration, or need for service unavailable locally.

Consult / destination	Indications
Geriatrics / falls / primary care	Frailty, recurrent unexplained falls, polypharmacy, postural hypotension, mobility or cognition concerns, and need for coordinated medication and home-safety review.

- Begin treatment and monitoring before transfer acceptance. Send ECGs, rhythm strips, imaging, laboratory results, medication list, device details, event timeline, risk assessment, and pending-result ownership.
- Transport capability must match risk, including monitoring, defibrillation/pacing, oxygen, IV access, rescue medicines, trained escort, and a deterioration plan.

25. Disposition

Disposition	Minimum criteria
Resuscitation / critical care / immediate transfer	Instability, persistent altered consciousness, serious arrhythmia, shock, massive PE, ACS with instability, aortic catastrophe, major haemorrhage, severe structural disease, recurrent deterioration, or other time-critical cause.
Admission / monitored bed	Identified serious condition; high-risk features; significant ECG abnormality; structural heart disease with unexplained syncope; recurrent events; major injury; severe postural hypotension requiring treatment; unsafe mobility or social context; high/very-high adult risk score where used.
ED observation / rapid specialist pathway	Intermediate-risk unexplained syncope when the patient is stable and the observation unit can complete a defined plan such as telemetry, serial tests, echo, device review, hydration, mobility, or rapid clinic appointment.
Discharge	Complete recovery; stable observations; normal or understood ECG; no serious cause or unresolved high-risk feature; injury addressed; safe oral intake and mobility; reliable adult support/transport when needed; written advice, driving/work restrictions, and follow-up arranged; pending results assigned.

SAFE-DISCHARGE RULE: A diagnostic label such as vasovagal syncope, dehydration, anxiety, or postural hypotension must be supported by the event history and examination. Do not discharge simply because tests are normal or the patient feels better.

26. Discharge information and safety

- Explain the likely cause, alternative possibilities, degree of uncertainty, tests performed, and why admission or discharge was chosen. Provide a copy of the ECG or ensure it is available to follow-up clinicians.
- Give written emergency return signs: recurrent syncope; event during exertion or while lying down; chest pain; palpitations; dyspnoea; severe headache; weakness/speech change; seizure; black stool or bleeding; pregnancy pain/bleeding; persistent vomiting; worsening injury; or failure to recover normally.
- For reflex or postural episodes, advise immediate sitting/lying at prodrome, hydration and regular meals when medically appropriate, gradual position changes, trigger avoidance, and medication review. Avoid generic high-salt advice in heart failure, hypertension, renal disease, or pregnancy without clinician direction.
- Give explicit driving advice under local law. Unexplained TLoC, suspected cardiac syncope, or possible seizure generally requires cessation of driving until appropriate assessment/clearance. Document the advice.
- Address work at height, machinery, professional driving, aviation, diving, swimming alone, unsupervised bathing, and competitive sport. Provide written restrictions and the clinician/service responsible for clearance.
- Arrange follow-up timing according to risk: urgent cardiac review for red flags, specialist seizure review when indicated, medication/falls review for postural or older-adult presentations, and routine review for uncomplicated faint if recurrent or changing.

27. Documentation and handover

- Whether TLoC was confirmed or uncertain, and the evidence used.
- Patient and witness description before, during, and after the event, including posture, trigger, prodrome, movements, duration, tongue injury, colour, recovery, and injury.
- Vital signs, orthostatic measurements and symptoms, neurological and cardiovascular examination, ECG interpretation, and comparison with prior tracing.
- Differential diagnosis, serious causes considered, why each investigation was ordered or omitted, and explicit risk category or score with eligibility caveats.

- Treatments, response, serial reassessment, consultation, transfer communications, and named clinician responsible for pending results.
- Disposition rationale, follow-up date/service, medication plan, driving/work/sport advice, return precautions, and confirmation that the patient/carer understood the plan.

28. Quality indicators and audit

Indicator	Suggested standard / measure
Initial stabilization	Percentage with complete observations and ABCDE documentation; time to escalation for unstable patients.
ECG completion and review	Percentage of suspected syncope/TLoC patients receiving a 12-lead ECG and documented clinician interpretation.
Event reconstruction	Percentage with witness/EMS account sought and structured pre-during-post description documented.
Risk identification	Percentage with documented high-risk features and explicit disposition rationale.
Targeted testing	Rates of head CT, EEG, carotid imaging, troponin, and broad laboratory testing without documented indication.
Orthostatic assessment	Percentage of clinically appropriate patients with technique, BP, pulse, symptoms, and safety recorded.
Disposition safety	72-hour and 30-day return, serious outcome, admission after discharge, arrhythmia, injury, and death review.
Communication	Percentage with documented driving/work advice, written return precautions, follow-up, and pending-result ownership.
Equity and dignity	Delays or adverse outcomes associated with age, disability, communication needs, pregnancy, poverty, transport, or lack of specialist access.

29. Training and implementation

- All ED clinicians shall receive training in syncope/TLoC event reconstruction, ECG danger patterns, orthostatic measurement, seizure differentiation, adult risk-tool guardrails, and safe discharge communication.
- Simulation shall include unstable bradyarrhythmia, exertional syncope with normal initial ECG, occult GI bleed, ruptured ectopic pregnancy, convulsive syncope, older-adult unexplained fall, paediatric athlete, and device-related syncope.
- The department shall maintain ready access to ECG comparison, cardiac monitoring, defibrillation/pacing, pregnancy testing, targeted laboratory testing, echocardiography/POCUS, device interrogation or referral, and specialist transfer contacts.
- Clinical governance shall review missed cardiac syncope, serious outcomes after discharge, unnecessary testing, delayed transfer, incomplete driving advice, and recurrent-attendance cases, and shall update the protocol after guideline or service change.

ANNEX A. One-page syncope / TLoC workflow

Stage	Action
1. Recognize danger	Incomplete recovery, shock, hypoxaemia, chest pain/dyspnoea, bleeding, pregnancy complication, focal deficit/headache, major injury, exertional/supine event, palpitations, abnormal pulse/ECG, structural heart disease.
2. Stabilize	ABCDE, injury protection, observations, monitoring, IV access when indicated, glucose for persistent/uncertain cases, condition-specific emergency treatment.
3. Reconstruct	**Patient + witness/EMS account:** posture, trigger, prodrome, colour, movements, duration, injury, confusion, focal symptoms, palpitations.
4. Examine and ECG	Cardiovascular, neurological, bleeding/volume, trauma, pregnancy; 12-lead ECG for all; orthostatic BP/pulse when safe and relevant.
5. Target tests	CBC for bleeding/anaemia; electrolytes for volume/drug/rhythm risk; troponin for ACS/high-risk or approved score; pregnancy/PE/imaging/echo/EEG only when indicated.

Stage	Action
6. Classify risk	**High:** admit/transfer/monitor. Intermediate: senior review + observation/rapid pathway. Low: classic benign pattern + normal exam/ECG + safe follow-up. Use adult score only within eligibility.
7. Disposition	Treat injury and cause; provide written uncertainty, return signs, driving/work/sport restrictions, follow-up, and named owner of pending results.

ANNEX B. High-risk red-flag card

[ ] Persistent altered consciousness, abnormal vital signs, hypoxaemia, shock, or recurrent event in the ED.

[ ] Syncope during exertion or while supine; sudden event without prodrome; palpitations immediately beforehand.

[ ] Chest pain, new/unexplained dyspnoea, severe headache, focal neurological deficit, major bleeding, or pregnancy-related pain/bleeding.

[ ] Known heart failure, cardiomyopathy, significant valve/congenital disease, prior ventricular arrhythmia, pulmonary hypertension, or implanted cardiac device.

[ ] Abnormal ECG: significant bradycardia, AV block, bundle/bifascicular block, ventricular arrhythmia, long/short QT, Brugada, pre-excitation, ischaemia, pathological Q waves, sustained atrial arrhythmia, paced abnormality.

[ ] Heart murmur or signs of heart failure; severe anaemia or suspected haemorrhage.

[ ] Family history of sudden unexplained death or inherited cardiac disease at a young age.

[ ] Age over 65 with unexplained TLoC without prodrome, especially with injury or heart disease.

[ ] Significant injury, anticoagulation, unsafe mobility, recurrent unexplained falls, or inability to obtain reliable follow-up.

[ ] Paediatric exertional/supine syncope, abnormal ECG/exam, congenital disease, or young family sudden death.

ANNEX C. First-10-minute checklist

[ ] Resuscitation/monitored location assigned according to risk; fall and trauma precautions applied.

[ ] ABCDE and complete observations documented; persistent altered state routed to Protocol 17.

[ ] Exact event time, posture/activity, trigger, prodrome and recovery recorded; witness/EMS/video sought.

[ ] 12-lead ECG obtained and reviewed by clinician; prior tracing requested.

[ ] Glucose checked when indicated; pregnancy testing considered.

[ ] IV access, continuous ECG/pulse oximetry/BP monitoring applied when high risk.

[ ] Arrhythmia/ACS/PE/bleeding/ectopic/stroke/seizure/trauma/toxic pathway activated when suspected.

[ ] Injury assessed and treated; unassisted standing prohibited until safe.

[ ] Next reassessment time and responsible clinician documented.

ANNEX D. Witness and event-description checklist

[ ] Circumstances, posture, activity and possible trigger immediately before event.

[ ] Prodrome: warmth, sweating, nausea, visual dimming, dizziness, chest pain, dyspnoea, palpitations, aura, headache.

[ ] Eyes open or closed; skin colour; breathing pattern; pulse if witnessed.

[ ] Loss of tone versus stiffening; head/eye turning; number, rhythm and duration of jerks.

[ ] Tongue bite and location; urinary/faecal incontinence; injury and site.

[ ] Duration of unresponsiveness and time to normal speech, behaviour and walking.

[ ] Post-event confusion, sleepiness, headache, myalgia, focal weakness or persistent symptoms.

[ ] Photos/video/EMS rhythm strip available and stored according to consent/privacy policy.

ANNEX E. ECG danger-pattern card

[ ] Persistent inappropriate bradycardia, sinus pauses, Mobitz II or complete AV block.

[ ] Complete bundle-branch block, bifascicular block, alternating bundle pattern, QRS >130 ms.

[ ] Ventricular tachycardia, frequent ventricular ectopy, nonsustained VT, or pre-excited atrial fibrillation.

[ ] Corrected QT markedly prolonged (>480 ms in CSRS) or short; review medicines and electrolytes.

[ ] Type 1 Brugada pattern or concerning right-precordial changes, especially with fever.

[ ] Ventricular pre-excitation / WPW pattern.

[ ] Sustained atrial arrhythmia or rapid/slow AF associated with symptoms.

[ ] ST/T abnormality, pathological Q waves, or evidence of acute ischaemia.

[ ] LVH/HCM pattern, right-heart strain, epsilon wave/ARVC concern, or other inherited/structural clue.

[ ] Paced rhythm with concern for capture/sensing/device malfunction or no prior comparison.

ANNEX F. Orthostatic measurement card

Step	Practice
Safety first	Do not stand a patient with instability, severe symptoms, major injury, high fall risk, or inability to cooperate. Use assistance and stop immediately if symptoms develop.
Baseline	Allow supine rest when feasible. Record BP and pulse; note symptoms. If supine measurement is impractical, document use of seated baseline.
Standing	Assist to stand. Record BP and pulse after at least 1 minute and preferably repeat through 3 minutes under local policy; record symptom reproduction.
Positive result	A fall of at least 20 mmHg systolic or 10 mmHg diastolic supports postural hypotension. The clinical context and symptoms remain essential.
Next steps	Review volume loss, bleeding, medicines, autonomic disease and comorbidity. Treat cause; repeat after intervention when useful; refer if history remains suggestive despite nondiagnostic measurements.

ANNEX G. Targeted-investigation card

Clinical question	Investigation
Could this be arrhythmia or structural disease?	ECG for all; monitoring; electrolytes; echo/POCUS; device interrogation; ambulatory monitor or specialist referral.
Could this be ACS?	Serial ECG/troponin and ACS pathway based on symptoms, history and ECG.
Could this be PE?	Clinical probability pathway, D-dimer or imaging as indicated; avoid routine testing for syncope alone.
Could this be bleeding or ectopic pregnancy?	CBC, pregnancy test, type/screen, ultrasound/CT and haemorrhage pathway as indicated.
Could this be neurological or trauma?	Head CT/MRI only for focal deficit, persistent altered state, severe headache, seizure-specific indication or significant trauma.
Could this be seizure?	Structured history; glucose/electrolytes as indicated; ECG always; EEG/neurology not routine but arranged when features support seizure.
Could this be medication/toxic/metabolic?	Targeted levels, toxicology, COHb, renal/liver tests, glucose and electrolytes according to exposure and treatment relevance.

ANNEX H. CSRS worksheet and guardrails

[ ] Patient is age 16 or older and had true syncope with complete recovery.

[ ] No serious cause has already been identified during ED evaluation.

[ ] Not being used for definite seizure, persistent altered consciousness, intoxication, major trauma, or non-syncope collapse.

[ ] All score variables are available and accurately measured/interpreted.

[ ] Clinical diagnosis terms vasovagal or cardiac syncope are justified, not chosen to manipulate the score.

[ ] Total score and risk category documented; score supports but does not replace senior judgement.

[ ] Follow-up and monitoring capability match the risk category and local pathway.

[ ] Unsafe social context, injury, pregnancy, paediatric status, device issue, or clinician concern overrides a nominally low score.

Item	Points
Vasovagal predisposition	-1
Heart disease	+1

Item	Points
Any SBP <90 or >180	+2
Troponin >99th percentile	+2
QRS axis < -30 or >100	+1
QRS >130 ms	+1
QTc >480 ms	+2
ED vasovagal diagnosis	-2
ED cardiac diagnosis	+2
TOTAL	

ANNEX I. Suspected cardiac-syncope checklist

[ ] Continuous ECG monitoring and IV access applied; defibrillation/pacing capability available.
[ ] Exertional/supine onset, prodrome, palpitations, chest symptoms, structural disease and family sudden death documented.
[ ] ECG personally reviewed and compared with previous; repeat ECG/rhythm strip obtained with recurrence.
[ ] Electrolytes, troponin, imaging and echo selected for specific clinical questions.
[ ] QT-prolonging, bradycardic, hypotensive, or pro-arrhythmic medicines reviewed and corrected where safe.
[ ] Cardiology/electrophysiology contacted; device interrogation arranged when applicable.
[ ] Sport, driving, machinery and safety restrictions documented.
[ ] Admission/transfer or rapid ambulatory-monitoring plan is explicit and owned.

ANNEX J. Syncope versus seizure checklist

[ ] Patient, witness and EMS descriptions obtained separately where possible.
[ ] Posture/trigger/prodrome recorded; pallor/sweating favour syncope but are not definitive.
[ ] Head turning, prolonged rhythmic jerking, unusual posturing, lateral tongue bite and prolonged confusion assessed.
[ ] Brief irregular jerks recognized as possible convulsive syncope.
[ ] ECG completed even when seizure is suspected; arrhythmia/channelopathy considered.
[ ] Glucose and targeted metabolic tests obtained as indicated.
[ ] Persistent deficit/headache/altered state routed to neurological emergency pathway.
[ ] EEG not ordered routinely; neurology/first-seizure follow-up arranged when supported.

ANNEX K. Older adult and unexplained-fall checklist

[ ] Asked specifically about amnesia, unwitnessed fall, prior similar events and collateral history.
[ ] ECG, pulse, cardiac examination and postural BP/pulse completed when safe.
[ ] Medication reconciliation includes antihypertensives, diuretics, sedatives, opioids and recent changes.
[ ] Occult bleeding, infection, dehydration, aortic stenosis, arrhythmia and carotid sinus syndrome considered.
[ ] Head injury, anticoagulation, fractures, mobility and pain assessed.
[ ] Frailty, cognition, vision, footwear, continence and home hazards reviewed.
[ ] Safe walking, transport, caregiver support, food/fluid access and follow-up confirmed.
[ ] Medication/falls/geriatric or primary-care review assigned to a named service.

ANNEX L. Pregnancy and postpartum checklist

[ ] Gestational age or postpartum interval recorded; pregnancy test obtained when status uncertain.
[ ] Vaginal bleeding, abdominal/pelvic pain, dyspnoea, chest pain, headache, hypertension and neurological symptoms assessed.
[ ] Ectopic pregnancy, haemorrhage, PE, arrhythmia, aortic disease, preeclampsia/eclampsia and cardiomyopathy considered.
[ ] Maternal ABC stabilization completed; left uterine displacement used for significant later-pregnancy instability.
[ ] Obstetric review and fetal assessment arranged after maternal stabilization when indicated.
[ ] Necessary imaging and treatment not delayed solely because of pregnancy; medication safety checked.
[ ] Driving/work, supervision and follow-up plan documented.

ANNEX M. Paediatric syncope checklist

[ ] Age, weight, complete observations, hydration, glucose when indicated, and return to baseline documented.

[ ] Patient and witness history includes exertion, posture, prodrome, chest pain, palpitations, movements and recovery.

[ ] Congenital/structural disease, Kawasaki history, deafness, eating disorder, stimulant/supplement use and family sudden death reviewed.

[ ] Cardiac and neurological examination completed; 12-lead ECG interpreted for age.

[ ] Exertional/supine event, abnormal ECG/exam, no prodrome, palpitations, or family history prompted senior/paediatric-cardiology discussion.

[ ] No return to competitive sport after exertional/unexplained syncope until specialist clearance.

[ ] Safe discharge requires normal observations/exam/ECG, benign history, reliable carer and written return precautions.

ANNEX N. Low-risk discharge checklist

[ ] Classic uncomplicated vasovagal/situational pattern or adequately treated postural cause documented.

[ ] Complete recovery to normal baseline; stable observations and safe mobilization.

[ ] Normal or explained ECG; no high-risk history, examination finding, comorbidity or family history.

[ ] No unresolved bleeding, pregnancy, PE, neurological, toxic, metabolic or injury concern.

[ ] Patient understands warning symptoms and how to sit/lie down safely; hydration/trigger/medication advice individualized.

[ ] Written emergency return signs provided and understood.

[ ] Driving, work, machinery, bathing/swimming and sport advice documented under local rules.

[ ] Follow-up and ownership of pending results confirmed; safe transport/support arranged.

ANNEX O. Transfer and handover minimum dataset

Category	Required information
Identity / contacts	Patient identifiers, family/decision-maker, referring and receiving clinicians, callback numbers, pregnancy/device status.
Event timeline	Time, posture/activity, trigger, prodrome, palpitations, movements, duration, injury, recovery, recurrent episodes, EMS findings.
Clinical state	ABCDE, observations and trends, rhythm, orthostatic findings, neurological status, bleeding/injury, mobility and frailty.
ECG / monitoring	All ECGs and rhythm strips, prior comparison, automated and clinician interpretation, telemetry events, device data.
Tests / treatments	Glucose, bloods, troponin, imaging, echo/POCUS, pregnancy/PE evaluation, medicines, fluids, transfusion, response.
Risk / reason	Suspected cause, high-risk features, CSRS if eligible, reason for admission/transfer and specialist advice.
Next actions	Monitoring, next ECG/test/medicine, echo/device interrogation, consultant review, pending results, driving/safety advice and family update.

ANNEX P. Audit tool

Case review item	Yes / No / N/A / notes
ABCDE and complete observations documented	
Witness/EMS event description sought	
12-lead ECG performed and clinician interpretation documented	
High-risk history/examination/ECG features assessed	
Orthostatic assessment completed when appropriate and safe	
Investigations targeted to documented clinical questions	
Routine head CT/EEG/carotid imaging avoided unless indicated	

Case review item	Yes / No / N/A / notes
Adult risk score used only within eligibility and with caveats	
Serial monitoring/reassessment appropriate to risk	
Serious cause pathway and specialist escalation timely	
Injury, mobility and social safety addressed	
Disposition rationale explicit	
Driving/work/sport advice and return precautions documented	
Follow-up and pending-result ownership confirmed	
30-day serious outcome or return reviewed	

ANNEX Q. Local configuration checklist

[ ] Triage criteria and immediate escalation process for high-risk TLoC.

[ ] 12-lead ECG availability, clinician competency, comparison access, and cardiology over-read process.

[ ] Continuous monitoring capacity, observation goals and duration, defibrillation/pacing access, and telemetry review ownership.

[ ] Orthostatic BP/pulse equipment, standardized technique, falls precautions and documentation template.

[ ] Approved adult risk score, electronic calculator, eligibility rules and disposition pathway, or explicit decision not to use a score.

[ ] Troponin/ACS, PE, pregnancy, haemorrhage, neurological imaging, seizure, toxicology and trauma pathways.

[ ] Echocardiography/POCUS, ambulatory monitoring, exercise testing, device interrogation and inherited-arrhythmia referral access.

[ ] Paediatric, pregnancy/postpartum, older-adult/falls and athlete-specific pathways.

[ ] Cardiology, electrophysiology, paediatrics, neurology, obstetrics, geriatrics and transfer contact list.

[ ] Local driving, occupational, sport, aviation, diving and machinery guidance and patient information leaflets.

[ ] Pending-result governance, rapid follow-up clinic capacity and process for patients without primary care or transport.

[ ] Named audit lead, data definitions, simulation schedule and serious-outcome review process.

ANNEX R. References and source tools

1. Shen WK, Sheldon RS, Benditt DG, et al. 2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope. Circulation. 2017;136:e60-e122.
2. Brignole M, Moya A, de Lange FJ, et al. 2018 ESC Guidelines for the diagnosis and management of syncope. European Heart Journal. 2018;39:1883-1948.
3. Mockel M, Janssens KAC, Pudasaini S, et al. The syncope core management process in the emergency department: a consensus statement of the EUSEM syncope group. European Journal of Emergency Medicine. 2024;31:250-259.
4. National Institute for Health and Care Excellence. Transient loss of consciousness (blackouts) in over 16s. Clinical guideline CG109. Published 2010; last updated 21 November 2023.
5. National Institute for Health and Care Excellence. Hypertension in adults: diagnosis and management. NICE guideline NG136. Postural hypotension recommendations amended 2023.
6. Thiruganasambandamoorthy V, Kwong K, Wells GA, et al. Development of the Canadian Syncope Risk Score to predict serious adverse events after emergency department assessment of syncope. CMAJ. 2016;188:E289-E298.
7. Thiruganasambandamoorthy V, Sivilotti MLA, Le Sage N, et al. Multicenter Emergency Department Validation of the Canadian Syncope Risk Score. JAMA Internal Medicine. 2020;180:737-744.
8. Zimmermann T, du Fay de Lavallaz J, Nestelberger T, et al. International Validation of the Canadian Syncope Risk Score. Annals of Internal Medicine. 2022;175:783-794.
9. Sanatani S, Chau V, Fournier A, et al. Canadian Cardiovascular Society and Canadian Pediatric Cardiology Association Position Statement on the Approach to Syncope in the Pediatric Patient. Canadian Journal of Cardiology. 2017;33:189-198.
10. Queensland Children's Hospital. Syncope - Emergency management in children. Guideline CHQ-GDL-00772, version 1.1; effective 2024, review due 2026.
11. World Health Organization and International Committee of the Red Cross. Basic Emergency Care: Approach to the Acutely Ill and Injured. WHO; 2018.
12. Local source tools to attach before approval: ECG danger-pattern guide; orthostatic observation form; arrhythmia/ACS/PE/bleeding pathways; paediatric and pregnancy syncope pathways; device-interrogation process; adult risk-score calculator; driving and occupational guidance; transfer and discharge checklists.