Clinical Practice Procedures:
Assessment/QAS Adult Deterioration Assessment

Policy code	CPP_AS_QAD_0924
Date	September, 2024
Purpose	To ensure a consistent procedural approach to undertaking QAS Adult Deterioration Assessment.
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to patients ≥ 16 years of age.
Source of funding	Internal – 100%
Author	Clinical Quality & Patient Safety Unit, QAS
Review date	September, 2027
Information security	UNCLASSIFIED – Queensland Government Information Security Classification Framework.
URL	https://ambulance.qld.gov.au/clinical.html

While the QAS has attempted to contact all copyright owners, this has not always been possible. The QAS would welcome notification from any copyright holder who has been omitted or incorrectly acknowledged.

All feedback and suggestions are welcome. Please forward to: Clinical.Guidelines@ambulance.qld.gov.au

Disclaimer

The Digital Clinical Practice Manual is expressly intended for use by appropriately qualified QAS clinicians when performing duties and delivering ambulance services for, and on behalf of, the QAS.

The QAS disclaims, to the maximum extent permitted by law, all responsibility and all liability (including without limitation, liability in negligence) for all expenses, losses, damages and costs incurred for any reason associated with the use of this manual, including the materials within or referred to throughout this document being in any way inaccurate, out of context, incomplete or unavailable.

QAS Adult Deterioration Assessment

September, 2024

Clinical deterioration is an acute medical event that is characterised by an unexpected change in a patient's baseline physiological status, resulting in haemodynamic instability and/or cognitive decline.[1] Failure to recognise and appropriately respond to clinical deterioration is an emergent risk to patient safety and is recognised as one of the leading causes of preventable in-hospital death.[2]

The Queensland Adult Deterioration Detection System (Q-ADDS) is a validated vital sign observation chart that is currently used at all public hospitals in Queensland.[3] Briefly, the chart assigns a numerical value to each of the patient's vital signs, with these individual numbers then combined to calculate the patient's total score. If this score reaches a predetermined threshold, the patient must be escalated for immediate review.

In collaboration with Queensland Health, an adapted version of the Q-ADDS form has been developed to assist ambulance clinicians in monitoring patients that are delayed offloading at public Emergency Departments. This tool is designed to identify clinical deterioration and provide a clear escalation process for clinicians to follow in instances that this occurs.

Indications

- All patients aged ≥ 16 years that are delayed offloading at a Queensland Health hospital facility.

Contraindications

- Patients that are immediately offloaded
- Patients that are delayed offloading at private hospital facilities
- Patients aged < 16

Complications

- Nil in this setting

1. Determine the Australasian Triage Scale (ATS) category the patient has been allocated by asking the triage nurse.
2. As directed, proceed to the designated QAS waiting area and collect a hospital printed A3 QAS Q-ADDS form.
3. In the space provided on **page one**, affix the patient's identification label.
4. In the space provided on **page two**, record the patient's ATS category.
5. In the relevant spaces on **page two**, record the following vital signs by placing a dot (•) in the appropriate box:
    - Respiratory rate
    - Oxygen saturation
    - Oxygen flow rate (if on supplementary oxygen)
    - Systolic blood pressure
    - Heart rate
    - Cardiac rhythm (if clinically indicated)
    - Pain score
    - Temperature
    - Behaviour and consciousness
6. Use the Q-ADDS Score Legend to assign a score of **0–E** for each individual vital sign.
7. Add all of the individual scores together to calculate the patients Total Q-ADDS Score.
8. If the Total Q-ADDS Score is **≥ 3**, notify a relevant Emergency Department clinician (i.e., Triage Nurse or Nursing Team Leader) and request the patient be clinically reviewed.
9. If an **E** score is recorded in any field, immediately initiate an Emergency Call to any hospital personnel and provide advanced life support interventions.
10. On **page three**, identify if the patient presents with any 'criteria of concern' and/or meets the 'could it be sepsis?' metrics. If either of these criteria are met, notify a relevant Emergency Department clinician (i.e., Triage Nurse or Nursing Team Leader) and request the patient be clinically reviewed.
11. If clinically indicated, document the neurological status and blood glucose level on **page four**. If the Glasgow Coma Score of the patient falls by ≥ 2 points, immediately initiate an Emergency Call to any hospital personnel and provide advanced life support interventions.
12. Repeat steps 5–11 at the following intervals until the patient is offloaded:
    a. Patients allocated an **ATS category 1–2** must be reassessed every **10 minutes**. If delayed > 1 hour, request the patient be clinically reviewed by relevant Emergency Department clinician or contact the QAS Clinical Hub (1300 315 218 option 3) to discuss modifying the frequency of observations.
    b. Patients allocated an **ATS category 3–5** must be reassessed every **30 minutes**.

13. If the patient has been delayed for > 1 hour and meets **all** of the following criteria, request the patient be clinically reviewed for potential off-load:
    - Total Q-ADDS Score = 0
    - Clinical Frailty Score < 3
    - ATS Category 3–5
14. Upon clinical handover, complete the Q-ADDS Review procedure within the patients Digital Ambulance Report Form (DARF). Additionally, a photo of **page 2** of the Q-ADDS must be captured as a clinical image.

Additional information

- There is no requirement to document the patients' vital signs within DARF following hospital triage as they are recorded within the Q-ADDS form.
- The frequency of observations mandated in the Q-ADDS form were adopted from the College of Emergency Nursing Australasia and Australia College for Emergency Medicine joint statement on Vital Signs Monitoring in Emergency Departments.[4]
- In instances where there are delays in offloading a patient at a healthcare facility, ambulance clinicians have a continuing responsibility to ensure patient safety.

Additional information *(cont.)*

- While the overall primacy of care transitions to the healthcare facility upon triage, ambulance clinicians must adhere to the following principles while awaiting offloading:
    a. The administration of medications or provision other clinical interventions must be undertaken if clinically required. This should occur in consultation and collaboration with medical/ nursing staff.
    b. The physical needs and personal cares of patients must be closely monitored. This includes holistic cares such as the prevention of pressure related injuries, toiletry requirements and ensuring access to food and water (if clinically appropriate).
- This CPP has been informed by the Australia Commission on Safety and Quality in Health Care National Consensus Statement on recognising and responding to acute deterioration.[5]
- The supply and availability of Q-ADDS forms at hospital are managed at a local level with oversight from the District Director.

Queensland Government

Queensland Ambulance Service (QAS) Transfer of Care Emergency *Queensland* Adult Deterioration Detection System (*Q*-ADDS)

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

Facility: .....

Date of birth: Sex: ☐ M ☐ F ☐ I

General Instructions

This form must be completed for **all adult patients (>16 years)** that are not immediately off-loaded at a Queensland Health Facility.

To complete the form, follow the instructions below.

1. Record the patient's vital signs as clinically appropriate to their ATS category. Using the *Q*-ADDS Score legend, assign a score of 0–**E** for each individual vital sign. Add the individual scores together to calculate the patients Total *Q*-ADDS Score. The Total *Q*-ADDS Score = Respiratory Rate + O_2 Saturation + O_2 Flow Rate + Systolic Blood Pressure + Heart Rate + Temperature + Behaviour and Consciousness.
2. When graphing observations, place a dot (●) in the appropriate box and join to the preceding dot (e.g. ●╲●). For blood pressure, use the symbols indicated (⟩‹). You must write any observation outside the range of the graph as a number.
3. If the patient's Total *Q*-ADDS Score is ≥3–7, request the patient be immediately reviewed by the Triage Nurse or Nursing Team Leader and notify an on-duty QAS supervisor. Document the date and time of this escalation in the DARF using the *Q*-ADDS Procedure.
4. Document Neurological observations on page 4 if clinically indicated. Initiate an Emergency Call if GCS falls by ≥2 points.

fold line

QAS TRANSFER OF CARE EMERGENCY Q-ADDS

DO NOT WRITE IN THIS BINDING MARGIN

v2.00 - 03/2024
WINC Code: 1NY43360
SW1230

fold line

fold line

Adult			Date												
			Time												
Australian Triage Scale (ATS) Category															
Clinical Frailty Scale Score															
Respiratory Rate (breaths / min) Measure for a Total minute		**E**	≥36												
		4	31–35	4	4	4	4	4	4	4	4	4	4	4	4
		2	25–30												
		1	21–24												
		0	17–20												
			13–16												
		1	9–12												
		E	≤8												
O_2 Saturation (%)			≥98												
		0	95–97												
			92–94												
		1	90–91												
		2	85–89												
		4	≤84	4	4	4	4	4	4	4	4	4	4	4	4
Oxygen* (L/min)		**E**	15												
		4	>11–14	4	4	4	4	4	4	4	4	4	4	4	4
		2	>5–11												
		1	2–5												
		0	<2												
FM Face mask **NP** Nasal prongs			Mode												
Blood Pressure (mmHg) Score systolic BP		4	≥200	4	4	4	4	4	4	4	4	4	4	4	4
		2	190s												
			180s												
			170s												
		1	160s												
			150s												
			140s												
		0	130s												
			120s												
			110s												
		1	100s												
		2	90s												
		4	80s	4	4	4	4	4	4	4	4	4	4	4	4
		E	70s												
			60s												
Heart Rate (beats / min)		**E**	≥160												
		4	150s	4	4	4	4	4	4	4	4	4	4	4	4
		4	140s	4	4	4	4	4	4	4	4	4	4	4	4
		3	130s												
		2	120s												
			110s												
		1	100s												
			90s												
			80s												
		0	70s												
			60s												
			50s												
		2	40s												
		E	30s												
Cardiac Rhythm															
Pain Score (0-10)															
Temperature (°C)		2	≥39.5												
			38.5–39.4												
		1	38–38.4												
			37.5–37.9												
		0	37–37.4												
			36.1–36.9												
		1	35.1–36												
		2	34.1–35												
		4	≤34	4	4	4	4	4	4	4	4	4	4	4	4
Behaviour and Consciousness If necessary, wake patient before scoring		4	Changing behaviour or New confusion	4	4	4	4	4	4	4	4	4	4	4	4
		0	**A**lert												
		1	**V**oice												
		E	**P**ain												
			Unresponsive												
TOTAL *Q*-ADDS SCORE															
Paramedic Initials															

Name:

URN: DOB:

Q-ADDS Score Legend

0	Score 0
1	Score 1
2	Score 2
3	Score 3
4	Score 4
E	Emergency call

Clinical Frailty Scale Legend

(See other page for further information)

1 Very Fit
2 Well
3 Managing well
4 Vulnerable
>5 Frail

Q-ADDS table:
- Record the patient's vital signs by placing a dot (●) in the appropriate box and join the preceding dot (●╲●). For BP use the symbol indicated (⟩‹).

Q-ADDS Score:
- Using the legend, assign a score of 0–**E** for each individual vital sign.

Total Q-ADDS Score:
- Add all the individual scores together to calculate the Total Q-ADDS Score.

ATS Category 1–2:
- 10 minute intervals.
- If delayed >1 hour, discuss the required frequency of observations with an ED clinician. If ongoing clinical concerns exist, call the QAS Clinical Hub on 1300 315 280 (Option 3).

ATS Category 3–5:
- 30 minute intervals.

Total *Q*-ADDS Score ≥3:
- Request the patient be immediately reviewed by the Triage Nurse or Nursing Team Leader.
- Notify an on-duty QAS supervisor.

E score in any field:
- Provide advanced life support interventions.
- Immediately initiate an Emergency Call

- If the patient has been delayed for >1 hour **AND** meets the following criteria, request a clinical review be performed to discuss off-load:

Total *Q*-ADDS Score 0

AND

Clinical Frailty Score <3

AND

ATS Category 3–5

- Complete Q-ADDS procedure in DARF
- Capture a photo of this page in DARF.

fold line

PAGE 3

Cardiac Rhythm Legend

AF = Atrial Fibrillation
AFL = Atrial Flutter
HB = Heart Block
JR = Junctional Rhythm
SB = Sinus Bradycardia
SR = Sinus Rhythm
ST = Sinus Tachycardia
SVT = Supraventricular Tachycardia

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

Date of birth: Sex: ☐ M ☐ F ☐ I

Could it be Sepsis?

Notify Triage Nurse or Nursing Team Leader if the patient has a known or suspected infection, plus any of the following clinical features:

- Respiration Rate >20 breaths per minute
- Heart Rate >90 beats per minute
- Systolic Blood Pressure <100mmHg
- Systolic Blood Pressure drop >40mmHg
- Temperature <35.5°C
- Temperature >38.4°C
- New oxygen requirement to keep oxygen saturation >91%
- New dysrhythmia
- Not passed urine in the last 12 hours
- Lactate ≥2mmol/L
- Non-blanching rash/mottled/ashen/cyanotic
- Acute deterioration in functional ability
- Taking an immunomodulator
- Recent chemotherapy
- Evidence of new or altered mental state
- Family members/carers concerned about mental state

Any Criteria of Concern Identified?

Notify Triage Nurse or Nursing Team Leader, if the patient has any of the following clinical features:

- Threatened airway
- New neurological deficits
- Chest pain with acute ischaemic ECG changes
- Uncontrolled pain requiring analgesia every 10 minutes or less
- Ischaemic limb
- Haemorrhage that is not controlled by direct pressure
- Family or carer are concerned about patient
- You are concerned about the patient

Clinical Frailty Scale*

Scoring frailty in people with dementia:

The degree of frailty generally corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia** recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In severe dementia they cannot do personal care without help.

1 VERY FIT: People who are **robust, active, energetic** and motivated. They tend to exercise regularly and are among the fittest for their age.

2. WELL: People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally** (e.g. seasonally).

3. MANAGING WELL: People whose **medical problems are well controlled**, but often are not regularly active beyond routine walking.

4. VULNERABLE: While **not dependent** on others for daily help, often **symptoms limit activities**. A common complaint is being "slowed up" and/or being tired during the day.

5. MILDLY FRAIL: People who often have **more evident slowing**, and need help with **high order IADLs** (finances, transportation, heavy housework). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation.

6. MODERATELY FRAIL: People who need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance with dressing.

7. SEVERELY FRAIL: Completely dependent for personal care, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within approx. 6 months).

8. VERY SEVERELY FRAIL: Completely dependent approaching end of life. Typically, they could not recover even from a minor illness.

9. TERMINALLY ILL: Approaching the end of life. This category applies to people with a **life expectancy <6 months**, who are **not otherwise evidently frail.**

*1. Canadian Study on Health & Aging, Revised 2008. 2. K.Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489–495. © Rockwood. Version 1.2, 2019.

fold line

PAGE 4

IV Cannula

Site 1:	Gauge:	Site 2:	Gauge:
Inserted by:		Inserted by:	
Date:	Time:	Date:	Time:
Removed by:		Removed by:	
Date:	Time:	Date:	Time:

(Affix identification label here)

URN:

Family name:

Given name(s):

Address:

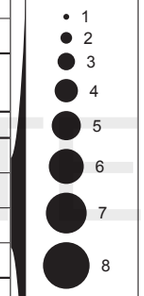
Date of birth: Sex: ☐ M ☐ F ☐ I

Neurological

		Date											
		Time											
Eyes open	Spontaneous	4											
	To speech	3											
	To pain	2											
	No response	1											
Best verbal response	Orientated	5											
	Confused	4											
	Inappropriate words	3											
	Incomprehensible sounds	2											
	No response	1											
	ETT / Tracheostomy												
Best motor response	Obeys commands	6											
	Localises to pain	5											
	Withdraws from pain	4											
	Flexion to pain (decorticate)	3											
	Extension to pain (decerebrate)	2											
	No response	1											
	Total												
	Initiate an Emergency Call if GCS falls by ≥2 points												
Pupils	Size (left)												
	Reaction (left)												
	Size (right)												
	Reaction (right)												
Limb movements: Arms	Normal power												
	Mild weakness												
	Severe weakness												
	Spastic flexion												
	Extension												
	No response												
Limb movements: Legs	Normal power												
	Mild weakness												
	Severe weakness												
	Extension												
	No response												
BGL	mmol/L												

If BGL <4 or >15 mmol/L, Notify Triage Nurse or Nursing Team Leader immediately and commence BGL monitoring form

Pupil sizes (mm)



Pupil reaction
+ Brisk
X Nil
S Sluggish
C Eye closed by swelling

fold line