



Clinical Practice Guidelines: Other/Pain management

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Pain is most commonly described as “an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage”. Pain is a subjective and individual, multifactorial experience influenced by culture, previous pain events, beliefs, mood, and ability to cope. It is therefore emotional as well as sensory in nature.^[1]

Acute pain is an extremely common symptom treated in the out-of-hospital setting, yet oligoanalgesia due to under-recognition, under-treatment, or delays in analgesia is often a reality for many patients.^[2] One in five Australian adults are estimated to live with chronic pain with injury being the leading contributor to both acute and chronic pain.^[3]

Clinical features



- Self-reported pain/elevated pain score
- History of potentially painful injury or condition
- Distress/agitation
- Pallor, muscle tension, guarding, sweating
- Dilated pupils
- Nausea, vomiting
- Increased heart rate, respiratory rate, and blood pressure
- Signs and symptoms specific to the underlying cause



Risk assessment

Patients at risk of under-reporting pain, and therefore being under treated for their pain include:

- Older people, paediatrics, and neonates
- Patients with mental health diagnosis
- Language and cultural barriers
- Patients with cognitive impairment
- Patients who are pregnant

Administration of analgesia can have adverse effects. When determining the most appropriate pain relief consideration should be given to:

- *Physiological factors* – geriatric, paediatric, and patients with diminished drug clearance (e.g., renal or liver dysfunction)
- *Clinical features* – hypovolaemia, respiratory compromise, head injury
- Any previous adverse responses the patient may have had to analgesia.

Appropriate management of pain in the out-of-hospital setting relies on three key areas:

- 1) Assessment of pain
- 2) Provision of appropriate analgesia
- 3) Application of the Principles of Pain Management

Assessment

A clinical assessment of pain requires a systematic approach including elements of observation, physical examination, vital signs, and the patient's self-report of pain.^[2] A commonly accepted mnemonic used for the assessment of pain is **OPQRSTT**:

- **Onset:**
What was the patient doing when the pain started (*active, inactive, stressed*), and was the onset sudden, gradual or part of an ongoing chronic problem?
- **Provocation/Position:**
Where is the pain? Does anything make the pain better or worse?
- **Quality:**
Describe the pain. For example is it dull, sharp or crushing?
- **Region/Radiation:**
Does the pain radiate or move anywhere?
- **Severity:**
How severe is the pain?
- **Timing:**
When did the pain start and does it come and go?
- **Treatment:**
Have you attempted self treatment or taken anything for your pain?

Effective pain management involves the use of an age and patient appropriate pain assessment tool, especially when managing patients with special needs who are unable to effectively communicate. This can include patients presenting with altered level of consciousness (ALOC), language barriers, cognitive impairment, or paediatrics. While many such tools exist, not all are appropriate for out-of-hospital use. **Table 1** outlines QAS approved pain assessment tools.

Table 1

Categorical scales	Categorical scales use words to describe the magnitude of pain or the degree of pain relief. The verbal descriptor scale (VDS) is the most common example (e.g., using terms such as none, mild, moderate, severe). This is preferred if a patient is unable to understand the numerical rating scale.
Numerical rating scales	Numerical rating scales (NRS) have both written and verbal forms. Patients rate their pain intensity on the scale of zero to ten where zero represents “no pain” and ten represents “worst pain imaginable.” The Verbal NRS (VNRS) is typically administered using a phrase such as: “On a scale of zero to ten, with zero being no pain at all and ten being the worst pain you could imagine, where would you rate the pain, you are experiencing right now?”
Other assessment tools	Validated tools for measuring pain in neonates, infants and children must be both age and developmentally appropriate. <ul style="list-style-type: none">• Wong-Baker FACES pain scale is for patients ages three and above.• The revised “Faces, Legs, Activity, Cry and Consolability” (r-FLACC) scale can be used for all patients who have difficulty communicating their pain e.g., patients with cognitive impairment or who may be critically unwell, or patients whose language or cultural background differs from the treating clinician.^[6,7]

Reassessment

Patients in pain should receive appropriate analgesia in a timely fashion. The effectiveness of analgesia should be re-evaluated within 5 to 10 minutes of receiving the first dose of analgesia and ongoing thereafter. Following reassessment, if analgesia is found to be inadequate, a stronger or increased dose of analgesics should be considered along with the continued use of non-pharmacological measures^[8].

The **Wong-Baker FACES Pain Rating Scale**^[3] is the preferred severity assessment tool in children aged three and above.



- Point to each face using the words to describe the pain intensity. Ask the child to choose a face that best describes their own pain and record the appropriate number.

From: Hockenberry MJ, Wilson D: Wong's essentials of paediatric nursing, ed. 8, St. Louis, 2009, Mosby. Used with permission. Copyright Mosby.



Behavioural cues may become the primary means to assess pain in patients who are unable to speak, comprehend or use self-reporting tools. This is achieved through the use of r-FLACC behavioural assessment scale. A score from each category is added together to arrive at a score out of ten.

Figure 2. r-FLACC scale

Category	0	1	2
F Face	No particular expression or smile	Occasional grimace/frown; Withdrawn or disinterested; appears sad or worried	Consistent grimace or frown; frequent/constant quivering chin, clenched jaw; distressed-looking face; expression of fright or panic
L Legs	Normal position or relaxed; usual tone and motion to limbs	Uneasy, restless, tense; occasional tremors	Kicking, or legs drawn up: marked increase in spasticity, constant tremors or jerking
A Activity	Lying quietly, normal position, moves easily; regular, rhythmic respirations	Squirming, shifting back and forth, tense or guarded movements; mildly agitated (e.g. head back and forth, aggression); shallow, splinting respirations, intermittent sighs	Arched, rigid or jerking; severe agitation; head-banging' shivering (not rigors); breath-holding, gasping or sharp intake of breaths, severe splinting
C Cry	No cry/verbalisation	Moans or whimpers; occasional complaint; occasional verbal outburst or grunt	Crying steadily, screams or sobs, frequent complaints; repeated outbursts, constant grunting
C Consolability	Content and relaxed	Reassured by occasional touching, hugging, or being talked to, distractible	Difficult to console or comfort, pushing away caregiver, resisting care or comfort measures

Adapted from combining the original FLACC^[5]

FLACC Pain Assessment Tool, copyright 1997, Mosby, Inc.

Provision of appropriate analgesia

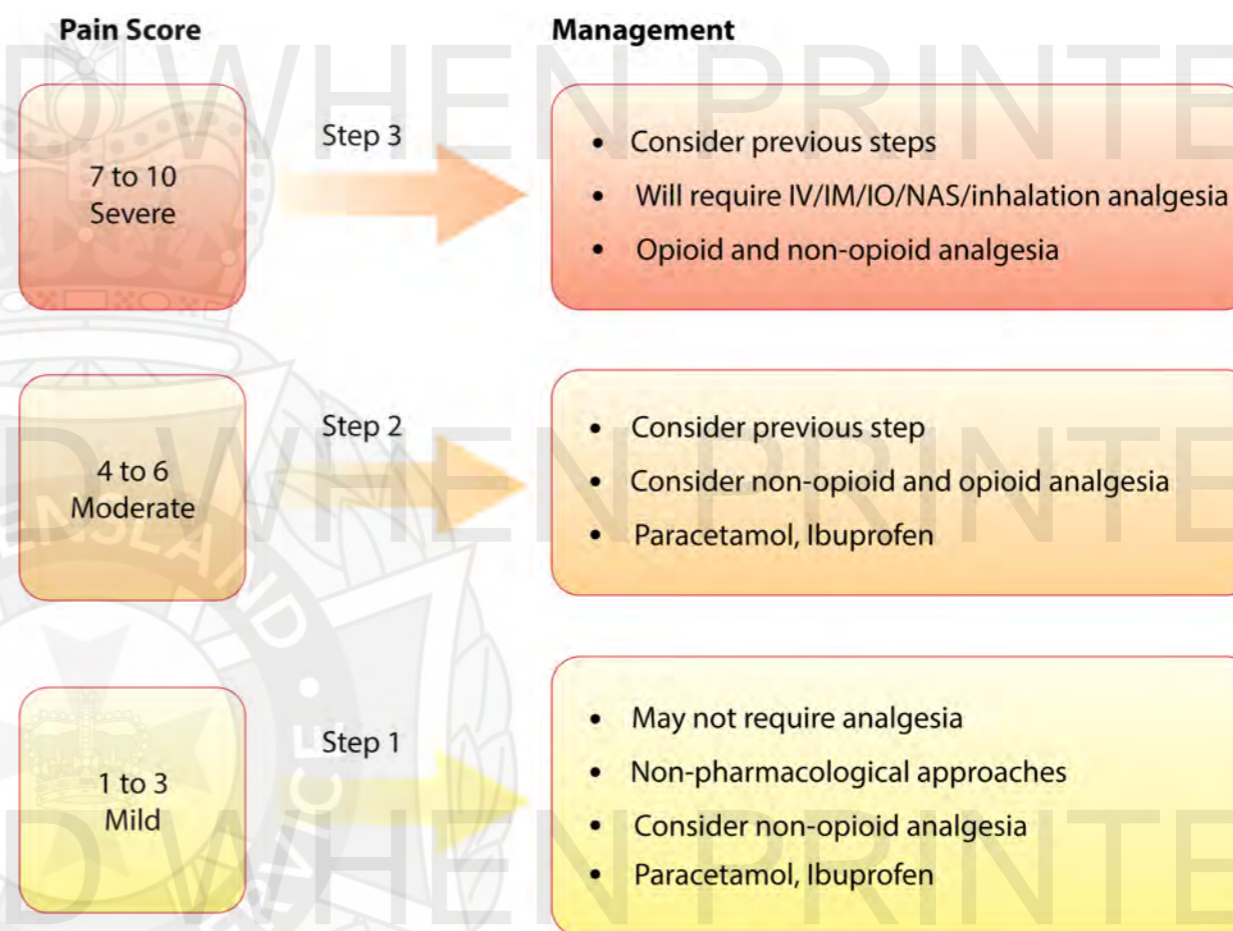
Following assessment of a patient's pain, ambulance clinicians should determine the most appropriate analgesic with consideration of the benefits and risks. Clinicians should consider non-pharmacological and pharmacological approaches and the use of multimodal analgesia. Briefly, this involves administering the combination of opioid and non-opioid analgesics acting at different sites within the pain pathway to provide an additive or synergistic effect^[2].

Non-pharmacological: Pain perception involves an element of psychophysiological reaction, and therefore the utilisation of non-pharmacological approaches to pain management is important. This form of analgesia may include, reassurance and compassion, reduction of fractures and dislocations, immobilisation or splinting, ice and elevation, psychological techniques i.e., distraction.

Pharmacological analgesia may include Paracetamol, Ibuprofen, Sucrose 24%, Methoxyflurane, Fentanyl, Morphine and Ketamine. Ambulance clinicians should consider using a combination of oral and inhalation analgesics prior to the use of other routes.

Interventional analgesia/anaesthetic may include sucrose 24% or direct infiltration of local anaesthetic at the desired site to mitigate pain in order to facilitate procedures such as radial artery line placement, skin suturing or regional anaesthesia i.e., ring blocks.

The analgesic pain ladder provides a stepwise approach to the provision of appropriate analgesia.



Analgesic pain ladder: Adapted from WHO analgesic pain ladder

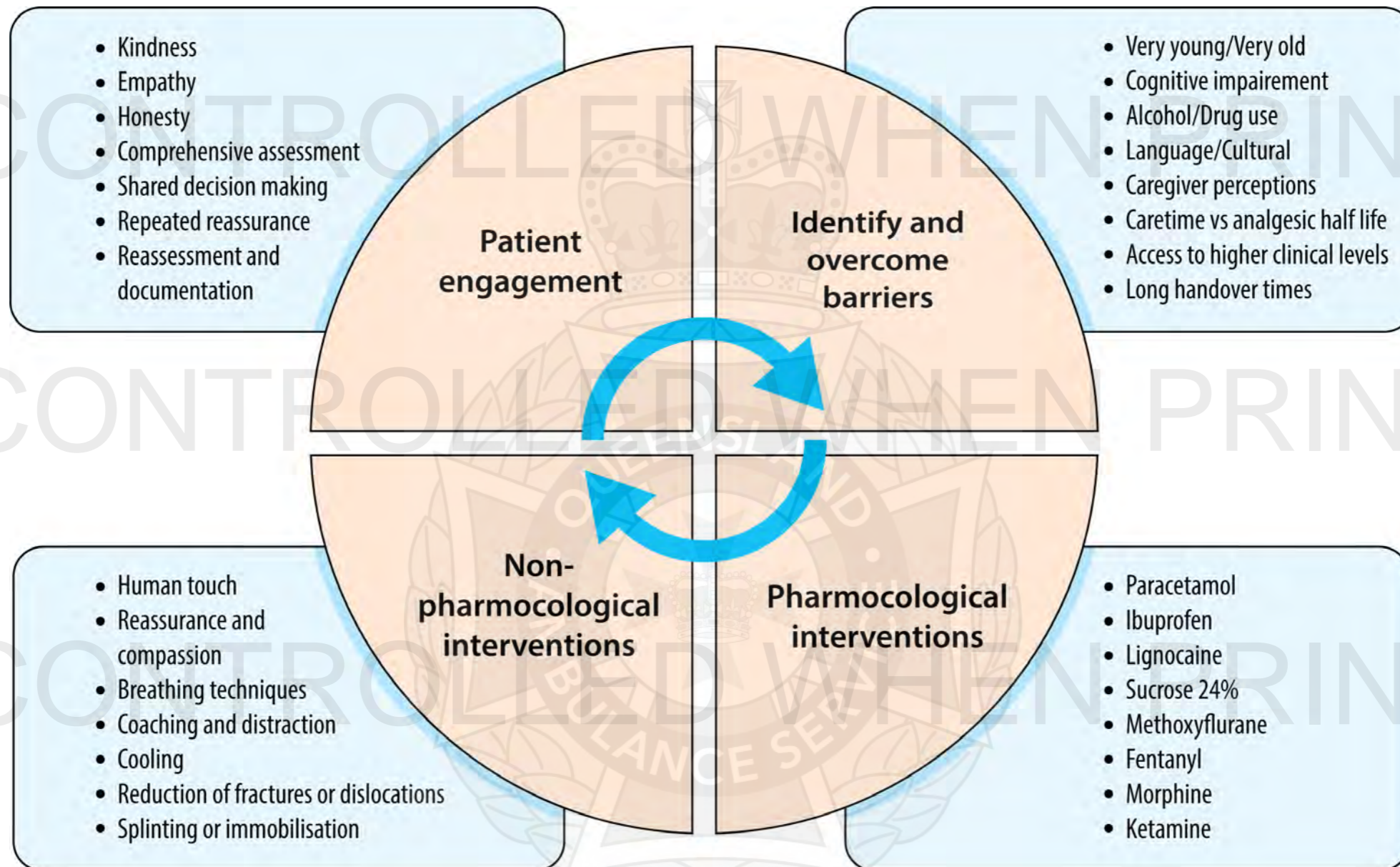
Special Note:

The nature of the patient's injuries in addition to exacerbation of pain caused by movement, extrication, or transport can make the complete removal of a patient's pain unachievable within the confines of clinician care. In all situations, the clinician should attempt to make the patient's pain level manageable and comfortable.

To prevent the exacerbation of pain where possible, and where time and patient condition permits, clinicians should begin treating a patient's pain prior to extrication and movement to the ambulance.

Principles of Pain Management

The aim should always be to relieve pain until it is comfortable and manageable for the patient – unless there is some specific impediment to do so.



Adapted from National Ambulance Service. (June 2022)^[11]

Additional information

Where possible, clinicians should consult the Queensland Health Viewer to ascertain if the patient has a current hospital or ambulance care plan to help inform patient pain management.

Specific patient groups

Older persons: Older patients can suffer from chronic disease states which require multiple medications for their management. This polypharmacy combined with risk factors of physiologic aging processes, increased number of physicians involving the patient, and concurrent use of drugs that cause additive hypotension, sedation or anticholinergic effects, can render older patients particularly susceptible to adverse drug effects and drug-to-drug interactions.^[5]

Aboriginal and Torres Strait Islander Peoples:

For Aboriginal and Torres Strait Islander patients, pain is often under-assessed and poorly managed due to cultural differences and misunderstanding of pain behaviours. Some Aboriginal and Torres Strait Islander patients are reluctant to express their pain. This may be due to:

- The association they make between pain and past colonial and segregation policies.
- Breaking Aboriginal lore (law) which brings shame to the patient and their community.

- ‘Nonsense questions’. For example, if a patient has a broken leg, asking them ‘*are you in pain*’ is considered a ‘nonsense question’ because they are highly likely to be in pain. An alternative to this question could be to say ‘*I can see you are in pain*’, before continuing on with a more detailed pain assessment.
- The use of westernised numerical scales or visual tools to undertake an accurate pain assessment may not be understood by some Aboriginal and Torres Strait Islander people, particularly if English is not their first language.^[7]

To assist in the assessment of a patient’s pain, clinicians should look for non-verbal indicators such as:

- Minimal speaking
- Lying on their side not wanting to face the clinician or give any eye contact
- Turning their head away when asked questions by a clinician
- Hiding under their blanket
- ‘Centering’. This can be interpreted as simulated sleeping and is a process that involves drawing into one’s self spiritually and psychologically to block out the pain
- Lying completely still, wincing or grimacing, crying, head shaking or clucking of the tongue.^[9,10]

CPG: Clinician safety
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Determine the patients pain score by using one of the following pain assessment tools:

- Numerical pain scale for adults (*score out of 10*)
- Categorical pain scale for adults (*mild, moderate, or severe*)
- Wong Baker Faces Scale for paediatrics 3 and older (*score out of 10*)
- r-FLACC Scale for patients with communication obstacles (*score out of 10*)

Mild pain (score 1–3)

Patient may not require analgesia

Consider:

- Non-pharmacological approach
- Paracetamol
- Ibuprofen
- Sucrose 24%

Moderate pain (score 4–6)

Consider:

- All interventions listed for mild pain if not already provided
- Methoxyflurane
- Morphine
- Fentanyl

Severe pain (score 7–10)

Consider:

- All interventions listed for mild and moderate pain if not already provided
- Ketamine

Continually reassess the patient every 5 to 10 minutes

Transport to hospital
Pre-notify as appropriate

Note: Clinicians must only perform procedures for which they have received specific training and authorisation by the QAS.