Acute Pain - assessment & management guidelines

journey to change

NHS Tees, Esk and Wear Valleys NHS Foundation Trust

Pain Assessment & Management

There are many pain assessment tools available which have been developed specifically for use in different patient groups (e.g. adults, older people, children/young people and people with learning disabilities). Careful consideration is required to ensure that the appropriate assessment tool is selected for each individual patient. When pain is present, attempt to locate and record pain using the body map available in the electronic patient record (EPR). Where pain is not identified, no further action is necessary, assess regularly and record on EPR. Pain can be assessed and managed by following the appropriate tool and prescribing guidelines identified below:

- **Step One - Pain assessment.** This is the first step in the process of managing pain and should occur before any intervention takes place and before moving to the next step in the pain management guidelines. The aim of assessment is to identify all of the factors, both physical and non-physical, that affect a patient's perception of pain. Each specialty has identified recommended pain assessment tools for use in their patients which are linked below:

Working age adult (no LD) – able to communicate

Working age adult (no LD) – unable to communicate

Adult with learning disabilities

MHSOP – able to communicate

MHSOP – unable to communicate

- **Step Two - Pain Management**. Once the appropriate pain assessment tool has been used, prescribers should follow the appropriate guidance for pain management. Remember that non-pharmacological management can also be used, and may reduce or negate the need for medication:

Acute (non-cancer) pain management – Adult, LD & MHSOP

Acute Pain – following a fall

Non-pharmacological management

- All prescribing decisions must have a clearly documented clinical rationale. The need to continue treatments should be considered at each review, with a view to deprescribing where appropriate. Kidney function (eGFR) and interactions with other medication must be considered in all prescribing. This consideration must be documented within the EPR. Please consult a clinical pharmacist for any further questions/advice.
- For the assessment and management of **chronic pain** – refer to NICE Guidelines 193
- For the assessment and management of **osteoarthritis** – refer to NICE Guidelines 226
- For the assessment and management of **headaches** – refer to NICE Clinical Guidelines 150 *(N.B. criteria for further investigation and/or referral in sections 1.1-1.3)*

Title	Acute Pain Assessment and Management Guidelines		
Approved by	Drug & Therapeutics Committee	Date of Approval	25th July 2024
Protocol Number	PHARM-0079-v3	Date of Review	1st August 2027

Acute (non-cancer) pain management - AMH, LD & MHSOP

MILD, MODERATE OR SEVERE PAIN

STEP ONE:

Prescribe **PRN OR regular paracetamol** orally at a dose of 1 gram (500 mg if weight <50 kg) using a minimum dose interval of 4 hours and a maximum dose of 4 grams (2 grams if weight <50 kg) in 24 hours. Ensure patient is receiving regular administration at the maximum dose before moving onto Step TWO

STEP TWO:

Continue with **regular paracetamol** 1 g (500 mg if weight <50 kg) FOUR times a day.

If no contra-indications (for inflammatory pain only in older patients), prescribe a Non-Steroidal Anti-Inflammatory drug (**NSAID**). See **NOTES** for recommended choice and dose.

If the person is unable to take a NSAID then move onto Step THREE

STEP THREE:

Continue with medication in Step TWO.

Prescribe a weak opioid such as **codeine** 15 – 30 mg every 4 hours PRN. Maximum = 30 mg FOUR times a day (minimum dose interval of 4 hours & a maximum dose of 120 mg in 24 hours). Ensure **PRN laxatives** are prescribed.

If limited/no relief then move on to Step FOUR

STEP FOUR:

Continue with non-opioid medication in Step THREE. Consider replacing codeine with **tramadol** (see notes) regularly at a dose of 50-100 mg every 4-6 hours (maximum of 400 mg in 24 hours). Ensure **PRN laxatives** are prescribed.

If ineffective, move to Step FIVE

STEP FIVE:

Continue with regular **paracetamol** 1 g (500 mg if weight < 50 kg) FOUR times a day (and regular NSAID if appropriate).

Confirm that the patient has been compliant with the regular weak opioid and if so, **replace** with an immediate release strong opioid e.g. Oramorph (**morphine sulphate**) 10 mg/5 ml liquid – 5 mg every four hours PRN.

Ensure **PRN laxatives** are prescribed.

If effective & treatment is to continue, calculate the total daily dose of morphine administered in the last 24 hours and convert this into a regular twice daily modified release preparation. Also continue the immediate release morphine PRN at a dose of 1/6th to 1/10th of the total daily dose of modified release morphine. e.g. if a patient uses 60 mg Oramorph in 24 hours, this should be converted to:

Zomorph MR capsules 30 mg TWICE daily at 8am and 8pm + Oramorph 10 mg 4-hourly PRN.

NEUROPATHIC PAIN (excluding low back pain/sciatica – see NG59)

(AMH & LD ONLY, for MHSOP patients – seek pharmacist advice)

(See NICE guidance CG173 for more details on management of neuropathic pain)

STEP ONE:

Offer a choice of one of the following as initial treatment (excluding treatment of trigeminal neuralgia). Treatment should continue for 4-6 weeks to observe maximal effect of selected medication. If the initial treatment is not effective or is not tolerated, offer one of the remaining 3 drugs, and consider switching again if the second and third drugs tried are also not effective or not tolerated.

- **Amitriptyline** - (unlicensed indication) 10 mg at night, gradually increased if necessary to 75 mg daily.

OR

- **Gabapentin** (licensed for peripheral neuropathic pain only) - 300 mg once daily on day 1, then 300 mg twice daily on day 2, then 300 mg three times a day on day 3 OR initially 300 mg three times a day on day 1 increased according to response in steps of 300 mg (in three divided doses) every 2-3 days up to a maximum of 3.6 grams daily

OR

- **Pregabalin** – Initially 150 mg daily in 2 divided doses, increased, if necessary, after 3-7 days to 300 mg daily in 2 divided doses, increased further after 7 days to a maximum of 600 mg daily in 2 divided doses

OR

- **Duloxetine** (licensed for diabetic neuropathy only) – 60 mg once daily increased according to response to a maximum dose of 120 mg daily in divided doses.

STEP TWO:

If the initial treatment is not effective / tolerated, offer one of the remaining three drugs and consider switching again if the second and third drugs tried are also not effective / tolerated.

EFFECTIVE PAIN RELIEF - Continue to monitor response at regular intervals. Review prescription if pain resolves and consider stepwise discontinuation of analgesia

INEFFECTIVE PAIN RELIEF - Contact specialist team for advice

Acute (non-cancer) pain management notes (1)

Paracetamol

- Exercise caution when prescribing paracetamol to patients with low body weight (under 50 kg) as these patients may be at increased risk of experiencing hepatotoxicity at therapeutic doses. Clinical judgement must be used when prescribing for these patients, especially in the presence of additional risk factors such as malnutrition and alcoholism.

NSAID choice, dose and safety recommendations

- **Oral 1st line NSAID:** Ibuprofen 200-400 mg THREE to FOUR times a day (minimum dose interval of four hours). A maintenance dose of 600 mg – 1.6 g daily may be adequate. If this is not effective, stop ibuprofen and consider a trial of naproxen.
- **Oral 2nd line NSAID:** Naproxen 250-500 mg TWICE a day.
- **Topical NSAIDs:** should be used preferentially to oral NSAIDs in patients with hand or knee osteoarthritis e.g. Ibuprofen gel THREE times a day. (Topical capsaicin should be considered as an adjunct to core treatments for knee or hand osteoarthritis in older patients).
- Use the lowest possible NSAID dose for the shortest period necessary to control symptoms. The balance of cardiovascular and gastro-intestinal risk should be considered before prescribing NSAIDs, particularly in high-risk patients. In older patients, for inflammatory pain, consult pharmacist before prescribing oral NSAID, continue with caution as may take longer for anti-inflammatory effects. MUST have regular review and monitor U&E's & LFT's, if deranged then stop NSAIDs if ineffective or symptoms persist, consider rheumatology referral.
- In older patients (and others at risk of GI ulceration), proceed with caution due to increased risk of abdominal bleeding; potential adverse effects on renal function and increase in arterial blood pressure. If lithium, anticoagulants, antiplatelets or SSRIs are already prescribed use anti-inflammatories with great caution. Consider co-prescription of proton pump inhibitors (PPI). All older people taking NSAIDs should be routinely monitored for gastrointestinal, renal, and cardiovascular side effects, and drug–drug and drug–disease interactions. Check for interactions prior to prescribing NSAIDs/NSAIDs + PPI.
- The lowest effective dose of NSAID or COX-2 selective inhibitor should be prescribed for the shortest time necessary
- NSAIDs are more effective for persistent inflammatory pain than paracetamol. For osteoarthritis, NICE recommends that oral NSAIDs/selective COX-2 inhibitors may be substituted for paracetamol/topical NSAIDs where these have been ineffective for pain relief or added to paracetamol where paracetamol or topical NSAIDs provided insufficient pain relief.

Enteral feeding tubes

- When administering medicines via an enteral feeding tube, be aware that drug absorption may be unpredictable if the tube extends beyond the drug's main site of absorption.
- A pharmacist must always be consulted if there is any doubt about administering a medicine via the enteral route.

- **Acute pain must be managed according to condition by the most appropriate team, involve acute services as necessary.**
- **For a new presentation of neuropathic pain or chronic primary or secondary pain in older patients, seek advice from clinical pharmacist, specialist pain clinic or refer to NICE guidelines**
- **For advice on palliative care and end of life treatment, please consult specialist palliative care team or regional guidelines**

Acute (non-cancer) pain management notes (2)

Opioid Information:

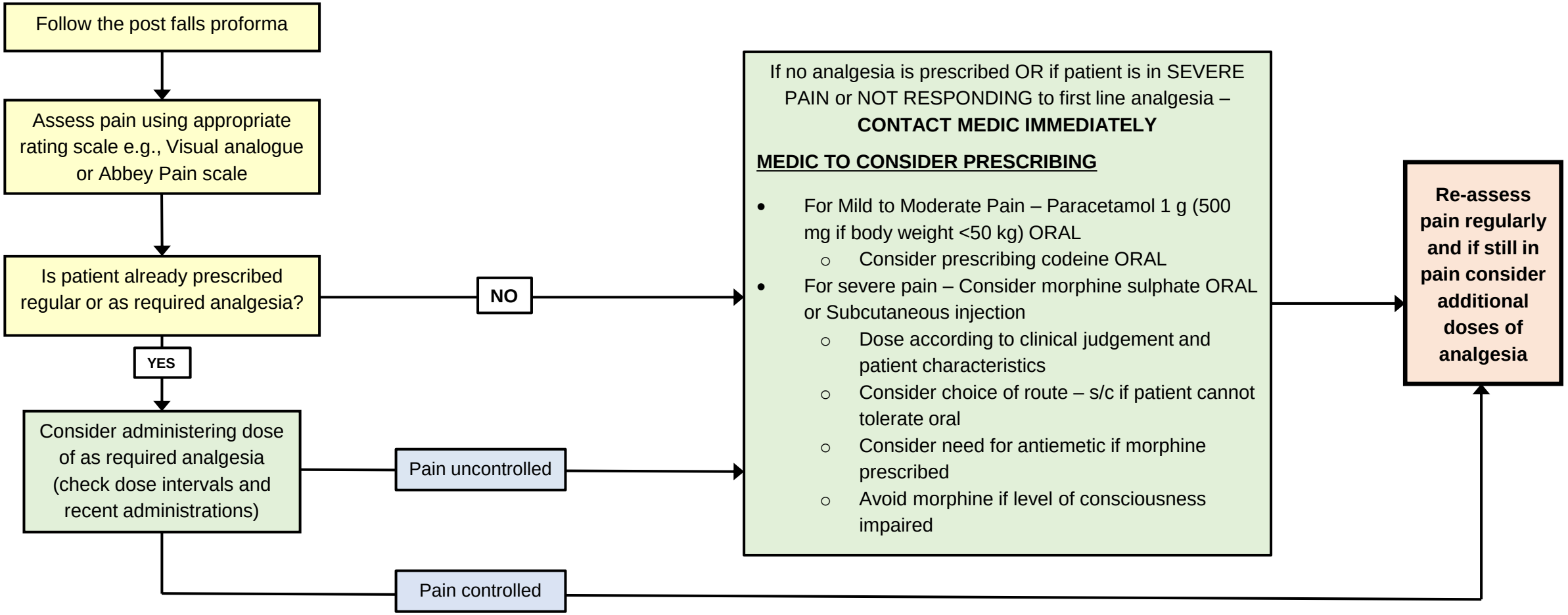
- In older patients, opioid therapy may be considered for moderate or severe pain, particularly if the pain is causing functional impairment or reducing quality of life.
- Codeine is a prodrug which needs to be metabolised to morphine before it exerts its analgesic effect. Up to 40% of adults are unable to metabolise codeine to morphine due to reduced enzyme activity. Therefore, codeine may be ineffective in these patients and tramadol could be considered as an alternative (See Step FOUR – Mild to moderate pain). For reference codeine 30 mg has a potency which is approximately equivalent to 3 mg of oral morphine; tramadol 50 mg has a potency which is approximately equivalent to 5 mg of morphine
- Tramadol should be avoided in older patients due to increased risk of adverse effects, and in patients taking serotonergic antidepressants due to increased risk of serotonin syndrome.
- In older patients, start at low doses e.g., codeine phosphate 15 mg four times daily and titrate upwards based on therapeutic response.
- Addiction potential should be considered prior to prescribing opioids,
- Always consider co-prescribing an appropriate laxative and an antiemetic with opioids.
- Be aware of the potential cumulative sedative effects of opioids which may occur when prescribed concomitantly with many medications used to treat mental illness – this can increase falls risk. Monitor closely for side effects.
- Consider use of an opioid conversion chart to calculate total daily opioid requirement. The risk of harm significantly increases with doses above the equivalent of 120 mg of morphine without an increased benefit. However, this must be individualised and carefully monitored.

Approximate equivalence of buprenorphine patches to oral morphine:	
buprenorphine 5 micrograms/hour	≡ morphine salt 12 mg daily
buprenorphine 10 micrograms/hour	≡ morphine salt 24 mg daily
buprenorphine 15 micrograms/hour	≡ morphine salt 36 mg daily
buprenorphine 20 micrograms/hour	≡ morphine salt 48 mg daily
buprenorphine 35 micrograms/hour	≡ morphine salt 84 mg daily
buprenorphine 52.5 micrograms/hour	≡ morphine salt 126 mg daily
Always seek specialist advice before titrating opioids above this level	
buprenorphine 70 micrograms/hour	≡ morphine salt 168 mg daily

Appropriate use of Transdermal Analgesics (Patches):

- Transdermal preparations of fentanyl and buprenorphine should not be used to treat acute pain or patients whose analgesic requirements are unstable / changing rapidly. The transdermal route takes a long time to achieve steady state which in turn, prevents rapid titration of the dose. Transdermal preparations should only be used once pain has been controlled using oral preparations. Approximate conversion tables are available in the BNF to guide prescribers when switching from oral to transdermal treatment.
- Patients on regular opioids, including transdermal patches, should always have a PRN dose prescribed for the management of breakthrough pain. This is usually prescribed in the form of immediate release morphine (liquid or tablets) and calculated as 1/6th to 1/10th of the equivalent total daily dose of modified release morphine.
- **Buprenorphine Transdermal Patches:** provide continuous release of analgesia, available as 7-day, or 96-hour formulations. To be considered in older patients when oral medications have failed or cannot be taken. For chronic pain only as it takes up to 72 hours to reach adequate levels. If the patient is already on codeine or other opioids, consider continuing these for 24 hours after the initial application of the buprenorphine patch. Do not consider altering dose of buprenorphine until 72 hours after initial administration. Use supplementary chart to record administration. If skin irritation occurs, consider alternative opioid. If patch begins to peel off, follow manufacturers advice. If indicated, refer to specialist pain clinic for advice. On discharge, ensure clinical rationale for analgesic patch is stipulated in letter to GP.
- **Buprenorphine patches and effects of heat:** heat can increase the absorption of medication from transdermal patches increasing the risk of adverse effects. Patients should be advised to avoid exposure to external heat sources such as heat packs, electric blankets, heat lamps, saunas etc. Fever can also increase absorption from patches resulting in increased plasma levels.
- Ensure patient and carers are counselled about the potential for life-threatening harm from accidental exposure to patches, including during application and removal. Ensure old patch is removed prior to applying new one – dispose of old patch by folding in half and placing in sharps bin for incineration. Use patch application chart. Wear gloves during application.

Acute pain management - post-fall



INFORM AMBULANCE STAFF OF ANY ANALGESIA ADMINISTERED

Non-pharmacological Management

The following are examples of a non-pharmacological approach to pain management.
Evidence of benefit on a population basis varies, but individuals may respond to any intervention based on shared decision-making

- Cognitive behaviour therapy (CBT)
- Physiotherapy
  - Exercise
  - Positioning
  - Mobilisation
- Occupational therapy
  - Limb support
  - Art
  - Music
- Massage
- Relaxation
- Reassurance
- Heat / cold application
- Transcutaneous electrical nerve stimulation (TENS)
- Herbal medicines *(N.B. check for interaction with conventional medicines)*
- Complementary therapies, e.g. acupuncture
- Education & information