Barts Health NHS
NHS Trust

TRUST CLINICAL GUIDELINE
ACUTE PAIN MANAGEMENT IN ADULT PATIENTS

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STANDARDS	National Patient Safety Agency, British Pain Society, Royal College of Anaesthetists, Nursing and Midwifery Council, General Medical Council		
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SCOPE OF APPLICATION AND EXEMPTIONS	**Included in guideline:** This guideline applies to any **ADULT** requiring pain management input.
	All Trust staff, working in whatever capacity
	Other staff, students and contractors working within the Trust
	Exempted from guideline: All non-clinical staff groups are exempt from this guideline. Paediatric & Neonatal Wards
	This guideline applies to all clinical Trust staff.

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Acute Pain Management in Adult Patients

1. INTRODUCTION

1.1 Prompt and effective acute pain management is important; poorly managed pain has an impact on patient comfort, post-operative recovery, prolonged hospital stay and development of chronic pain.

1.2 Acute pain management is not just limited to post-operative care, but can be a part of all inpatient specialties.

1.3 These guidelines aim to provide a framework to guide doctors and nurses to assess and manage acute pain safely and effectively on adult wards only.

1.4 Although there may be some common areas, these guidelines are separate from the palliative care guidelines; palliative care patients should be referred to the palliative care team rather than the inpatient pain service.

1.5 These guidelines are intended for adult patients. In circumstances where paediatric patients are treated on adult wards (e.g. trauma patients), they may be applicable; seek advice if necessary.

2. DEFINITIONS

Acute Pain	Pain of recent onset and probable limited duration of less than three months. It usually has an identifiable temporal and causal relationship to injury or disease.
Chronic Pain	Pain that persists beyond three months or the time of healing of an injury. There may not be an identifiable cause.
Acute on Chronic Pain	A combination of acute pain with an underlying chronic element. (e.g. a 'flare up' of chronic pain). This is not an atypical presentation for in-patients and may need a combination of treatment approaches. Inpatient pain service referral is often advisable as these patients can be complex.
Neuropathic Pain	Neuropathic pain is pain initiated or caused by a primary lesion or dysfunction in the peripheral or central nervous system. For example pain following shingles, or an amputation, or spinal cord trauma. Pain that occurs in diabetics or in patients with multiple sclerosis can also be neuropathic. (BPS website)
Inpatient Pain Service	A multidisciplinary team of specialist pain nurses and consultant anaesthetists who can provide advice on inpatient pain management.
Abbey Pain Score	A tool to aid pain assessment in patients with impaired communication, e.g due to dementia.
PAINAD Score	A tool to aid pain assessment in patients with impaired communication, e.g due to dementia.

3. PROCESS

3.1. PRINCIPLES OF ACUTE PAIN MANAGEMENT

The principles of effective acute pain management include the following:

- Thorough initial assessment of the patient's pain.

- Acute pain should be relieved as soon as possible but remember to investigate and treat the underlying cause. Individual analgesic plan discussed with the patient and implemented in a timely manner. Pain management is an ongoing cycle; there must be regular assessment of the analgesic plan. Drug doses may need to be altered, routes of administration changed or adjuvants introduced.

- Early advice from the inpatient pain service should be sought for any complex patients, e.g. acute on chronic pain episodes, patients who are not responding to analgesics as expected.

3.2. PAIN ASSESSMENT

- Regular pain assessment is essential and results in the improved management of acute pain.

- All patients should have their pain regularly assessed and documented on admission. It should be regularly reassessed throughout their stay in hospital (minimum 4 hourly for all surgical patients or patients administered regular or PRN opioids (weak or strong opioids). For all other patients, minimum twice a shift unless as clinical picture dictates).

- Pain scores have been described as the 5th vital sign and should be done as part of routine ward observations and documented on the relevant observation chart.

3.2.a. Patient Assessment

The assessment of pain should include a thorough medical history and examination and a specific 'pain history', which may include the following:

- Site
- Onset and duration
- Precipitating factors, e.g surgery, trauma.
- Character (see below for more information on pain description).
- Intensity of pain; at rest and on movement.
- Exacerbating and relieving factors
- Sleep. i.e. is the pain disturbing the patient's sleep?
- Current/ pre-admission analgesia

3.2.b. Descriptors

Identifying what type of pain your patient has can aid with pain management; not all pain should be treated with the same analgesics.

Nociceptive pain:
Somatic pain: Sharp, well localised, often with local/ surrounding tenderness. e.g. bone/ muscle pain.

Visceral pain: Dull, cramping, colicky in nature. There may be local tenderness or in an area of referred pain. e.g. pain originating from internal organs.

Neuropathic pain: Burning, shooting or stabbing. (See section 4 for more information.)

3.2.c. Pain Scores

- Pain scores can be used to assess the intensity of the pain.

- Pain scores should always be recorded both at rest and on movement, or for patients who are not mobile (e.g. post-operatively) when taking a deep breath/ coughing.

- A Numeric Rating Scale (NRS) of 0-10 should be used:

0	No pain
1-3	Mild pain
4-6	Moderate pain
7-10	Severe pain

- If a patient is finding the numerical rating scale tool difficult to comprehend then an alternative is to use the verbal rating scale (VRS); ask if their pain is none, mild, moderate or severe.

- When treating acute pain, a pain score of 0-3 NRS (i.e. none- mild) indicates well controlled pain. Remember this applies to pain on movement, not just at rest.

3.2.d. Pain assessment in patients with communication difficulties.

- Not all adult patients will be able to verbalise the severity of their pain, or if indeed they have any pain at all. This may include patients who have dementia or communication difficulties for other reasons; acute delirium or learning difficulties for example.

- A NRS can still reliably be used in patients with mild to moderate cognitive impairment with appropriate assistance but those with severe impairment should be scored using either the Abbey Pain Scale (see appendix 2) or the Pain Assessment in Advanced Dementia (PAINAD) scale (see appendix 3) as per British Pain Society guidelines.

- For patients with language barriers the British Pain Society website may be helpful: there is a list of pain scales in a variety of languages. Please see www.britishpainsociety.org https://www.britishpainsociety.org/british-pain-society-publications/pain-scales-in-multiple-languages/

3.2.e Patient or Nurse Controlled Analgesia/ Epidural Analgesia/ Management of Continuous Peripheral Nerve Catheter Anaesthetic Infusions for Pain in Adult Patients

- Patients with patient/nurse controlled analgesia (PCA/NCA), peripheral nerve catheter infusions or epidural analgesia must have regular pain assessment (minimum 4 hourly), in addition to regular observations as per the Trust guidelines.

- Please seek early advice from the inpatient pain service/ anaesthetist for any epidural, peripheral nerve catheter or PCA/NCA queries. **Note: all patients with epidural analgesia or peripheral nerve catheter infusions (except renal transplant TAP catheters and obstetric epidurals) should be reviewed daily by the inpatient pain service/ anaesthetist.** Staff nurses caring for these patients

should contact the inpatient pain service/anaesthetic service before midday if a patient has epidural analgesia or a peripheral nerve catheter infusion in place and has not yet been reviewed by the pain team/ anaesthetic service.

- For further information please refer to the Intravenous PCA/NCA, Continuous Epidural Infusion Analgesia and Management of Continuous Peripheral Nerve Catheter Anaesthetic Infusions for Pain in Adult Patients guidelines.

3.3. PRESCRIBING IN ACUTE PAIN

- It is important to always check if patients usually take regular analgesics/ adjuvant medication at home; these should be continued unless there are specific reasons not to as discontinuation may precipitate worsening of their pain.

- Oral administration is the preferred route. Avoid the injectable route whenever possible (IM/subcutaneous injections are painful, manual IV boluses can only be administered by trained healthcare professionals and requires either peripheral or central venous access; therefore the oral route is preferred).

- Ensure the route of administration is appropriate to the patient's condition.

- Review analgesics regularly (at least once daily by the named medical or surgical team responsible for the patient).

- It is important to remember patients who usually take opioids at home for a chronic condition will have a higher tolerance to opioids: please consult the inpatient pain service for advice.

  Unexpected pain must be reviewed and investigated for other causes, especially if the prescribed analgesics become ineffective.

3.3.a World Health Organisation (WHO) Analgesic Ladder

This was originally introduced by the WHO in 1986 as a guide to management of cancer pain but is now a commonly used tool to guide management in acute pain in general.

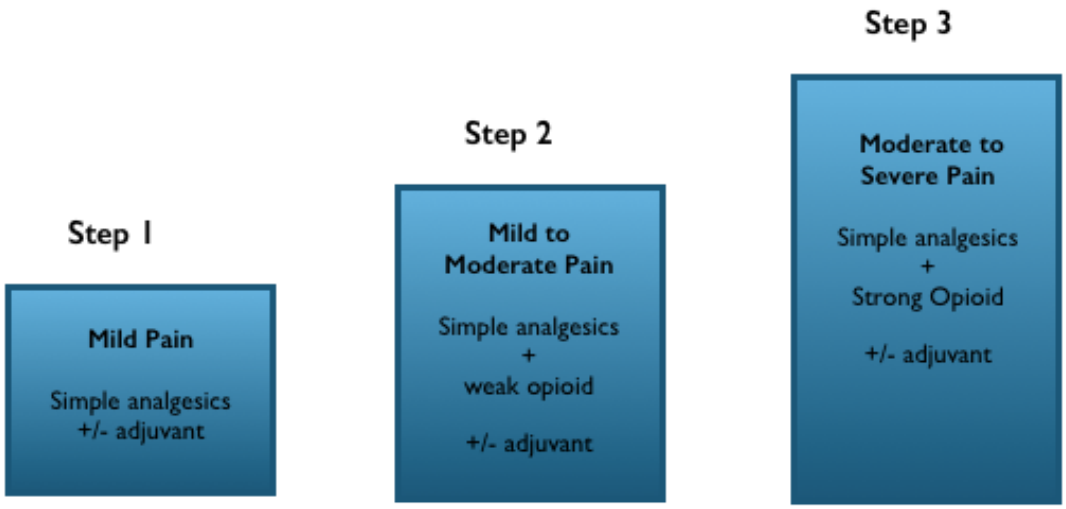

Fig 1. The WHO Ladder

The three steps are as follows:

Step 1: Mild Pain: Regular Paracetamol, +/- NSAID, +/- Adjuvant

Step 2: Mild to Moderate Pain: Weak opioid (e.g. tramadol/dihydrocodeine/codeine) + Regular Paracetamol, +/- NSAID, +/- Adjuvant

Step 3: Moderate to Severe Pain: Strong opioid + regular paracetamol, +/ NSAID, +/- Adjuvant

- Simple analgesics (e.g. paracetamol) must be prescribed regularly even if weak or strong opioids are also prescribed as they have an opioid sparing effect.

- The patient must be reassessed at each level of the ladder; if the pain is not controlled, advance up the ladder. In real terms advancing up the pain ladder may occur quickly, for example with patients presenting with severe pain, which is why regular assessment is so important.

- Clinical judgement should be used to determine whether weak opioids are required regularly or on a 'as required' basis.

- For more information on individual drugs used at each stage, please see below.

3.3a.i Managing breakthrough pain

If the current prescription has not helped, check:

1. The patient's clinical condition is not deteriorating.

2. The prescribed route of administration is still appropriate.

3. The patient's prescription chart to see if the patient has actually received the analgesic agent at the correct dose and time.

If analgesics for breakthrough pain has been written on the "as required" side of the prescription chart the patient may not have asked for it or the nurses may not have been giving it. Furthermore, the patient may not have been receiving the maximum dose.

If 'as required' analgesics have been administered and this still fails to control pain, then move up a category on analgesic strength. **If this is not achieving pain relief despite dose escalation of strong opioids then you should ask for help.** Consult a senior team member or contact the appropriate specialist team for advice (e.g. inpatient pain service, palliative care).

3.3.b. Guidance & Information on Specific Analgesics

3.3.b.i. Step 1 : Mild pain: Simple analgesics

- Simple analgesics (Paracetamol and NSAIDS) can be used at all stages of the WHO pain ladder, providing there are no contraindications.

- They can provide adequate analgesia alone for mild pain but also have an opioid sparing effect so should also be prescribed regularly for moderate to severe pain.

a. **Paracetamol**

Dose: 1g QDS, reduced to 15mg/kg for patients less than 50kg. **Avoid in patients with liver disease.**

Oral route should be first line choice but an intravenous preparation is available, e.g. patients who cannot absorb oral preparations.

Preparations:
Tablets 500mg
Soluble tablets 500mg
Suspension 120mg/5mL, 250mg/5mL
Suppositories 500mg, 1g
Intravenous injection 10mg/ml (100ml vials)

b. **Non-steroidal Anti-inflammatory Drugs (NSAIDs)**

- NSAIDS may provide valuable additional analgesia and can be used in conjunction with paracetamol at all stages of the WHO pain ladder.
- Short term use (**no more than 5 days**) is advised and contraindications must be excluded before prescribing.
- Only **one** type of NSAID should be prescribed on the patient's drug chart at any one time.
- Ensure patients on NSAID's have their renal function checked routinely.
- Please consider the times of administration when prescribing oral NSAID's, as they should be taken with/after food.
- Check if patient is using any topical non-steroidal gels prior to commencing oral NSAID's.
- Long-term NSAID treatment should be avoided where possible to minimise the risk of cardiovascular and other complications.

Contraindications:
- Aged 75 years and over
- Aspirin-induced asthma
- Congestive cardiac failure
- Renal or hepatic impairment
- History of gastro-intestinal (GI) bleeding
- Active peptic ulcer disease
- Significant hypertension (uncontrolled)
- Inflammatory bowel conditions e.g. Crohn's disease
- Significant clotting impairment
- Pregnancy

Cardiovascular risk:

- All NSAID use can, to varying degrees, be associated with a small increased risk of thrombotic events (e.g. myocardial infarction and stroke) independent of

baseline cardiovascular risk factors or duration of NSAID use. However, the greatest risk may be in those receiving high doses long term.

- No detectable effect on cardiovascular risk was shown with ibuprofen for doses up to 1.2g (400mg TDS) daily.

- Cardiovascular risk with diclofenac is similar to that of the selective COX-2 inhibitors.

- Diclofenac is contraindicated in those with: Ischaemic heart disease, heart failure, peripheral arterial disease or cerebrovascular disease.

NSAIDs should be used with caution in patients taking the following medicines:

- Low dose aspirin
- Warfarin therapy
- ACE inhibitors
- Beta blockers
- Diuretics
- Clopidogrel

Gastro-intestinal protection is required for patients at increased risk of GI bleeding. A Proton Pump Inhibitor (PPI) should be prescribed for the following patients:

- Patients aged 65 - 75 years
- If long term NSAIDs are required
- Patients prescribed steroids or anti-coagulant therapy

Choice of NSAID:

- Oral diclofenac is no longer recommended as per MHRA alert and is no longer available on the trust formulary.

- First Line NSAID: Ibuprofen 400 mg TDS oral route.

- Alternative Options:
  1. Naproxen Initial dose 500mg followed by 250mg every 6-8 hours, oral route. Maximum dose after first day is 1.25g/24 hours.

  2. Diclofenac is reserved for use as suppositories in maternity and injection for renal colic. Topical diclofenac may still be used as indicated.

3.3.b.ii. Step 2: Moderate Pain: Weak Opioids

a. Dihydrocodeine Tartrate

- Dihydrocodeine tartrate and paracetamol may be prescribed separately for greater flexibility of dosing and titration to pain

- Choice: Dihydrocodeine tartrate Tablets 30mg

- Dose: 30mg QDS PO

- Dihydrocodeine tartrate can cause constipation so a stimulant laxative / stool softener should be prescribed (e.g. senna and lactulose)

- Dihydrocodeine tartrate should **NOT** be used in patients who have recently undergone bowel surgery where an anastamosis has been formed.

- Caution using in patients with moderate to severe renal impairment.

b. Tramadol

- An alternative to dihydrodeine and codeine if either of these are contraindicated or ineffective.
- Caution in the following patients:
  - Age over 75 years (consider 50mg tds)
  - History of seizures/ epilepsy
  - Those prescribed selective serotonin re-uptake inhibitors
  - Pregnant or breast-feeding patients
  - Warfarin anticoagulation

- May precipitate hallucinations or nausea & vomiting

- Dose: 50 - 100mg QDS PO

- In patients with renal impairment consider reduced dose and frequency e.g. 50mg TDS

c. Codeine Phosphate

- Codeine phosphate and paracetamol may be prescribed separately for greater flexibility of dosing and titration to pain.

- Choice: Codeine Phosphate Tablets 15mg, 30mg
  Syrup 25mg/5mL
- Dose: 15 - 60mg QDS

- Codeine can cause constipation so a stimulant laxative / stool softener should be prescribed (e.g. senna and lactulose)

- Codeine phosphate should **NOT** be used in patients who have recently undergone bowel surgery where an anastamosis has been formed.

- Contraindicated in patients who are breast-feeding.

- Caution using in patients with moderate to severe renal impairment.

3.3.b.iii. Step 3: Severe Pain: Opioids

This is not a comprehensive guide to opioid prescribing. For more detail please refer to the Adult British National Formulary.

General Points:

- **Morphine** is the first-line strong opioid of choice for relief of severe acute pain. Avoid in patients with kidney impairment.

- **Oxycodone** is the second-line strong opioid and can be used in patients who have intolerable side effects with morphine, despite appropriate interventions to

manage these side effects. Immediate release oxycodone prefered in patients with kidney impairment rather than modified release.

- **Targinact** (prolonged release oxycodone and naloxone combination tablet) is **ONLY** to be prescribed on advice of the inpatient pain service.
  Targinact is sometimes used as part of the enhanced recovery programme in pain management following colorectal surgery for short term use only (usually no more than 5 days). This medication unfortunately cannot be prescribed in primary care.

- Regular pain assessments are essential: the dose of oral opioid may need to be titrated up or down according to the response.

- To treat **acute chest pain**, manual IV boluses of strong opioid (e.g. morphine) can be administered by trained healthcare professionals and requires either peripheral or central venous access. Incremental doses must be given (preferably using an algorithm) and sedation (AVPU) must be continuously monitored throughout as well as routine observations. The total dose administered must be prescribed on the drug chart as a once off dose (STAT dose).

- **DO NOT prescribe any additional opioids for patients who have a mixed (bupivacaine and fentanyl) epidural analgesia or PCA/NCA in situ, unless specifically advised by the inpatient pain service, as there is an additive effect and respiratory depression is more likely.** Please refer to the Intravenous PCA/NCA and Continuous Epidural Infusion Analgesia Guidelines.

- **Caution in the following groups: (dose reduction/ longer dosing interval may be needed. Seek advice from the inpatient pain service)**
  - Moderate to severe renal or hepatic impairment.
  - Frail/elderly
  - Opioid naïve patients

If a patient is commenced on an opioid during their inpatient stay the following statement can be added to the patients discharge summary:

Please include the paragraphs below in the patients discharge summary (only if started and subsequently discharged on any opioids (weak and/or strong) during patients admission):

This patient was prescribed opioids during their inpatient stay at Barts Health NHS Trust which could be potentially associated with both short term and long term side effects. We advise the patient and GP review any opioid medication within 1 week following discharge from hospital.

Due to recent change in legislation it is illegal to drive if either:
you're unfit to do so because you're on legal or illegal drugs
you have certain levels of illegal drugs in your blood (even if they haven't affected your driving)
Drugs of concern include: amphetamines, benzodiazepines (clonazepam, diazepam, flunitrazepam, lorazepam, oxazepam, temazepam) and opioids (e.g. methadone, morphine, oxycodone, tapentadol, targinact, codeine, tramadol or fentanyl).
Please refer to www.gov.uk/drug-driving-law for further details.

3.3.c

NPSA Guidance:
As well as at initiation of treatment, errors can occur during dose conversion or with an unintended dose increase for a patient already on opioids. Where a change in formulation or medicine is required, practitioners inexperienced in the use of opioids should use references for dose conversion to aid calculation of a safe dose.
Individualisation of opioid doses means that prescribing incidents may not be immediately recognisable.

Particular care should be taken when checking the safety of increased doses. For example, for oral morphine or oxycodone in adult patients doses should not normally be more than 50% higher than the previous dose.

Concurrent Drugs that should be prescribed with opioids

The following medications should be on the 'as required' section of the prescription chart when a patient is receiving opioids:

Agent	**Rationale for prescription**
Anti-emetic e.g.ondansteron (first line)	Nausea is a possible side effect of opioids.
Anti-histamine e.g. chlorphenamine	Pruritis is a possible side effect of opioids.
Opioid reversal agent e.g. naloxone	Respiratory depression and sedation are possible side effects of opioids.
Laxative e.g. senna/lactulose	Constipation is a possible side effect of opioids.

Opioid Conversions: (see table below for approximate conversions; section 3.3.d, page 15)

Recommendations from Faculty of Pain Medicine

- Switching from one opioid to another should only be recommended or supervised by a healthcare practitioner with adequate competence and sufficient experience. If uncertain, ask for advice from a more experienced practitioner e.g. inpatient pain service.

- Opioid rotation or switching may be considered if a patient obtains pain relief with one opioid and is suffering severe adverse effects.

- When converting from one opioid to another, the initial dose depends on the relative potency of the two drugs and route of administration.

- An individualised approach is necessary.

- Conversion factors are an approximate guide only because comprehensive data are lacking and there is significant inter-individual variation.

- In most cases, when switching between different opioids, the calculated dose-equivalent must be reduced to ensure safety. The starting point for dose reduction from the calculated equi-analgesic dose is around 25-50%.

- A dose reduction of at least 50% is recommended when switching at high doses (e.g, oral morphine or equivalent doses of 500mg/24 hours or more), in elderly or frail patients, or because of intolerable undesirable effects.

- The half-life and time to onset of action of the two drugs needs to be considered when converting so that the patient does not experience breakthrough pain or receive too much opioid during the conversion period.

- Once the conversion has occurred, the dose of new opioid should be titrated carefully according to individual response and the patient monitored closely for side effects and efficacy, especially when switching at high doses.

- Withdrawal symptoms (e.g. sweating, yawning,abdominal cramps, restlessness, anxiety) occur if an opioid is stopped/dose reduced abruptly.

3.3.d

Opioid Conversions: (see table below for approximate conversions)

Equivalent doses of morphine and related opioids

Conversions are not absolute and doses may need to be titrated up/down dependant on clinical situation; in opioid switching, practise is often to down titrate (dependant on situation to start off with) due to opioid incomplete cross tolerance

Oral				**Trans-Dermal**	**Parenteral**			
Morphine		**Oxycodone**		**Fentanyl**	**Morphine**		**Oxycodone**	
4 hour immediate release (IR) tabs/liq e.g. sevredol, oramorph	12 hour modified release (MR) e.g. MST	4 hour immediate release caps/liq e.g. oxycodone IR (oxynorm)	12 hour modified release tab e.g. oxycodone MR (oxycontin)	72 hour controlled release patch e.g. durogesic	4 hour s/c injection	24 hour contin's s/c Infusion	4 hour s/c injection	24 hour contin's s/c infusion
Every 4 hours	**Every 12 hours**	**Every 4 hours**	**Every 12 hours**	**Every 72 hours**	**Every 4 hours**	**Over 24 hours**	**Every 4 hours**	**Over 24 hours**
5 mg	15 mg	2.5 mg	10 mg	25mcg/hr	2.5 mg	15 mg	≅2.5 mg	10 mg
10 mg	30 mg	5 mg	10-20 mg	25 mcg/hr	5 mg	30 mg	≅2.5 mg	20 mg
15 mg	45 mg	7.5 mg	20 mg	25 mcg/hr	7.5 mg	45 mg	5 mg	30 mg
20 mg	60 mg	10 mg	30 mg	25 mcg/hr	10 mg	60 mg	7.5 mg	40 mg
30 mg	90 mg	15 mg	40 mg	50 mcg/hr	15 mg	90 mg	10 mg	60 mg
40 mg	120 mg	20 mg	60 mg	75 mcg/hr	20 mg	120 mg	10 mg	60 mg
50 mg	150 mg	25 mg	70 mg	75 mcg/hr	25 mg	150 mg	15 mg	70 mg
60 mg	180 mg	30 mg	90 mg	100 mcg/hr	30 mg	180 mg	15 mg	90 mg
80 mg	240 mg	40 mg	120 mg	125 mcg/hr	40 mg	240 mg	20 mg	120 mg
120 mg	360 mg	60 mg	180 mg	200 mcg/hr	60 mg	360 mg	30 mg	180 mg
150 mg	450 mg	75 mg	220 mg	250 mcg/hr	75 mg	450 mg	40 mg	220 mg

TAPENTADOL: 100mg is approximately equivalent to 40mg oral morphine, or 20mg oral oxycodone

When modified preparations are prescribed regularly, always prescribe a PRN immediate release preparation at the equivalent dose for breakthrough pain e.g. patient on MST 60mg BD, prescribe liquid morphine (oramorph) 20mg PRN 2-4 hourly .

3.3.e Opioid Toxicity

Any patient prescribed opioids is at risk of opioid toxicity but the following situations carry increased risk:

- When dose escalation is too rapid
- Existing renal impairment or acute deterioration in renal function
- Hepatic impairment
- Frail and elderly
- Following therapeutic intervention e.g. cytotoxic chemotherapy/radiotherapy or nerve block
- If pain is not opioid responsive

Signs of opioid toxicity:

- Drowsiness/sedation
- Respiratory depression (e.g. respiratory rate <8)
- Pin-point pupils
- Micro-sleeps
- Myoclonic jerks
- Hallucinations (auditory and visual)
- Confusion
- Vomiting

Management of Opioid Toxicity

Stop the Opioid!

ABC approach: Maintain airway and administer 100% Oxygen via non-rebreath mask.

Call for urgent help

Prepare & administer naloxone based on dosage regimen below.

Naloxone: Safe Prescribing Update

NHS England issued two Patient Safety Alerts addressing inappropriate dosing of naloxone where existing BNF guidance was not followed, resulting in 2 patient deaths. Naloxone is a pure opioid/opiate antagonist used for reversal of central nervous system effects of opioids/opiates.

The dose of naloxone is DIFFERENT depending on the clinical setting.

3.3.f Management of patients on longer-term opioid/opiate therapy (palliative care, chronic pain or substance misuse patients):

Reversal using naloxone can provoke an acute withdrawal. The rapid reversal of analgesics can lead to intense pain and distress, sympathetic nervous system overstimulation and cytokine release. Hypertension, cardiac dysrhythmia, pulmonary oedema and cardiac arrest may follow in worst case scenarios.

For the vast majority of these patients full reversal of their opioid/opiate effects is neither safe nor desirable. Therefore in this group of patients, **LOWER** doses of naloxone are indicated.

Emergency life-threatening situation:

ALL patients will likely need aggressive reversal of opioid/opiate induced respiratory depression regardless of previous opioid/opiate exposure.

Following initial dosing of naloxone:

Contact the inpatient pain service or palliative care team following dosing of naloxone where appropriate to provide further advice and review of the patient.

A Datix should also be completed following the use of naloxone in patients where opioids have been prescribed, to prompt a review and enable us to learn and further improve patient safety.

See naloxone doses recommended below.

3.3.g Naloxone doses recommended below

Higher initial dose regimen (Adults) ***By IV injection***	**When to use:** • All patients in life-threatening or emergency situations • Acute overdose or intoxication (accidental or deliberate)
Initially dose **400 micrograms** If no response after 1 minute give a further **800 micrograms** If no response after 1 minute give another **800 micrograms** If no response after 1 minute give **2mg** (up to **4mg** in severe poisoning) Continue up to a maximum total dose of **10mg**	
Higher initial dose regimen (Adults) ***By IntraMUSCULAR injection***	**When to use:** • As above where IV access is not immediately available
Initially dose **400 micrograms** If necessary give further **400 microgram** doses every 3 minutes until response achieved or IV access gained Continue up to a maximum total dose of **10mg**	
Lower initial dose regimen (Adults) ***By IV injection***	**When to use:** • Post-operative respiratory depression • Patients on long-term opioids/opiates
Initially give **100** to **200 micrograms** Further doses of **100 micrograms** can be given up to every 2 minutes until respiratory function improves	
Palliative care dose (Adults) ***By IV injection***	**When to use:** • Palliative care
Dilute a **400microgram ampoule up to 10ml with Sodium Chloride 0.9%.** Initially give **20-100 micrograms (0.5-2.5ml).(2)** Further doses of **20-100 micrograms** can be given every 2 minutes until respiratory function improves	
Naloxone infusion ***By continuous IV infusion***	**When to use:** • After initial resuscitation with '*higher initial dose*' regimen • Where overdose with **long-acting** opioid/opiate, including modified-release preparations, is suspected ***and*** the magnitude of the overdose is sizeable.
Start with an infusion rate equivalent to **about 60%** of dose required for the initial resuscitation Titrate infusion rate to acceptable respiratory response	

1. **NHSE patient safety alert 2014** https://www.england.nhs.uk/wp-content/uploads/2014/11/psa-inappropriate-doses-naloxone.pdf

2. **NHSE patient safety alert 2015** https://www.england.nhs.uk/patientsafety/wp-content/uploads/sites/32/2015/10/psa-naloxone-stage2.pdf

3.4. NEUROPATHIC PAIN

3.4.a. Definition

Neuropathic pain is pain initiated or caused by a primary lesion or dysfunction in the peripheral or central nervous system (e.g. pain following shingles, an amputation, or spinal cord trauma). Pain that occurs in diabetics or in patients with multiple sclerosis can also be neuropathic (British Pain Society website).

3.4.b. Treatment Pathway for Neuropathic Pain

A comprehensive interactive treatment pathway can be found on the Scottish Intercollegiate Guideline Network (SIGN) website:

http://www.ckp.scot.nhs.uk/Published/PathwayViewer.aspx?id=610

3.4.c. **Pharmacological management of neuropathic pain in non-specialist settings** (as advised by NICE guidelines 173)

- Neuropathic pain can be challenging to manage as it does not respond to standard analgesics in the same way as nociceptive pain.
- Neuropathic pain can present as a new acute pain (e.g. trauma patients, post-amputation pain), or it may be part of a chronic pain condition.
- Guidance for management of neuropathic pain is set out below but please contact the inpatientpain service if advice is needed.

Medication used to manage neuropathic pain (except trigeminal neuralgia)

- Offer a choice of amitriptyline, duloxetine, gabapentin or pregabalin as initial management of neuropathic pain (except trigeminal neuralgia).
- Any new medication should be started on a low dose & gradually increased depending on the response as patients may experience side effects. Please refer to the British National Formulary (BNF) or section 3.3.b above for more guidance, especially regarding renal impairment/ drug interactions.
- 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.
- Consider tramadol only if acute rescue therapy is needed.

Do not start the following for management of neuropathic pain in non-specialist settings, unless advised by a specialist to do so:

Morphine
Cannabis sativa extract
Capsaicin patch (only to be adminstered by Pain Management Team. Not to be administered on the wards/inpatient clinical areas)
Lacosamide
Lamotrigine
Levetiracetam
Lidocaine 5% medicated plaster (inpatient use only. This medication unfortunately cannot be prescribed in primary care)

3.5. INPATIENT PAIN CONTACT DETAILS FOR INDIVIDUAL HOSPITALS

Whipps Cross Hospital

- Routine Referrals: 9am - 5pm Monday - Friday, Pain CNS Bleep 2497

  Pain CNSs email: PainNurseWCH@bartshealth.nhs.uk
- Out of hours, including weekends: Anaesthetic CT1/2, Bleep 2008
- Daily pain ward rounds Monday- Friday
  - Consultant-led pain ward rounds Monday, Wednesday, Friday.
  - Pain CNS ward rounds Mon-Fri

Newham General Hospital

- Routine Referrals: 8am - 4pm Monday - Friday

  Main Site: Pain CNS, Bleep 4176

  Gateway Surgical Centre: Pain CNS. Bleep 277

  Pain CNSs email: PainNurseNUGH@bartshealth.nhs.uk
- Out of hours, including weekends:

  Main Site: Anaesthetic CT 1/2, Bleep 4095

  Gateway Surgical Centre: RMO, Bleep 267
- Daily pain ward rounds Monday - Friday

  Consultant-led pain ward rounds Monday AM, Tuesday PM, Friday PM

  Pain CNS ward rounds Mon-Fri

Royal London Hospital

- Routine Referrals: 8am - 5pm Monday - Friday, Pain CNS Bleep 1423

  Pain CNSs email: PainNurseRLHSBH@bartshealth.nhs.uk
- Out of hours including weekends: Anaesthetic CT1/2 Bleep 1366
- Daily Pain ward rounds Monday- Friday

  Consultant-led ward rounds Mon PM, Tue AM, Wed AM, Thurs PM, Fri PM

  Pain CNS ward rounds Mon-Fri

St Barts Hospital
Routine referrals: 9am- 5pm Monday – Friday, Pain CNS via mobile 07796 307521

Pain CNSs email: PainNurseRLHSBH@bartshealth.nhs.uk

- Out of hours, including weekends: Anaesthetist On-Call 07525618514 / hospital at night
- Daily Pain ward rounds Monday- Friday

  Consultant-led ward rounds Tue PM

  Pain CNS ward rounds Mon-Fri

4. DUTIES AND RESPONSIBILITIES

All staff working in the Trust	All healthcare staff should adhere to the guidelines for safer assessment of pain and prescribing of analgesics.
Managers	Responsible for adequate dissemination and implementation of the guideline as well as adopting the standard themselves. Responsible for ensuring that all staff meet their training requirements relevant to acute pain management.
Other posts	Governance department are responsible for the monitoring of clinical incidents relating to acute pain management.

5. MONITORING THE EFFECTIVENESS OF THIS POLICY

Issue being monitored	**Monitoring method**	**Responsibility**	**Frequency**	**Reviewed by and actions arising followed up by**
Compliance with the guidelines for acute pain management in adults.	Review of clinical incidents related to acute pain management.	All healthcare professionals who are prescribing analgesics & adjuvant therapy, pharmacists, inpatient pain service, palliative care team. Governance department.	Daily Monthly	Pharmacy, inpatient pain service, palliative care team. Governance Department

APPENDIX 1: ADDITIONAL GUIDANCE AND INFORMATION

1. British Pain Society Pain Scales in Multiple Languages
https://www.britishpainsociety.org/british-pain-society-publications/pain-scales-in-multiple-languages/

2. The assessment of pain in older people: National Guidelines (2007)
https://www.britishpainsociety.org/static/uploads/resources/files/book_pain_older_people.pdf

3. Opioids Aware: A resource for patients and healthcare professionals to support prescribing of opioid medicines for pain.
http://www.rcoa.ac.uk/faculty-of-pain-medicine/opioids-aware

4. NHSE patient safety alert 2014
https://www.england.nhs.uk/wp-content/uploads/2014/11/psa-inappropriate-doses-naloxone.pdf

5. NHSE patient safety alert 2015
https://www.england.nhs.uk/patientsafety/wp-content/uploads/sites/32/2015/10/psa-naloxone-stage2.pdf

6. Neuropathic pain in adults: pharmacological management in non-specialist settings

APPENDIX 2: ABBEY PAIN SCALE

Abbey Pain Scale

For measurement of pain in people with dementia who cannot verbalise.

How to use scale : While observing the resident, score questions 1 to 6.

Name of resident : .....

Name and designation of person completing the scale : .....

Date : ..... **Time :** .....

Latest pain relief given was.....**at**.....**hrs.**

Q1. Vocalisation
eg whimpering, groaning, crying
Absent 0 Mild 1 Moderate 2 Severe 3
Q1 ☐

Q2. Facial expression
eg looking tense, frowning, grimacing, looking frightened
Absent 0 Mild 1 Moderate 2 Severe 3
Q2 ☐

Q3. Change in body language
eg fidgeting, rocking, guarding part of body, withdrawn
Absent 0 Mild 1 Moderate 2 Severe 3
Q3 ☐

Q4. Behavioural Change
eg increased confusion, refusing to eat, alteration in usual patterns
Absent 0 Mild 1 Moderate 2 Severe 3
Q4 ☐

Q5. Physiological change
eg temperature, pulse or blood pressure outside normal limits, perspiring, flushing or pallor
Absent 0 Mild 1 Moderate 2 Severe 3
Q5 ☐

Q6. Physical changes
eg skin tears, pressure areas, arthritis, contractures, previous injuries
Absent 0 Mild 1 Moderate 2 Severe 3
Q6 ☐

Add scores for 1 - 6 and record here ⇒ **Total Pain Score** ☐

Now tick the box that matches the Total Pain Score ⇒

0 - 2 No pain	3 - 7 Mild	8 - 13 Moderate	14 + Severe

Finally, tick the box which matches the type of pain ⇒

Chronic	Acute	Acute on Chronic

Abbey, J; De Bellis, A; Piller, N; Esterman, A; Giles, L; Parker, D and Lowcay, B.
Funded by the JH & JD Gunn Medical Research Foundation 1998 - 2002
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APPENDIX 3: PAINAD SCALE

The Pain Assessment in Advanced Dementia (PAINAD) scale was designed to assess pain in patients with dementia by looking at five specific indicators: breathing, vocalisation, facial expression, body language, and consolability.

Each of these indicators is scored on a scale of 0 to 2.
Scores are documented in the table according to the observed behaviour of the patient.

When these five scores are added the patient's score can range from 0 (no pain) to 10 (severe pain).

ITEMS	0	1	2	SCORE
Breathing, independant of vocalisation	Normal	Normal	Noisy laboured breathing	
Negative vocailsation	None	Occasional Moan or groan. Low level speech with negative or disapproving quality.	Repeated calling out. Loud moaning or groaning. Crying.	
Facial Expression	Smiling or inexpressive	Sad Frightened Frown	Facial grimacing	
Body Language	Relaxed	Tense Distressed Pacing Fidgeting	Rigid, Fists clenched. Knees pulled up. Striking out. Pulling or pushing away.	
Consolability	No need to console	Distracted, reassured by voice or touch.	Unable to console, distract or reassure.	
			TOTAL	

PAINAD should be used in isolation; it is just one tool and should be informed by other assessment techniques, such as knowing the patient and changes in their behaviour.

Above information adapted from:
http://painanddementia.wiki.usfca.edu/PAINAD+assessment+tool

APPENDIX 4: ABBREVIATION GUIDE

ABC	Airway, breathing, circulation
BH	Barts Health
BNF	British National Formulary
BPS	British Pain Society
CNS	Clinical Nurse Specialist
CT1/2	Core Trainee Level 1 or 2
GI	Gastrointestinal
GMC	General Medical Council
IM	Intramuscular
IV	Intravenous
MHRA	Medicines & Healthcare products Regulatory Agency
MST	Morphine Sulphate Tablets
NICE	The National Institute for Health and Care Excellence
NMC	Nursing and Midwifery Council
NPSA	National Patient Safety Agency
NRS	Numerical Rating Scale
NSAID	Non-steroidal Anti-inflammatory
NUH	Newham University Hospital
PAINAD	Pain Assessment in Advanced Dementia Scale
PCA	Patient Controlled Analgesia
PPI	Proton-pump Inhibitor
PRN	‘Pro re nata’: when required
QDS	‘Quater Die Sumendus’: to be taken four times a day
RCOA	Royal College of Anaesthetists
SIGN	Scottish Intercollegiate Guidelines
TDS	‘Ter Die Sumendum’: to be taken 3 times a day
WHO	World Health Organisation