University Hospitals of Leicester NHS
NHS Trust

Policy for the administration of intravenous morphine or fentanyl bolus to adult patients in recovery areas only

Approved By:	Policy and Guideline Committee
Date of Original Approval:	18 June 2021
Trust Reference:	B25/2021
Version:	V2
Supersedes:	V1: Guidelines for the administration of intravenous morphine to adult patients in recovery areas only.
Trust Lead:	Sue Daykin – Lead Acute Pain Nurse Specialist UHL
Board Director Lead:	Andrew Furlong – Medical Director
Date of Latest Approval	28 June 2023 – Policy and Guideline Committee
Next Review Date:	September 2026

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REVIEW DATES AND DETAILS OF CHANGES MADE DURING THE REVIEW

Details of changes made to the policy since the previous version must be clearly identified here or if significant changes are made these should be attached as a separate Appendix. If the document is a complete re-write then this must also be documented here.

V2 changes to add Fentanyl to the protocol

KEY WORDS

Morphine, Fentanyl, Intravenous, Bolus, PACU

1 INTRODUCTION AND OVERVIEW

1.1 This document sets out the University Hospitals of Leicester (UHL) NHS Trusts Policy and Procedures for the administration of intravenous morphine or Fentanyl bolus's to adult patients. This method of pain management is intended for treatment of patients with acute severe pain in PACU and theatre recovery areas only, using the IV morphine or IV Fentanyl bolus algorithm.

2 POLICY SCOPE –WHO THE POLICY APPLIES TO AND ANY SPECIFIC EXCLUSIONS

Who does this policy apply to?

2.1 This policy applies to all registered practitioners working within PACU and theatre recovery areas within UHL.

2.2 All staff administering a bolus of morphine or fentanyl using this policy should be IV competent (this includes an LCAT assessment which is recorded on HELM).

2.3 This policy relates to adult patients only.

- Staffing for these patients: one Registered Nurse/ODP to two patients

2.4 Exclusions include

- Patients with a known allergy to morphine
- Patient with a known allergy to fentanyl.

3 DEFINITIONS AND ABBREVIATIONS

PACU: Post Anaesthetic Care Unit/ Theatre Recovery Rooms

4 ROLES – WHO DOES WHAT

4.1 Responsibilities within the Organisation

- Inpatient Pain Team to ensure adherence to policy through audit of practice.
- Nurse in charge of clinical area to ensure the patients in their care receive IV morphine/Fentanyl in accordance with this policy.
- Qualified Nurse or Operating Department Practitioner to attend training as stated and adhere to policy.
- Board Director Lead with ultimate responsibility

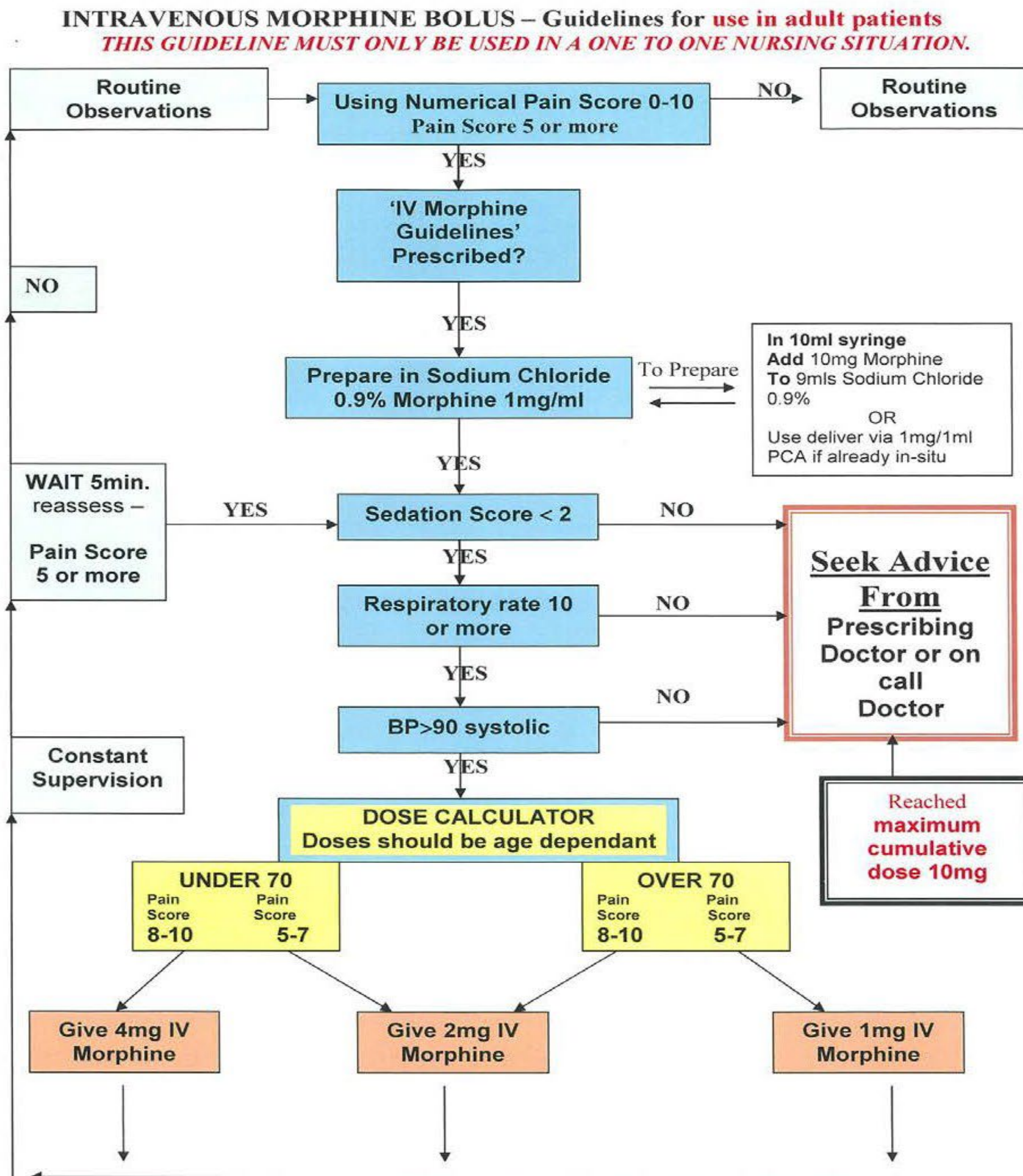
5 POLICY IMPLEMENTATION AND ASSOCIATED DOCUMENTS – WHAT TO DO AND HOW TO DO IT

Before considering whether Morphine or Fentanyl should be given to the patient, the following **ESSENTIAL REQUIREMENTS** should be observed:

- Maintain SpO2>95% (or as indicated on oxygen prescription) by supplementing oxygen, if necessary, via face mask or nasal cannula
- Respiratory rate>8 breaths/minute
- Sedation score < 2 or patient is alert.

- Pain on a numerical score is 5 or more.
- 5 minutes have elapsed since last bolus of opioid.
- After an initial intravenous bolus dose an alternative modality is required to ensure the patient has subsequent access to adequate analgesia.

5.1 Morphine



THE MORPHINE GUIDELINES MUST ONLY BE USED IN A ONE TO TWO OR ONE TO ONE NURSING SITUATION.

The nurse must stay with the patient throughout the administration period and then dispose of any unused morphine according to controlled drugs legislation.(UHL 2022 B16)

PAIN SCORE: Numerical Score 0-10 (on a scale of 0-10 how bad is your pain)

SEDATION SCORE:
0 = None (patient alert)
1 = Mild (awake but drowsy)
2 = Moderate (asleep but rousable) 3
= Severe (unrousable)
S = Normal Sleep

EMESIS SCORE (Indicating nausea & vomiting):
0 = No nausea or vomiting
1 = Nausea
2 = Nausea/vomit
3 = Nausea and frequent vomiting

GUIDELINES

1. Follow the flow chart: Intravenous **Morphine Bolus** – Guidelines for use in adult patients

2. To ensure adequate central absorption flush each bolus with 5mls sodium chloride 0.9%.

3. The patient's observations should be repeated at five-minute intervals. If the patient meets the criteria further boluses of morphine may be administered following the protocol, to an advised maximum of 10mg, unless advised otherwise by the anaesthetist.

4. The **Policy for the administration of intravenous morphine or fentanyl bolus to adult patients in recovery areas only** "IV Morphine" guideline should be discontinued when:-

    a) Pain score is 4 or less
    b) The patient becomes symptomatic
        - Respiratory rate <8
        - Sedation score of 2 or 3
        - Systolic BP of 90 or less
        - Persistent nausea and vomiting (despite anti-emetics)
    c) The department becomes too busy to provide constant supervision of the patient.

TREATMENT OF COMPLICATIONS

If the respiratory rate falls below 8 or the sedation score is 3, IV **NALOXONE** may be required. The patient should be assessed by a doctor to exclude other causes of respiratory depression. When Naloxone is required it should be given, as prescribed, in increments of 200 micrograms, by suitably trained staff or the anaesthetist. Please note that Naloxone has a shorter half -life than morphine so may need to be repeated

5.2 Fentanyl

PRESCRIBING CONSIDERATIONS

- Intravenous Fentanyl is reserved for the initial control of pain in the operating theatres, recovery or critical care setting.
- Acute or chronic renal impairment Weight <50 kg
- Age > 75 years and frail
- Respiratory rate <10 breaths/minute

THE FENTANYL GUIDELINES MUST ONLY BE USED IN A ONE TWO OR ONE NURSING SITUATION.

The nurse must stay with the patient throughout the administration period and then dispose of any unused fentanyl according to controlled drugs legislation (UHL 2022 B16)

PAIN SCORE: Numerical Score 0-10 (on a scale of 0-10 how bad is your pain)

SEDATION SCORE:
0 = None (patient alert)
1 = Mild (awake but drowsy)
2 = Moderate (asleep but rousable) 3
= Severe (unrousable)
S = Normal Sleep

EMESIS SCORE (Indicating nausea & vomiting):
0 = No nausea or vomiting
1 = Nausea
2 = Nausea/vomit
3 = Nausea and frequent vomiting

GUIDELINES

1. Follow the flow chart: **Intravenous Fentanyl Bolus** – Guidelines for use in adult patients

2. To ensure adequate central absorption flush each bolus with 5mls sodium chloride 0.9%.

3. Administer 10 to 25 micrograms bolus until pain tolerable. We need to take into account the age , weight, organ functions etc of the patient.

4. The patient's observations should be repeated at five-minute intervals. If the patient meets the criteria further boluses of Fentanyl may be administered following the protocol, to an advised maximum of 100 micrograms, unless advised otherwise by the anaesthetist.

5. The **Policy for the administration of intravenous morphine or fentanyl bolus to adult patients in recovery areas only** 'IV Fentanyl Bolus' guideline should be discontinued when:-

    d) Pain score is 4 or less
    e) The patient becomes symptomatic
        - Respiratory rate <8
        - Sedation score of 2 or 3
        - Systolic BP of 90 or less
        - Persistent nausea and vomiting (despite anti-emetics)
    f) The department becomes too busy to provide constant supervision of the patient.

TREATMENT OF COMPLICATIONS

If the respiratory rate falls below 8 or the sedation score is 3, IV **NALOXONE** may be required. The patient should be assessed by a doctor to exclude other causes of respiratory depression. When Naloxone is required it should be given, as prescribed, in increments of 200 micrograms, by suitably trained staff or the anaesthetist. Naloxone may have to be repeated

6 Education and Training Requirements

All practitioners to undertake an IV drug assessment and this should be recorded on HELM.

7 Process for Monitoring Compliance

7.1 Full compliance with the policy is necessary to maintain standards.

7.2 Quarterly audit of practice will take place by the pain link nurse for the clinical area and feed back to the lead pain nurse.

7.3 The monitoring table specifies what actions should be taken for the purpose of the audit and sets out responsibilities of those involved.

7.4 Advice on the most effective methodology, both in terms of measuring the success of the document and using the minimum resources in doing so, can be sought from the Clinical Audit Team.

7.5 Policy Monitoring Table

What key element(s) need(s) monitoring as per local approved policy or guidance?	**Who will lead on this aspect of monitoring? Name the lead and what is the role of other professional groups**	**What tool will be used to monitor/check/ observe/asses/ inspect Authenticate that everything is working according to this key element from the approved policy?**	**How often is the need to monitor each element? How often is the need complete a report ? How often is the need to share the report?**	**How will each report be interrogated to identify the required actions and how thoroughly should this be documented in e.g. meeting minutes.**
Dosage of morphine or Fentanyl as per guideline	Lead nurse	eMeds	Ongoing	Report to matron if non compliance
Adherance to policy	Acute Pain Team/lead nurse of PACU/ Theatre recovery	eMeds/ Observation of Practice	Ongoing	Report to matron if non compliance
Assessment of IV Drug Administration for all users	PACU and Theatre Recovery Leads	HELM records	ongoing	Report to matron if non compliance

8 EQUALITY IMPACT ASSESSMENT

8.1 The Trust recognises the diversity of the local community it serves. Our aim therefore is to provide a safe environment free from discrimination and treat all individuals fairly with dignity and appropriately according to their needs.

8.2 As part of its development, this policy and its impact on equality have been reviewed and no detriment was identified.

9 SUPPORTING REFERENCES, EVIDENCE BASE AND RELATED POLICIES

THESE GUIDELINES ARE INTENDED FOR USE WITH MORPHINE AND FENTANYL BOLUS ONLY

References

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O'Conner M, Chadwick S, Black C et al (1992) Solving problems with Patient Controlled Analgesia **British Medical Journal** Vol 304 Pg 1113

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Royal College of Surgeons & Anaesthetists (1990) **Joint Working Party Report Pain After Surgery** - London

Royal Marsden (2008) **Royal Marsden Hospitals Manual of Clinical Nursing Procedures** 7th edition

University Hospitals of Leicester (2021) **The Blood Transfusion Policy** B16/2003

University Hospitals of Leicester (2022) **Policy and Procedures for the Use of Controlled Drugs on Wards, Departments and Theatres** B16/2009

University Hospitals of Leicester (2020) **Cleaning and decontamination for infection prevention UHL policy** B5/2006

University Hospitals of Leicester (2022) **IV (Intravenous Therapy) UHL Policy*** (***excluding cytotoxic, epidural, PN and radiopharmaceuticals** B25/2010

University Hospitals of Leicester (2020) **Vascular Access in Adults and children Policy and Procedure** (B13/2020)

10 PROCESS FOR VERSION CONTROL, DOCUMENT ARCHIVING AND REVIEW

This policy will be available to view on insite and also on the Pain management insite page.

This policy will be reviewed in 2026 by the lead nurse for the acute pain team.

The updated version of the Policy will then be uploaded and available through INsite Documents and the Trust's externally-accessible Freedom of Information publication scheme. It will be archived through the Trust's PAGL.