SESLHD PROCEDURE COVER SHEET

NAME OF DOCUMENT	Acute Pain Management in the Post Anaesthetic Care Unit: Intravenous Opioid Pain Protocol for **Adults** Fentanyl, HYDROmorphone (Dilaudid), Morphine and Oxycodone
TYPE OF DOCUMENT	Procedure
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REVIEW DATE	March 2026
FORMER REFERENCE(S)	St George Hospital PACU (Adult) Intravenous Opioid Pain Protocol. Clinical Workplace Instruction. Immediate post-operative pain in the PACU: intravenous opioid pain protocol. Prince of Wales Hospital Clinical Business Rules.
EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR	Clinical Stream Director Surgery Anaesthetics and Perioperative Services
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FUNCTIONAL GROUP(S)	Surgery, Perioperative and Anaesthetics
KEY TERMS	Pain Protocol

SESLHD PROCEDURE COVER SHEET

SUMMARY	To align with finalisation of anaesthetic care and deliver effective pain relief management in the immediate postoperative phase that occurs in the SESLHD Post-Operative Care Units (PACU). To provide timely, efficient and safe patient care. The procedure is restricted to use in the Post Anaesthetic Care Unit (PACU). Registered Nurses' administering medications outlined in this procedure must meet the approved training and assessment requirements of the PACU in the SESLHD facility where they work.

Acute Pain Management in the Post Anaesthetic Care Unit: Intravenous Opioid Pain Protocol for Adults Fentanyl, HYDROmorphone (Dilaudid), Morphine and Oxycodone

SESLHDPR/501

1. POLICY STATEMENT

The Post Anaesthetic Care Unit (PACU) intravenous (IV) Opioid Pain Protocol requires the administration of IV bolus doses (aliquots) of **opioid as ordered** at minimum intervals of three – five minutes.

Opioid administered as per the **PACU IV Opioid Pain Protocol Flow Chart** enables the patient to experience rapid relief of pain through the use of controlled, incremental IV doses of opioid.

The PACU IV Opioid Pain Protocol is prescribed by the treating anaesthetic Medical Officer (MO) and administered by the PACU Nurse to relieve acute pain in the immediate postoperative phase of the surgical patient's healthcare journey.

2. BACKGROUND

Pain assessment and management is a vital element of the surgical patient's care in PACU, Accurate pain assessment with timely management will directly influence patient comfort, surgical outcomes and satisfaction following surgery.

Patient care is impacted when there is delay in delivery of pain management through administration of analgesia; potentially this delay leads to increases in the:

- severity of pain experienced by the post-operative patient
- time for the PACU nurse to establish a therapeutic level of analgesia
- length of stay in PACU and hospital admissions
- risk of developing chronic pain

Definitions

aliquot	Measured part of a whole volume
ANTT	Antiseptic Non Touch Technique
CBR	Clinical Business Rule
S8	Schedule 8 Drug
eMR	Electronic Medical Record
IV	Intravenous
IMS+	Incident Management System
iVIEW	electronic patient care record and observation chart
KPI	Key Performance Indicator
MAR	Medication administration record (within eMR)
MO	Medical Officer
MoH	Ministry of Health
NIMC	National Inpatient Medication Chart
PACU	Post Anaesthetic Care Unit
PD	Policy Directive

3. RESPONSIBILITIES

3.1 Employees will:

PACU Nursing staff will:

- safely administer the PACU IV Opioid Pain Protocol (as per the PACU IV Opioid Pain Protocol Flow Chart) so that the patient's pain is controlled (**this may mean the pain is not completely alleviated**)
- successfully complete all training requirements as outlined in section 3.5
- successfully complete competency requirements associated with this procedure
- complete additional education requirements where required by the facility's education team.

Education staff will:

- ensure all nurses working in the PACU complete all training requirements outlined in section 3.5
- ensure appropriate support and education is provided to PACU nurses to develop and maintain required knowledge and skill associated with this procedure
- complete competency assessments of the PACU nurses related to the procedure
- maintain records for evidence of education and assessment processes.

3.2 Line Managers will:

- ensure all nurses working in the PACU will receive appropriate training
- ensure all nurses working in the PACU have read the Acute Pain Management in the Post Anaesthetic Care Unit: Intravenous Opioid Pain Protocol for Adults Fentanyl, HYDROmorphone (Dilaudid®), Morphine and Oxycodone SESLHD procedure
- review IMs+ data relevant to this procedure.

3.3 District Managers/ Service Managers will:

- review existing procedure annually
- present audit results and IMs+ data relevant to this procedure to the SESLHD Surgical Stream Committee and Anaesthetic Directors.

3.4 Medical staff will:

Prescribe 'Pain Protocol' on the NIMC or MAR. The prescription must include:

- The **medication name** (i.e., the opioid of choice at that facility e.g., fentanyl) with the **strength**, **form** and **route of administration**.
    - Note: PD2020_045 High-Risk Medicines Management recommends when prescribers include in the order the trade name of the HYDROmorphone preparation e.g., HYDROmorphone (Dilaudid®)
- **maximum number of dose** to be administered as guided by PACU IV Opioid Pain Protocol (see Appendix 1)

- any variation to the PACU IV Opioid Pain Protocol aliquot prescription (see Appendix 1).

3.5 Training requirements

Competency to administer medications is included in the qualifications of medical practitioners, registered nurses and enrolled nurses, but only in accordance with any practice conditions imposed by the hospital and the endorsements, notations and conditions on the person's registration.

Nursing:
Prior to administering medications using the PACU IV Opioid Pain Protocol, all RNs and ENs must complete the following to achieve competency:

1. Medication Administration Assessment for Nurses and Midwives (My Health Learning module course code 43129138)
2. Learning package: SESLHD Acute Pain Management of Adults in the Post Anaesthetic Care Unit: IV Opioid Pain Protocol
3. Medication Administration Competency Assessment (mandatory prior to administering intravenous medications – see local policy and procedure for individual facility requirements).
4. CORE SKILL – Pain Assessment and Management (Pain Protocol) Learning Package for Assessment Tool

Records of completed training and competency will be maintained by the Nurse Education Team via My Health Learning (Acute Pain Management of Adults in PACU: IV Opioid Pain Protocol Learning Package CSK 131026) or in accordance with local Nursing Education and Research Unit procedures.

4. PROCEDURE

4.1 Patient assessment

Pain assessment must occur immediately prior to any administered dose and no more than five minutes after each administered dose of IV medication.

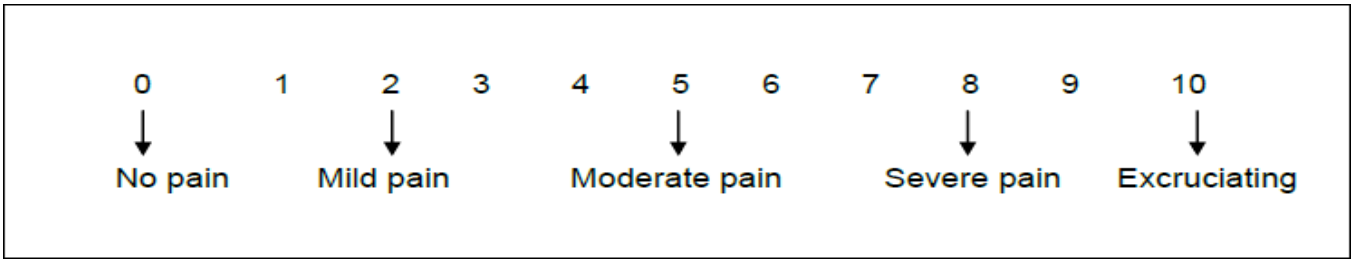
With the absence of objective measures of pain, self-reporting of pain is acknowledged to be best practice globally.

Each pain assessment must be accompanied by documented evidence of sedation, respiratory and pain scores in the approved PACU patient healthcare record, either iVIEW (eMR) or PACU observation chart.

The below pain scales are commonly used and reliable references for the PACU nurse in determining the appropriate dose of prescribed opioid to be administered at any one time. Pain assessment in the PACU should include opportunity for the patient to self-report at

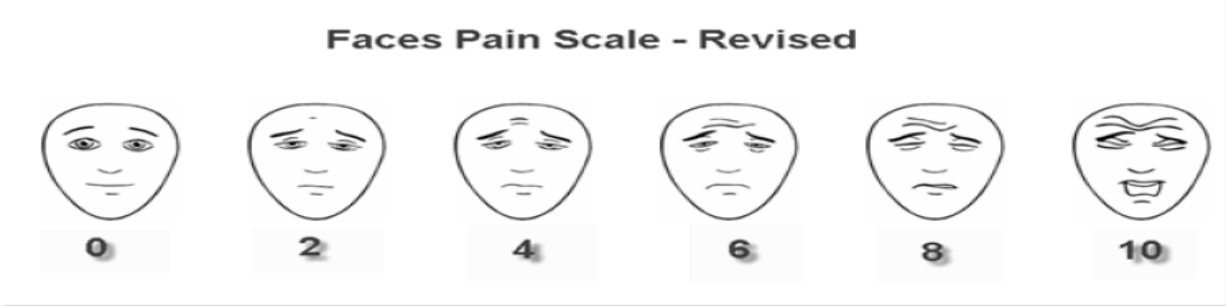
rest and on movement. Movement in the post-operative patient is recommended to take the form of sitting, coughing or movement of the affected area.

Verbal Numerical Pain Scales rates pain from 0 for 'no pain' to 10 'worst possible' or excruciating pain. This tool can be utilised verbally or written as below.



The **verbal descriptor scale** describes pain as none, mild, moderate, severe and worst possible or excruciating pain.

For patients with barriers to communication the **Faces Pain Scale** provides a recognised assessment tool.



4.2 Cognitive Impairment

Regardless of a patient's cognition, self-reporting of pain remains the preferred option for the PACU nurse when assessing a patients' pain score. Despite the evidence supporting this statement, the Pain Assessment in Advanced Dementia (PAINAD) tool is the most appropriate pain scale available to assist the PACU nurse with pain assessment where patients have known cognitive impairment. The PAINAD pain scale is available on iView.

4.3 Medication Preparation

All medications must be prepared in accordance with NSW Health Policy Directives:

PD2022 032 Medication Handling
PD2017_013 - Infection Prevention and Control Policy.

Syringes must be labelled with a user-applied label and in accordance with the National Standard for User-Applied Labelling of Injectable Medicines, Fluids and Lines 2015.

The syringe must be discarded 60 minutes after preparation to maintain stability and sterility.

4.4 Medication Administration

- Confirm prescription order
- Check Patient Identification
- Check Allergies
- Check drug dosage according to PACU IV opioid pain protocol flow chart (appendix 1)
- Confirm patency of IV cannula
- Ensure patient has appropriate oxygen applied prior to administration of opioid
- Ensure compatibility of fluid in progress with opioid medication to be administered
- Swab needleless IV access port with alcohol swab
- Temporarily occlude flow of fluid in tubing above level of access port
- Inject opioid as a slow push
- Re-establish patency of IV fluid flow
- Ensure administration of a flush following each administration
- Replace blunt drawing up needle on syringe end placing in a clean receptacle to maintain ANTT between doses.
- Observe IV site and patient for adverse reactions
- It is the responsibility of the accredited PACU RN for safe storage of the remaining S8 medication between each aliquot. Store in a clean receptacle. Maintain possession of the syringe and do not leave unsecured (at the bedside or elsewhere).
- All medications must be handled and administered in accordance with NSW Health Policy Directives;
    - PD2017_013 - Infection Prevention and Control Policy;
    - PD2022 032 - Medication Handling;
    - PD2020_045 – High-Risk Medicines Management;
    - PD2019_040 - Intravascular Access Devices (IVAD) – Infection Prevention & Control; and the
    - National Standard for User-Applied Labelling of Injectable Medicines, Fluids and Lines.

4.5 Analgesic Administration

Continue to administer PACU IV Opioid Pain Protocol as per PACU IV opioid pain protocol flow chart (Appendix 1) until patient comfort is achieved; **this may not equate to being totally pain free**

All patients receiving the PACU IV Opioid Pain Protocol must remain in the PACU for a minimum of twenty (20) minutes after the last administered dose of IV opioid

If a second syringe has been administered (any or all of the syringe) they must remain for a minimum of 30 minutes following the last dose.

The local minimum discharge criteria must also be met.

The PACU IV Opioid Pain Protocol prescription MUST be ceased prior to transfer to the ward.

4.6 Patients Requiring Additional Considerations

High risk patient groups such as pregnant and elderly patients must have an anaesthetic

consultation to review their acute pain management and suitability for the 'Pain Protocol' prior to administration of the intravenous opioids.

4.7 Sedation and Respiratory depression – Adverse

When titrating opioids for pain management in the PACU, sedation, respiratory function and pain score must be assessed prior to each administration of IV opioid.

Assessment of sedation should be undertaken using the following Sedation Assessment Tool which is documented in the pain assessment section in iView

Sedation Score	
3	Difficult to rouse or unresponsive
2	Constantly drowsy, unable to stay awake
1	Easy to rouse
0	Wide awake

ACI NSW Standardised Pain Charts

Oxygen should be continued as charted for all patients receiving intravenous pain protocol.
If adverse events occur, the anaesthetist must be contacted for immediate patient review.
PACU nurses competent to administer the PACU IV Opioid Pain Protocol must be familiar with the preparation and administration of naloxone (see table below).

Complications	Management
Sedation	Monitor regularly as per protocol. Sedation score >2 = cease pain protocol, give oxygen. Notify anaesthetist. Naloxone ready to administer.
Respiratory depression	Respiratory rate < 10 = caution. Cease pain protocol. Give high flow oxygen. Assess sedation score, monitor patient closely. Respiratory rate < 5 = Cease pain protocol. Give oxygen. Seek assistance; notify anaesthetist immediately. Monitor patient. Naloxone ready to administer. Stay with patient. Apnoea - patient requires reminding/stimulating to take a breath; naloxone ready to administer.

When naloxone is administered for reversal of opioid adverse events this must be documented on the MAR or NIMC.

Any patients administered naloxone must have an anaesthetic review prior to discharge from PACU. Patients should remain on PACU for 60 to 90 minutes post administration of naloxone.

4.8 Medication Documentation

Document administration of PACU IV Opioid Pain Protocol on the 'Once Only'/ PRN section of the NIMC or MAR.

Administration of, and patient response to, opioid must be documented as per the local facility's PACU documentation requirements; either hardcopy or eMR.

4.9 Witness to Schedule 8 medication transactions

4.9.1 General Information

The witness to a Schedule 8 medication transaction must be a person who is fully familiar with Schedule 8 medication handling and recording procedures. This may include a registered nurse or registered midwife, an authorised prescriber, a pharmacist, and any other person authorised by the registered nurse/midwife in charge of the patient care area to complete this task, such as an enrolled nurse or anaesthetic technician.

The witness must be present during the entire procedure that is:

- the removal and replacing of the medication from the Schedule 8 medication storage unit
- the preparation of the medication (as applicable), such as drawing up into a syringe
- the discarding and rendering unusable any unused portion of the medication (as applicable)
- the recording in the Schedule 8 drug register
- the transfer to the patient
- the administration to the patient.

4.9.2 Special instructions for injectable incremental dosing of Schedule 8 medications using a syringe procedural requirements

For Schedule 8 medications, a second person check is required under the Schedule 8 medication witness requirements outlined in PD2022_032 - Medication Handling. The purpose of the Schedule 8 witness procedure is to account for the Schedule 8 medication. The purpose of a second person check prior to administration is to reduce risks associated with medication administration.

Generally, the use of incremental dosing is not encouraged due to risks of medication error and drug diversion. However, in clinical areas, such as PACU, where it is determined that incremental dosing is required PD2022_032 - Medication Handling mandates that incremental dose administrations must be signed by two authorised persons on the medication

order.

An exception *can be made in circumstances (if any) where only a single registered nurse or registered midwife is on duty or available in the department to administer an incremental dose and when delay in accessing a second person to check the dose would be detrimental to the patient.*

5. DOCUMENTATION

Anaesthetic record
National Inpatient Medication Chart (NIMC) in eMR downtime
Medication administration record (MAR) within eMR
iView within eMR
Education records
Clinical competency records

6. AUDIT

Regular audits of patient care area Schedule 8 drug registers at intervals approved by the Drug and Therapeutics Committee must be conducted to confirm records are meeting legislative and policy requirements and also to detect any possible misappropriation.

Schedule 8 Drug Register - monthly
Medical Key Performance Indicators (KPIs) – monthly
Organisation mandatory training records – annually
Local facility compliance audits
IMS+ data

7. REFERENCES

- NSW Health Policy Directive PD2022 032 Medication Handling
- NSW Health Policy Directive PD2017_013 - Infection Prevention and Control Policy
- NSW Health Policy Directive PD2020_045 – High-Risk Medicines Management
- NSW Health Policy Directive PD2019_040 - Intravascular Access Devices (IVAD) – Infection Prevention and Control
- National Standard for User-Applied Labelling of Injectable Medicines, Fluids and Lines
- SESLHDPD/160 Medication: Administered by Enrolled Nurses

8. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
March 2016	0	CNC, Randwick Campus Operating Suite, Prince of Wales Hospital NUM, PACU St George Hospital SESLHD PACU IV Pain Protocol Working Party
May 2016	0	Draft for Comment
June 2016	0	Submitted to DQUM Committee for endorsement
August 2016	1	Approved by DQUM
August 2016	1	Approved by Clinical and Quality Council
April 2018	1	SESLHDPR/501 – underwent review and no changes made. Processed by Executive Services prior to publishing.
September 2020	2	Minor review. Section 4.1 Cognitive Impairment paragraph updated. Links and References updated. Approved by Executive Sponsor. To be tabled at October 2020 Quality Use of Medicines Committee.
October 2020	2	Approved at Quality Use of Medicines Committee. Published by Executive Services.
October 2021	3	Review commenced. Minor review updating hyperlinks and references. Risk Rating reduced from Extreme to Medium.
February 2022	3	Approved by Executive Sponsor. To be tabled at Quality Use of Medicines Committee.
March 2022	3	Approved at Quality Use of Medicines Committee
August 2022	4	Major review commenced
October 2022	4	Draft for comment period
February 2023	4.1	Endorsed by Executive Sponsor following major review
February 2023	4.2	Endorsed by Drug and Therapeutics Committee with amendments
March 2023	4.2	Published following approval at Clinical and Quality Council.

Appendix 1 – PACU Intravenous Opioid Pain Protocol Flow Chart

Definitions

Pain	Level of Consciousness	Drug Preparation
1-3: Very Mild **4:** Mild **5-7:** Moderate **8-10**: Severe	**0:** Wide Awake **1:** Easily Rousable **2:** Constantly Drowsy, unable to stay awake **3:** Difficult to rouse or unresponsive	Dilute with Sodium Chloride 0.9% to total 10mL.

STEP 1: CHECK VITALS

Sedation score > 2
Respiratory Rate < 10
Blood Pressure NOT within 20% of baseline

→ DO **NOT** USE THIS PROTOCOL FURTHER.

SEEK ADVICE FROM ANAESTHETIST.

STEP 2: VITALS OK: PAIN SCORE AND DOSAGE

1-3 Very Mild	4 Mild	5-7 Moderate	8-10 Severe
Oxycodone 10 mg/10mL			
No Further Dosage	Age ≤ 70: 1mL IV Age > 70: 0.5 mL IV	Age ≤ 70: 2 mL IV Age > 70: 1 mL IV	Age ≤ 70: 2 mL IV Age > 70: 1 mL IV

OR

Fentanyl 100 microg/10 mL			
No Further Dosage	Age ≤ 70: 1 mL IV Age > 70: 0.5 mL IV	Age ≤ 70: 2 mL IV Age > 70: 1 mL IV	Age ≤ 70: 2-4 mL IV Age > 70: 1-2 mL IV

OR

Morphine 10 mg/10 mL			
No Further Dosage	Age ≤ 70: 1 mL IV Age > 70: 0.5 mL IV	Age ≤ 70: 2 mL IV Age > 70: 1 mL IV	Age ≤ 70: 2-4 mL IV Age > 70: 1-2 mL IV

OR

HYDROmorphone (Dilaudid) 2mg/10 mL			
No Further Dosage	Age ≤ 70: 1 mL IV Age > 70: 0.5 mL IV	Age ≤ 70: 2 mL IV Age > 70: 1 mL IV	Age ≤ 70: 2 mL IV Age > 70: 1 mL IV

STEP 3: Pain Assessment no more than 5 minutes after last administration. Return to STEP 1.

- If pain is still severe after the administration of the prescribed maximum dose, contact anaesthetist for review ([5] ,D[11] C[12])
- Has a multimodal approach for pain management been considered and implemented? (B[7] D[11]C[13])