

# INTRA-OPERATIVE MEDICATIONS, IRRIGATIONS AND FLUIDS - PREPARATION AND DOCUMENTATION IN THE OPERATING SUITE - CHW

## POLICY®

### DOCUMENT SUMMARY/KEY POINTS

- This document encompasses preparation, handling, administration and documentation of medications, irrigations, fluids, and flush in the perioperative service - CHW
- All medications/irrigations/fluids/flush must be checked by the Instrument nurse and Circulating nurse - one of whom must be a Registered Nurse (RN), and the surgeon/proceduralist prior to patient use
- All medications/irrigations/fluids must be documented on the appropriate electronic patient records
- Intraoperative medications/irrigations/fluids/flush must be electronically documented on the 'Intraoperative Record' located in SurgiNet under Perioperative documentation as listed in [Appendix 1](#)
- All medications/irrigations/fluids must be labelled according to the [National Standard for User Applied Labelling of Injectable Medicines, Fluids and Lines'](#)
- This document excludes administration of blood and blood products

This document reflects what is currently regarded as safe practice. However, as in any clinical situation, there may be factors which cannot be covered by a single set of guidelines. This document does not replace the need for the application of clinical judgement to each individual presentation.

<b>Approved by:</b>	SCHN Policy, Procedure and Guideline Committee	
<b>Date Effective:</b>	1 <sup>st</sup> January 2024	<b>Review Period:</b> 3 years
<b>Team Leader:</b>	Clinical Nurse Educator	<b>Area/Dept:</b> Operating Suite

## CHANGE SUMMARY

- Updated 2023 ACORN Standards, [SCHN Medication Administration Practice Guideline \(2020\\_043v1\)](#) and [NSW Health Medication Handling Policy Directive PD2022\\_032](#).
- Addition of Enrolled Nurse Perioperative Scope of Practice

## READ ACKNOWLEDGEMENT

- All perioperative nurses, anaesthetists and surgeons working within the CHW Operating Suite staff are to read and acknowledge they understand this policy.

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## Introduction

Preparation, administration and Documentation of all intra-operative medications is governed by [NSW Health Policy Directive Medication Handling PD2022\\_032](#),<sup>1</sup> [SCHN Medication Administration Practice Guideline](#),<sup>2</sup> [SCHN Aseptic Non Touch Technique \(ANTT\) Policy](#),<sup>3</sup> [National Standard for User-applied labelling of injectable medicines, fluids and lines](#)<sup>4</sup> and the [New ACORN Standards 2023](#).<sup>5</sup>

The perioperative service is a unique and complex environment of practice in which there is high usage of medications. The nature of workflows and surgical procedures necessitate specialised processes for the handling of medications.

- The operating room in the perioperative area is a closed-practice environment, in which there is a single patient, whose identity is beyond doubt and confirmed at 'Time Out'.<sup>4</sup>
- The identity of the personnel responsible for preparing and checking medicines is recorded in SurgiNet.<sup>4</sup>
- The Post Anaesthetic Care Unit (PACU) is an open practice environment where other patients are in the same area.<sup>4</sup> Medications are administered by RN's in PACU as per [SCHN Medication Administration Practice Guideline](#).
- Both written and verbal medications orders are prescribed by the Surgeon or Proceduralist in the perioperative environment.<sup>6</sup>
- It is best practice for the person administering medications to prepare the medications.
- Anaesthetists are often solely responsible for the prescription, preparation, dispensing and labelling, administration, documentation, and monitoring of clinical effects of medication.<sup>7</sup>
- Medications prepared by the Anaesthetist may also be administered by the Anaesthetic nurse under the direction and supervision of the Anaesthetist.<sup>7</sup>
- Irrigations, fluids, flush and medications are often prepared before and during procedures by the Instrument and Circulating nurses (one of whom must be an RN), for the Surgeon or Proceduralist to administer.
- Medications prepared by Instrument and Circulating nurses include but are not limited to:
  - Local anaesthetic agents
  - Antineoplastic medications
  - Intra-Venous (IV) additives to IV fluid
  - IV and Intra-Arterial (IA) contrast
  - With appropriate education and assessment, IA inotropes, flush and medication protocols for Neuro-Interventional Radiology, Interventional Radiology, and Cardiac Catheterisation procedures.

**Note: If an Instrument or Circulating nurse has not received appropriate education and assessment or is unfamiliar with preparation and handling of medication protocols, the Surgeon or Proceduralist is responsible for preparation of the medications.**

## Intraoperative Management of Medications, Fluids, Flush and Irrigations

- The Surgeon or Proceduralist is responsible for providing a valid medication prescription, as a written or verbal order.
- Each injectable medicine drawn up in a bag or syringe should be prepared and labelled as a single operation by the same person.<sup>4</sup>
- Medication must be prepared individually for one patient as close to use as possible within the immediate patient care environment<sup>1</sup> (operating theatre or anaesthetic bay).
- Medications must be prepared, checked and administered in accordance with the principles of safe medication administration as per [SCHN Medication Administration Practice Guideline](#).
- All intra-operative medications/irrigations/fluids/flush, including skin preparations, indwelling urinary catheter prep and fluids used in flush bowls, **must** be checked, and confirmed by the Instrument nurse, the Circulating nurse (one of whom must be an RN), and the Surgeon or Proceduralist administering the medication, prior to use. This check must be verbal and visual and consist of the:
  - Medication, diluent, irrigation, fluid, or flush name,
  - Medication concentration, strength, and dose,
  - Administration route,
  - Expiry date,
  - Appearance and sterile integrity of the item.
- Clear communication techniques including repeat back and closed loop must be used when administering medications prepared by the Anaesthetist and administered by the Anaesthetic nurse.
- All medications/irrigations/fluids/flush must be labelled according to the ACSQHS [National Standard for User-applied labelling of injectable medicines, fluids and lines](#),<sup>4</sup> with the name and concentration (including units) of the medication visible.
  - Solutions with medication added **by the Circulating nurse** are to be prepared using standard ANTT and labelled with the patient name and MRN, and the name and concentration of the solution and medication.
  - Solutions with medication added **by the Instrument nurse** are to be prepared using surgical ANTT and labelled with an impermeable sterile marker using the sterile label with the medicine, amount(units), volume (mL) and concentration (units/mL).
- Any opened ampoules or containers of used medication/irrigation/fluids/flush are to remain in the operating room until the patient leaves the operating room. These must be discarded **before** the next patient enters the operating room.

**Medication Endorsed Enrolled Nurses (EN's) in the perioperative service**

- EN's are employed as Instrument and Circulating nurses in the perioperative service at the Children's Hospital at Westmead.
- EN's are required to have the direct or indirect supervision of an RN when providing patient care.<sup>8</sup>
- In the operating theatre, at a minimum, one member of the instrument / circulating nurse team must be an RN,<sup>5,6</sup> therefore the EN works under the direct supervision of the RN.
- As an instrument or circulating nurse, EN's may be required to prepare and check medications with an RN and Surgeon / Proceduralist, for administration by the Surgeon or Proceduralist.

**Education and Assessment**

- All perioperative nurses complete the following mandatory education modules in My Health Learning:
  - Fundamentals of Paediatric Medication Safety
  - Handling antineoplastic drugs and related waste safely
- Education specific to medication preparation and handling within the perioperative scope of practice is provided to both EN's and RN's by the perioperative service education team, specialty Clinical Nurse Specialists (CNS), and educators from other SCHN services as required e.g. Oncology.
- Assessment on the preparation and checking process for intraoperative medications is included in Instrument and Circulating Nurse assessment tools.
- Instrument and Circulating nurses are not required to complete the SCHN 'Administration of IV Therapy' Clinical Skills Assessment (CSA) as they do not administer medications. However, as per SCHN policy, this CSA must be completed to administer IV medication if they become employed in another clinical area.

**Documentation**

- [Appendix 1](#) lists the intraoperative medications/irrigation/fluids/flush to be documented in SurgiNet and eMR by the Anaesthetist, Instrument/Circulating nurse(s), and Surgeon.
- All medications/irrigations/fluids/flush used during the procedure must be documented in SurgiNet, eMR and the operation report, including but not limited to medications listed in [Appendix 1](#).
- The intraoperative medications/irrigations/fluids/flush listed under 'Nursing Documentation' in [Appendix 1](#), must be recorded on the electronic intra-operative nursing document located in SurgiNet.
- Surgeons and Anaesthetists are responsible for the documentation of all other prescribed and administered medications and fluids including but not limited to those listed in [Appendix 1](#).
- Medications administered by the Surgeon intraoperatively listed under 'Surgeon to document on MAR' in [Appendix 1](#), must be ordered in PowerChart prior to the commencement or on completion of surgery, by the surgeon.
- All medications used by the surgical or procedural team must also be documented in the operation report.

## References

1. New South Wales Department of Health. (2022). *NSW Policy Directive Medication Handling PD2022\_032*. [https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2022\\_032.pdf](https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2022_032.pdf)
2. The Sydney Children's hospital's Network (SCHN). (2023). *Medication Administration Practice Guideline 2020-043*: <https://webapps.schn.health.nsw.gov.au/epolicy/policy/6238>
3. The Sydney Children's hospital's Network. (2023). *Aseptic Non-Touch Technique Policy*. <http://webapps.schn.health.nsw.gov.au/epolicy/policy/5974>
4. Australian Commission on Safety and Quality in Healthcare. (2015). *National Standard for User Applied Labelling of Injectible Medications, Fluids and Lines*. Sydney: ACSQHC
5. Australian College of Perioperative Nurses (ACORN). (2023). *The New ACORN Standards. Volume 2 – 2023 Professional Practice Standards for Perioperative Nurses (PPSPN)*. Adelaide, South Australia: ACORN.
6. Australian College of Perioperative Nurses (ACORN) *Standards for Perioperative Nursing in Australia* (16<sup>th</sup> edn.). 2020. Adelaide: ACORN.
7. Australia and New Zealand College of Anaesthetists. (ANZCA). (2021). *PG51(A) Guideline for the safe management and use of medications in Anaesthesia*. <https://www.anzca.edu.au/safety-advocacy/standards-of-practice/policies,-statements,-and-guidelines>
8. Nursing and Midwifery Board of Australia. (2016, January). *Enrolled Nurse Standards for Practice*. <https://www.nursingmidwiferyboard.gov.au/Codes-Guidelines-Statements/Professional-standards/enrolled-nurse-standards-for-practice.aspx>

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## Appendix 1. Documentation of Medication

Instrument / Circulating Nurse in SurgiNet	Surgeon in the MAR
Acetylcholine 20mg/2mL intraocular inj.	Alteplase (TPA)
Tetracaine (Amethocaine) 1% minims eye drops	Betamethasone (Celestone, Chronodose)
BIPP Paste Gauze 12.5mm	Bleomycin
Celluvisc eye drops	Dehydrated Alcohol (Absolute)
Chloramphenicol 0.5% eye drops	Heparinised Saline
Chloramphenicol 1% eye ointment	Triamcinalone (Kenacort A-10 and A40)
Ciprofloxacin 0.3% eye/ear drops	Mitomycin C
Cyclopentolate 1% minims eye drops	Papaverine 12mg/mL injectable solution
Floseal	Phenol 10% in Meglumine Iothalamate 60%
Fluorescein 2% minims eye drops	Sodium Chloride 23.4%
Haemarol	Talc Powder-Sterile (Steritalc) 4g Powder
Hydrocortisone 1% topical ointment	Neuro-Interventional Radiology protocols
Kenacomb ear drops and ointment	<b>Anaesthetist in Anaesthetic Module</b>
Lignocaine (lidocaine)-chlorhexidine 2%-0.05% gel	All medications associated with anaesthesia
Lubricating Gel Sterile	Bupivacaine +/- Adrenaline (administered by surgeon)
Methylene Blue	(administered by surgeon)
Omnipaque	Ropivacaine (administered by surgeon)
Oxymetazoline 0.05% nasal spray	(administered by surgeon)
Papaverine HCl Injection	Indocyanine Green (ICG)
Paraffin liquid, Paraffin soft white ointment	<p><b>All medications and irrigations given by the surgical team intraoperatively must also be documented in the operation report.</b></p>
Phenylephrine 2.5% minims eye drops	
Povidone iodine 10% topical ointment	
Silver sulfadiazine 1% topical cream	
Sodium chloride 0.9%	
Sofradex ear drops	
Tisseal	
Ultravist 240	
<b>Irrigations / washes with additives</b>	
Document in SurgiNet	