

## Adult Patient Controlled Analgesia (PCA)

### Contents

Adult Patient Controlled Analgesia (PCA).....	1
Policy.....	1
Scope/Audience.....	1
Associated Documents.....	1
Statement.....	2
Criteria.....	2
Patient and Whanau Education.....	2
Procedural Considerations.....	3
Pre Administration.....	3
Patient Monitoring.....	3
Syringe Change and Programme Change.....	4
Documentation.....	4
Discontinuation of PCA.....	4
Measurement/Evaluation.....	5
References.....	5

### Policy

This policy is to ensure the management of Patient Controlled Analgesia (PCA) is performed in a standardised manner using best practice guidelines by approved personnel and to ensure the patient has an understanding of the management of the PCA pump and can safely self titrate analgesia to meet their individual requirements

### Scope/Audience

RN/RM with First Level IV Certification  
(or for administration via CVAD 2nd level certification)

### Associated Documents

PCA Patient Information sheet ref: 1342  
PCA Treatment sheet C160012

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[Adult Surgical Based IV Incremental Opioid Policy Vol 12](#)

Online PCA Education Package

[Nurse Assisted PCA policy Fluid and Medication Management Manual](#)

[Intrathecal Morphine policy Fluid and Medication Management Manual](#)

## Statement

PCA management is overseen by the Acute Pain Management Service in the Christchurch Hospital Campus and Gynaecology Ward Christchurch Womens Hospital. PCA management in other divisions is managed by the anaesthetist.

## Criteria

- Suitable candidates for PCA pump are those patients able to understand and comply with instructions as assessed by the multidisciplinary team.
- PCA must be prescribed by an anaesthetist on the PCA Treatment Sheet C160012
- PCA opioid syringes are premixed by pharmacy, any additional drug additives must be prescribed by an anaesthetist or the APMS
- Naloxone must be charted and readily available
- Ensure concurrent IV fluids are prescribed
- Ensure concurrent Oxygen therapy is prescribed as necessary
- An appropriately certificated RN/M will have responsibility of patients with a PCA
- The patient is the only person who should push the patient control button (refer to nurse assisted analgesia policy as required).
- The key to the PCA pump must be kept with the areas drug keys.

**Please Note:** The patient is not to leave the ward area with a PCA in progress unless they are undergoing a legitimate procedure e.g. X-ray

## Patient and Whanau Education

The patient/family/whanau will be educated prior to commencement of the PCA including

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- The rationale of PCA.
- Use of the pump.
- Explanation of safety features.
- Explanation of monitoring, e.g. pain scores and sedation scores.
- How you can contact the nurse
- Likely duration of therapy.
- The patient will be given the PCA patient information sheet.

**For all areas covered by the Acute Pain Management Service**

Patients commencing a PCA infusion must be referred to the Acute Pain Management Service to ensure they receive follow up supervision, education and entrance to the Acute Pain Management Service.

## Procedural Considerations

### Pre Administration

- For the medical/surgical cluster of Christchurch Hospital PCA pumps are available from PACU for infusions to be commenced on the ward. Replacement batteries are available from PACU if not in Ward stock.
- Follow the Double independent Checking Procedure and Definitions Roles and Responsibilities documents via Vol 12
- For PCA infusions, an extension set with an antisiphon valve must be used. The anti reflux side port prevents opioid backtracking to the IV fluids.
- Prime the giving set with the prescribed opioid solution.
- Prime the anti reflux side port with 5mL normal saline and attach the concurrent IV fluids to this side port.

### Patient Monitoring

The following observations should be recorded hourly for the first 12 hours then four hourly if stable, to monitor medication effects. Follow the Early Warning Management System as required.

**Exceptions:**

- Basal infusion rate with which recordings must be continued hourly
- See Intrathecal policy for patient monitoring requirements for Intrathecal Morphine.

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When the prescriber deems more intensive recordings are appropriate or where the Early Warning Score Management Pathway has been activated

- Observations must include:
  - Pain score, 0-5.
  - Sedation score, 0-3
  - Respiratory Rate
  - BP and pulse
  - And all further observations to ensure a EWS calculation

**Please Note:** Continuous opioid infusions (Basal rates) are more likely to cause respiratory depression.

Inadequate analgesia (pain scores 3-5) requires review by medical staff/APMS staff. Call the APMS/Duty Anaesthetist or the On-Call Anaesthetist.

### **Syringe Change and Programme Change**

- Any PCA prescription alterations the staff initiating the new prescription must do this according to the double independent checking procedure and Roles and Responsibility Policy
- Document date and time of syringe change, programme change and shift total on the PCA prescription sheet C160012
- PCA pumps require zeroing of the “Total Dose” at the end of each shift.

**Please Note:** When changing syringes, always clamp tubing to prevent inadvertent bolus being administered.

### **Documentation**

- As per Syringe or programme change as above
- All observations will be recorded on the Adult Observation Chart
- The following must be documented on the PCA chart
  - Number of administered doses and number of attempts (Inj/Att).
  - Total dose per shift.

### **Discontinuation of PCA**

- Ideally PCA should be discontinued in the morning after consultation with the Acute Pain Management Service/Duty Anaesthetist

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- When PCA is discontinued, any remaining medication must be discarded and the amount documented by two nurses in the Controlled Drug Register

**Please Note:** Ensure adequate alternative analgesia has been charted before discontinuing PCA infusion.

## Measurement/Evaluation

APMS review of each individual patient daily

Incident management process

## References

Acute Pain Management Service Scientific Evidence (3rd ed.)  
National Health and Medical Research Council (2010) Australian  
Government

McIntyre, P.E, Shug, S.A., Acute Pain Management. A practical  
guide (3rd ed.) 2015, Saunders

<b>Policy Owner</b>	Acute Pain Management Service Nurse Consultant
<b>Policy Authoriser</b>	Executive Director of Nursing & Chief Medical Officer
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