Medications in Paediatrics

Sites where PCP applies	All HNELHD sites caring for paediatric patients
This PCP applies to:	
1. Adults	No
2. Children up to 16 years	Yes
3. Neonates – less than 29 days	No
Target audience	All clinical staff who prescribe and administer medications to paediatric patients.
Description	This has been developed to ensure that any risk of harm to the patient associated with medication administration is identified and managed.

Go to Procedure

Keywords	Medication, administration, medicine, paediatric, overdose, IV opioid, Z-track, intramuscular, subcutaneous, injection, gastrostomy, bolus, single-check medications,
This PCP relates to NSW Ministry of Health Policy Directive	PD2013_043 Medication Handling in NSW Public Health Facilities
PCP number	PD2013_043:PCP 47
Replaces existing document?	Yes
Document number and dates of superseded document/s	JHCH 13.3 2015 Safe Administration of Medicines in JHCH

Related Legislation, Australian Standard, NSW Ministry of Health Policy Directive or Guideline, National Safety and Quality Health Service Standard (NSQHSS) and/or other, HNE Health Document, Professional Guideline, Code of Practice or Ethics:

- National Standards V2 – 1 & 4
- NSW Ministry of Health Policy PD 2013_043 Medication Handling in NSW Public Health Facilities
- Medication Safety in HNE Health PD2013_043:PCP 31
- Patient's Own Medications – Handling and Storage in Hospital PD2013_043:PCP 32
- NSW Ministry of Health Policy PD2016_058 User-applied Labelling of Injectable Medicines, Fluids and Lines.
- NSW Ministry of Health GL2006_006 Infants and Children Insertion and Confirmation of Placement of Nasogastric and Orogastric Tubes

Tier 2 Director responsible for Policy to which the PCP relates. PCP authorised by	Paul Craven, Executive Director, Children, Young People & Families
PCP contact person and Network or Service etc. responsible for the PCP Contact details	Camilla Askie, Clinical Practice Improvement Coordinator, CYPFS
Date authorised	17 July 2019
This document contains advice on therapeutics	Yes, Approval gained from District Quality Use of Medicines Committee on 20 May 2019
Issue date	19 July 2019
Review date	19 July 2022

This document reflects what is currently regarded as safe and appropriate practice. The guideline does not replace the need for the application of clinical judgment in respect to each individual patient but the procedure/s require mandatory compliance. If staff believe that the procedure/s should not apply in a particular clinical situation they must seek advice from their unit manager/delegate and document the variance in the patient's healthcare record.

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Note: Over time, links in this document may cease working. Where this occurs, please source the document in the PPG Directory at: http://ppg.hne.health.nsw.gov.au/.

PURPOSE AND RISKS

Research shows that many adverse events reported in Australian health service organisations are associated with medicines. Research also demonstrates that standardisation and improvements to medication chart design can improve the safety of medication processes (ACSQHC, 2009).
This guideline has been developed to further educate clinicians on the principles of safe medication administration for paediatric patients within paediatric wards, thereby reducing medication administration errors and reducing the risk of associated patient harm.
Children are at increased risk of medication errors compared to adults for a number of reasons. Medicines for children often need to be measured, rather than coming in discrete dosing units. There are more complex calculations and children are at higher risk of 10-fold and other calculation errors.
Any unplanned event resulting in, or with the potential for, injury, damage or other loss to the patient as a result of this clinical procedure must be reported through the Incident Information Management System (IIMS).
Open disclosure procedures must be commenced to ensure the concerns of the patient are identified and managed in accordance with Ministry of Health Policy Directives.

Risk Category*: Clinical Care & Patient Safety*

GLOSSARY

Acronym or Term	Definition
BCP	Business Continuity Plan
CAP	Clinical Applications Portal
ePMA	Electronic Prescribing and Medicines Administration
EN	Enrolled Nurse qualified for medication administration
JHCH	John Hunter Children's Hospital
IIMS	Incident Information Management System
IM	Intramuscular
IT	Intrathecal
IV	Intravenous
MedChart	ePMA Software for HNELHD
MO	Medical Officer
NG	Nasogastric
NGT	Nasogastric tube

OG	Orogastric
PC	Personal computer
PCP	Policy Compliance Procedure
PEG	Percutaneous Endoscopic Gastrostomy
PPE	Personal Protective Equipment
PPG	Policy, Procedure and Guideline
PO	Per oral
PR	Per rectum
RN	Registered Nurse
RMO	Resident Medical Officer
SUBCUT	Subcutaneous

PROCEDURE

This PCP does not replace the need for the application of clinical judgment in respect to each individual patient.

The legal and safe administration of medications to patients via any designated route must be a key priority of all clinical staff.

The process starts with legal and safe prescription of medications and includes recognition of unsafe prescriptions with actions to rectify, safe systems of medication supply and storage, medication reconciliation and administration of medications by professionally endorsed and competent clinicians practicing according to the legal requirements of their professional registration.
For Nurse Initiated Medicines see PD2013_043:PCP 4 Nurse and Midwife Initiated Medicines and individual protocols.
This procedure requires mandatory compliance.
It is mandatory to ensure that the patient/family/carer has received appropriate information to provide informed consent and, that patient identification, correct procedure and correct site process is completed prior to any procedure.
It is mandatory for staff to follow relevant five moments of hand hygiene, infection control, moving safely/safe manual handling, documentation practices and to use HAIDET for patient/carer communication: Hand hygiene Acknowledge, Introduce, Duration, Explanation, Thank you or closing comment.

MEDICATION ADMINISTRATION PROCESS

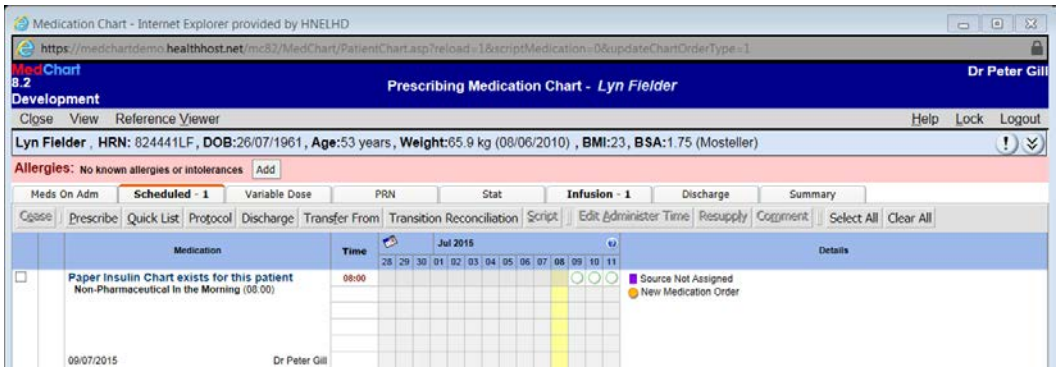
Prescribing with MedChart:

Prescribers are responsible for ensuring that medication orders are prescribed within the MedChart software. MedChart software must be used to prescribe all medicines, except where approved specialty paper charts remain in place. The prescribing section of the ePMA software includes Nurse/Midwife Initiated Medicines.

MedChart provides information for prescribers through seamless access to reference texts. Quick lists provide a quick and easy method for the prescription of the most common medications in usual dosing regimens. Protocols are embedded within the software to assist the prescription of complex medication regimens.

Paper medication charts remain in use for the following: complex infusions, (*including where a specialty chart is in existence e.g. HNE Heparin Infusion)*, sites where MedChart has not been implemented yet, outpatients and community health. Chemotherapy will be prescribed in CHARM.

For sites where MedChart is implemented, there must be cross-referencing of other concurrent medication charts in use for the inpatient within the software. This can be done using the relevant Quick List option “Paper Chart exists for this patient”. This is the responsibility of the prescriber, although may also be added by other clinicians caring for the patient. This is to ensure that medicines are not overlooked on administration rounds.



For patients transferring to and from ePMA-enabled clinical areas, prescribers are required to follow procedures outlined in PCP PD2013_043:PCP 36 Transfer of patients to and from ePMA-enabled clinical areas.
This may include printing of paper charts from the ePMA software.
Prescribers must ensure that finalised discharge medication lists are completed within the software. This provides compliance PD 2009_060 PCP 5 Clinical Handover - Discharge Summaries. Medication lists will integrate with discharge summaries produced in CAP, to provide an accurate summary of medicines, which will also be visible in the patient’s personally controlled electronic healthcare record (My Health Record).
These lists should also be provided to patients and carers as part of their agreed medication plan.

MEDICATION HISTORY & RECONCILIATION:

The MedChart software assists prescribers to document medication history and allows for medication reconciliation to be performed within the software at admission, transitions of care and at discharge. This process should be started for all patients on admission. The treating team has primary responsibility for this. On discharge, the treating team will need to complete a medication reconciliation based on the Risk Stratification Tool. JHCH’s is attached as an example – see Appendix 3.

PAEDIATRIC NATIONAL INPATIENT MEDICATION CHART (NIMC)

Paper-Based Prescribing

- The medication chart is labelled correctly with addressograph sticker on both sides
- The patient’s name is printed by the first prescriber under the identification label or handwritten details

- The patient's weight is recorded
- The Allergies & Adverse Reactions box is completed
- The prescription is legible, with signed and printed prescriber's name and contact details
- The date (including the year), time, route, dose calculation and indication for the prescription is recorded
- There must be only a single route of administration specified. Prescribing multiple alternative routes of administration (e.g. PO/IV) is unsafe
- The medication generic name, dose and frequency are documented
- Only accepted abbreviations are used (See National terminology, abbreviations and symbols to be used in the prescribing and administering of medications in Australian hospitals[3])
- The times of administration match the frequency of the prescription and have been entered by the prescriber
- Slow/modified/sustained release medications have the "Tick if slow release" box marked

ADMINISTRATION

Prepare the medication

- Don PPE (gloves and goggles) if handling liquids, cutting tablets or reconstituting drugs
- Measure the required dose, check expiry date and complete an independent check with an appropriate second person
- Ensure medication is prepared in the correct administration device:
    - Tablets in medicine cups or dissolved into enteral dispenser. Check with "Don't Rush to Crush" reference for crushable medications or in MIMS online.
    - Oral liquids in oral syringes
    - Enteral medications in enteral syringes
    - Larger volumes of oral liquid medications in medicine cup
    - Use kidney dish for transporting to the bedside
- All parenteral medication must be labelled in accordance with the policy directive, PD2016_058 User-applied Labelling of Injectable Medicines, Fluids and Lines.
- All parenteral bags, burettes and syringes containing medications are to be labelled with the appropriate additive label for the route, and should include the drug name, strength, dose, time commenced and administrator's and second checker's name
    - This label must not occlude the manufacturer's printed information
    - Additionally, the line that the infusion is running into must be labelled with a matching label specific to the route (see Appendix 1)
- All containers (e.g. bags and syringes) for injectable medicines and all lines and catheters for administering injectable medicines are labelled to identify the correct route of administration and are colour coded according to target tissue
    - All parenteral lines not intended for administration of medicines or fluids, such as invasive monitoring lines, are also labelled
- All containers (e.g. bags, syringes) containing medicine which leave the hands of the person preparing the medicine before administration must be labelled
- Only one medicine at a time is prepared and labelled before the preparation and labelling of any subsequent medicine
- Any medicine or fluid that cannot be identified (e.g. in an unlabelled syringe or other container) must be discarded

ADMINISTRATION TO PATIENT

- Ensure that the correct personnel are available and present throughout the checking and administration process
- Attend five moments of hand hygiene throughout the procedure
- Set a mental and physical “timeout” space to allow you to concentrate on the task at hand.
    - Checking the medication/s should be the only task the staff member is attending. Interruptions should be kept to a minimum.
    - If unable to complete the checking process due to interruption, the procedure should be restarted
- With the prescription available, check the five rights of medication administration
    - Right drug – and in correct form e.g. slow release
    - Right dose – this involves checking that the prescribed dose is correct based on the patient’s weight (or in some cases, body surface area). Use the appropriate drug reference manual to check this. The Australian Medicines Handbook – Children’s Dosing Companion is the preferred reference for dosing in children. If an error is apparent, ask the prescribing medical officer to review and correct
    - Right time and date
    - Right route
    - Right patient
- Check the expiry date of the drug
- Check for any recorded allergies and consider the relevance with the intended administration e.g. do not administer amoxicillin if patient has a recorded penicillin allergy
- Check parenteral fluid compatibility for all injectable drugs, along with drug compatibilities if more than one drug is used or more than one line is attached
- Collect the required equipment
- Recalculate the required dose with independent and appropriate second person

DOCUMENTATION OF ADMINISTRATION WITH MEDCHART

The staff member administering the medication is responsible for documenting the medication administration within the software, including the prescribing and dosing of nurse/midwife initiated medicines.

An administration quick guide is available on the Intranet (MedChart resources) to assist staff after training. Hard copies of these are available in ePMA-enabled clinical areas.

Clinicians involved in administration of medicines need to be aware that some paper (specialty) charts may remain in use for inpatients. Use the Quick List option “Paper Chart exists for this patient” (see example above) to remind staff to check for paper charts.

ADDITIONAL DOCUMENTATION FOR IMMUNISATIONS

In addition to documenting in MedChart, all immunisations must be documented in the individual parent held child health record, in NSW this is also called the Blue Book. The AIR (Australian Immunisation Register) also needs to be notified of the immunisation received to ensure a complete and contemporaneous record of the child’s immunisation is maintained for future immunisation.

PROCESS FOR MEDICATION ADMINISTRATION

- TWO appropriate clinicians are required to physically go to the bedside of the patient to administer all medications that require double-checking
- For the single-check medications only – see Appendix 2 list, one clinician is acceptable
- Explain the medication and its action to the child and/or parent/carer
- All persons involved in checking the medication must attend to the patient's identification and allergy check prior to administration of the drug

PATIENT AND ALLERGY IDENTIFICATION

Patient labels with patient name, MRN, date of birth and barcode ONLY are to be used in identification bands. If the patient has identified MEDICATION allergy/allergies they should have a red identification band with insert containing their name, date of birth and barcode only. The specifics of their allergy SHOULD NOT be written on their identification band.

- Attend a verbal and visual identification check by:
    - Asking the patient or parent/carer the child's full name and date of birth
    - Visually checking the child's identification band for name, date of birth, and medical record number (MRN)
- Asking the child or parent/carer about any allergies, checking this against the medication chart.
    - If allergies are identified but not recorded, complete the Allergies & Adverse Reactions box on the medication chart or the allergies section of MedChart
- If the patient identification is correct, check that the required route is available (e.g. able to swallow if oral; vascular access is patent) and administer the medication as per the drug reference or manufacturer's instructions
    - Ensure the patient swallows any ORAL medication administered to them.
    - Do not leave medications for the patient to take later
    - Do not leave medication out for other patients to access
- Personnel involved in the checking and administration procedure then sign that the drug has been legally and safely administered on the medication chart, electronically in MedChart, and in the Accountable Medications Register (Schedule 4/8 "DD book") if applicable
- Dispose of waste and sharps as per WHS Policy (i.e. a sharps container at the bedside)
- Monitor for any allergies and adverse reactions and respond accordingly
- Document any irregularities in the patient's healthcare record
- If there are any concerns about the medication, DO NOT administer until concerns have been resolved (may require escalation to senior medical/nursing/pharmacy staff as per policy) Refer to the Medication Conflict Resolution: Managing Concerns over the Safety of Medication Orders Guideline

SAFETY ALERTS

- Oral syringes MUST be used for all medications administered by oral route to avoid the risk of intravenous administration
- Enteral dispensers (ENFit) MUST be used for all medications administered by NG/OG/PEG routes to avoid the risk of intravenous administration
- IV medication MUST be labelled as per the line labelling policy if it leaves the hands of the person preparing it
- Water for injection bags of fluid are ONLY for humidifier use and must be kept away from intravenous bags of fluid. Accidental IV administration of water for injection has caused deaths

PATIENT'S OWN MEDICATIONS

Medications brought into the health facility by a patient or family member:

- Usually not administered to the patient and the family should be requested to take the medication home. The patient's own medication may be used only until the hospital is able to obtain it – contact the pharmacy for advice
- Are not to be left at the bedside
- An exception may be made for patient's own adrenaline (epinephrine) auto-injector (EpiPen) which may be kept with the patient and self-administered in case of anaphylactic reaction
- If a medication is unable to be sourced from pharmacy, an authorised prescriber has to approve the use and a pharmacist (or other qualified practitioner when a pharmacist is unavailable) must visually inspect the medication and container to verify the drug's identity, proper labelling and packaging to guide safe drug administration
- Refer to the District PCP: Patient's Own Medications – Handling and Storage in Hospital PD2013_043:PCP 32

UNPLEASANT TASTING ORAL MEDICATIONS

To assist in administering unpleasant tasting oral medications, parents/carers may ask to mix a medicine with food

- Medications should not be mixed into a bottle of infant formula or expressed breast milk (EBM) due to the possibility of the infant not drinking the feed and making the infant averse to the formula
- The same applies to mixing medication with large quantities of food
- Medications may be mixed with a small amount of puree, e.g. apple, or added to a small amount of formula or EBM in a teat
- Infants and young children requiring oral medications should be nursed and the medications administered in small increments toward the inner aspect of the cheek to avoid choking, gagging or aspiration. If the infant starts to cough or gag, stop the procedure, settle the infant and resume with smaller increments and watch for signs and symptoms of aspiration

PROCEDURE FOR ADMINISTRATION OF INTERMITTENT IV OPIOID BOLUS

- As per the PD2013_043 Medication Handling in NSW Public Health Facilities, two authorised persons must check and administer the IV opioid bolus. Also refer to local policies and procedures
- The two authorised persons that check the opioid must sign for each opioid bolus administered
- The medication syringe must be clearly labelled
- The IV line must be checked for patency prior to delivering the opioid bolus
- The IV opioid should be checked for compatibility with any current fluids or other medications prior to giving the opioid bolus
- A pulse oximetry monitor must be available and placed on the patient
- The patient's level of sedation and respiratory rate must be fully assessed, prior to giving each opioid bolus
- The prescribed dose of opioid should be administered as a 'push' from a 10 mL syringe. The bolus dose must not exceed the recommended bolus size
- A sodium chloride 0.9% flush must be given after the bolus to ensure the full opioid dose has reached the patient
- One nurse should continue to observe the patient during administration of the IV opioid bolus.
- If the patient requires further opioid boluses after this time, the patient requires a clinical review. A new syringe should be made up as per the prescription and the same administration process followed

- The total amount of opioid given and amount discarded must be recorded on the NIMC or MedChart by the two authorised persons that administered and checked the opioid
- If the pain is unresolved after ONE permitted bolus has been given, a review by the medical team is required to reassess the patient
- If the patient does not need the analgesia for any reason, the drawn-up medication is to be immediately discarded into the appropriate receptacle
- Document any S8 destruction (including quantity and witness)

OBSERVATIONS

- Prior to administration of the IV opioid bolus, the patient should have a baseline set of observations attended and recorded on the Standard Paediatric Observation Chart (SPOC)
- The patient should be awake or easily roused to voice prior to the bolus
- A full set of observations should be recorded on the SPOC, including pain score and level of consciousness every 5 minutes for 15 minutes after bolus
- The effectiveness of the analgesia should be recorded in the patient's healthcare record.

COMPLICATIONS

IF RESPIRATORY DEPRESSION OR OVERSEDATION IS SUSPECTED:

- CEASE administering opioid bolus
- Attempt to rouse the patient
- Obtain a full set of observations
- Depending on the patient’s observations, call for a medical clinical review OR Rapid Response Team
- Administer naloxone per the medical officer orders if opioid toxicity is suspected

PROCEDURE FOR GASTROSTOMY/NGT ADMINISTRATION

- If possible, medications should be in a liquid form for easier administration and to reduce risks of blockage
- In the event of several medications to be administered at one time, be aware of chemical reactions and seek pharmacist advice with regard to administration
- Confirm the patency of the gastrostomy tube with 5 mL water flush if feeds not infusing & stop feeds during medication administration
- For NGT administration, confirm the correct position of the tube and patency by testing the pH of stomach aspirate on pH strip. The result from the pH strip must be less than or equal to 4.0. Document the result in the patient healthcare record. This test is to be completed before any medication administration
- If feeds not infusing, test pH of stomach aspirate on pH strip, pH less than or equal to 4.0 is required to proceed (desired range 1.0–4.0)
- If the child is on acid suppressing medications or on continuous feeds this range may be significantly altered. Senior medical officer must be notified. Individual risk assessment will determine if a gastric pH up to 5.0 will be acceptable confirmation of placement’ GL2016_006
- This acceptable pH must be clearly documented in the patient’s healthcare record by the treating medical officer.’ GL2016_006
- Administer the medication slowly as per the reference instructions and visually inspect the gastrostomy site or NGT for leakage, inflammation, swelling or signs of pain in the patient
- Flush the tube with 5–10 mL of water slowly before clamping the gastrostomy tube/capping NGT or restarting the feeds if in progress

- Terminate the procedure, ensuring that the patient is comfortable and the gastrostomy tube/NGT is secure

SAFETY ALERTS

Only administer medication via the giving sets provided with each gastrostomy button

Do not, under any circumstances, push a syringe directly into the button as it will damage the valve in the button

For size 6 or 8 NG tubes, omeprazole should only be administered as pharmacy prepared suspension and must be thoroughly flushed to prevent blocking the gastrostomy/NGT

PROCEDURE FOR SUBCUTANEOUS OR INTRAMUSCULAR ADMINISTRATION

Ensure that:

- The infant/child is provided with appropriate pain relief and management of procedural pain is implemented
- That the infant or child is positioned in either a sitting or lying position that ensures the person administering the injection is not required to bend or twist to administer the injection
- That the required numbers of personnel are present to ensure that the infant/child and the person administering the injection are safe
- The site is free of tenderness, scarring, itching, and inflammation and hypertrophied areas
- That the appropriate PPE and sharps safety is used and disposed of according to governing polices

POSITIONING AND INJECTION SITES (SUBCUT, IM)

For positioning technique descriptions/images and injection site techniques/images go to relevant section of the Australian Immunisation Handbook

Suitable sites for injections are:

- **Subcutaneous** – Suitable sites are the upper outer third of the arm or the upper outer aspect of the thigh (vastus lateralis site) or the fatty abdominal region
- **Intramuscular** – Suitable sites are the deltoid muscle in the upper arm or the ventrogluteal site or the outer aspect of the thigh
    - When determining the site suitable for IM injection, it is important to remember that the volume of medication given per site is dependent on the size of the muscle: that is 1–2 mL for the deltoid site; up to 3 mL for the ventrogluteal site; and up to 2 mL for the outer aspect of the thigh
- Clean the injection site with an alcohol wipe (except for immunisations where wipes are not used), starting at the centre and wiping outwards in a circular motion for approximately 5 cm diameter and allow to dry
    - Allowing time to dry is particularly important for the administration of enoxaparin injections as the alcohol can remove the silicone coating on the needle, increasing the probability of bruising
    - Alcohol wipes should not be used for insulin injections as they increase the risk of skin breakdown (an important part of care considering the frequency and long-term need for injections). The exception being any child who is immune deficient (i.e. oncology). Ensure the skin is clean and dry with normal bathing

PROCESS OF ADMINISTRATION (SUBCUT, IM, Z-TRACK)

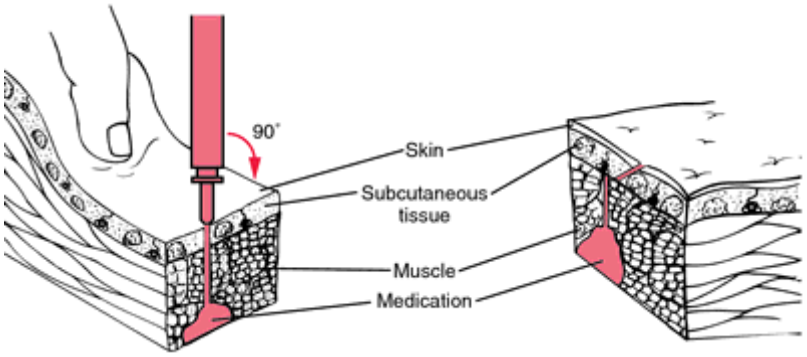
- **Subcutaneous** – Pinch the skin up with the forefinger and thumb to ensure the medication is delivered subcutaneously
    - Needle is inserted at a 45° or 90° angle, depending on the medication to be administered
    - Continue to hold the syringe in place and inject the medication with a slow even pressure
- **Intramuscular** – spread the skin tightly
    - Inject the needle into client quickly and firmly and at an angle of 90°
    - Pull back gently on plunger to ensure no blood apparent. If blood evident in syringe, discard in sharps container and recommence process. If no blood is evident, inject the medication with a slow even pressure
- Remove needle quickly from insertion site and place alcohol swab over the site. Do not re-sheath needles. If using an insulin administration device (pen), the patient/family member should remove the needle and dispose in the sharps container at the bedside
- Disposal of waste – only needle/s, syringe/s and glass ampoules are disposed of in sharps containers. Paper, cardboard, alcohol wipes and plastic ampoules can be disposed of in the household waste. Antibiotic ampoules must not be disposed of in household waste

Z-TRACK METHOD OF INTRAMUSCULAR INJECTION

This is used to administer a drug in a large muscle that prevents the leakage of the medication into the layers of subcutaneous tissues. It is named Z-track because, after using the technique, a zigzag path is responsible for sealing the drug in the muscle.

Irritating medications and those that cause discolouration are administered intramuscularly using this method (e.g. iron salts). Tissue irritation is minimised by the lateral displacement of the skin during injection that seals the drug into the muscle tissue, inhibiting the escape of the drug into the subcutaneous layer of the skin.

The procedure requires thorough attention to technique because leakage of the injected drug causes permanent staining of some tissues and patient uneasiness. A large and deep muscle must be used in this procedure. The ventrogluteal site is usually selected for the IM injection.



TheFreeDictionary.com
http://medical-dictionary.thefreedictionary.com/Z-track+injection

PERFORMING THE Z-TRACK METHOD

- Place gloved fingers on the skin surface and pull the overlying skin and subcutaneous tissue approximately 2.5–3.5 cm laterally
- Holding the skin taut with the non-dominant hand, insert the needle at a 90 degree angle at the spot where the finger was initially placed before displacing the skin laterally

- Aspirate for blood return with the dominant hand only. If there is no blood return on aspiration, inject the drug slowly
- Wait for 10 seconds before withdrawing the needle to allow the medication to disperse evenly
- Slowly remove the needle
- Release the taut skin. A zigzag needle track is created (as a result of the sliding of the tissue planes across each other) preventing the escape of medication from the muscle tissue
- Instruct the patient not to wear tight or constricting clothing because it can force the injected medication out to the subcutaneous layers. Do not massage the site
- Encourage the patient to mobilise (walk or move in bed) to facilitate the absorption of medication or use passive movement if the patient is not able to mobilise independently

MEDICATION ADMINISTRATION FOR TOXICOLOGY PATIENTS (FOLLOWING DRUG OVERDOSE/POISONING)

- No nurse-initiated medicines are to be administered to patients admitted following deliberate or accidental poisoning
    - This section of the medication chart can have a line drawn through it to prevent medications being nurse-initiated
    - MedChart does not have the functionality to stop nurse-initiated medications. It should therefore be documented in the patient's healthcare record and communicated at handover
- Cessation of the "No Nurse Initiated Medicines" requirement is at the discretion of the treating teams and should be documented in the patient healthcare record
- All medications including analgesics, antacids and nicotine replacement therapy must be approved by the Paediatrician in the first instance or the Toxicology Team
- If after hours, the Paediatric Resident or Registrar must contact the Paediatrician on call (in the first instance) or the Toxicologist on call prior to ordering medications
    - This is very important especially if sedation is required

SAFETY ALERT

RMOs/Registrars must ring the paediatrician or the toxicologist on call before ordering medications for patients who have been admitted with accidental or deliberate poisoning

- In the past, toxicology patients have self-poisoned again in hospital as they have been able to hoard or take other patient's medications
- All discharge medications must be approved by the Paediatric Consultant
- A patient's own medication is not to be routinely returned to them on discharge. Consider obtaining consent to destroy patient's own medications, especially if risk of poisoning/overdose exists.
    - The Paediatrician or Toxicologist may decide to return a patient's medication, preferably to be handed over to a relative or friend rather than directly to a patient
    - Refer to the District PCP: Patient's Own Medications – Handling and Storage in Hospital PD2013_043:PCP 32

MEDICATIONS FOR DISCHARGE WITHIN MEDCHART

- Planning for discharge within MedChart can commence at admission. By using the 'Meds on Adm' tab and activating the plan, prescribers can:
    - Decide which regular medicines can be continued (unchanged or changed)
    - Decide which regular medicines can be ceased

- Decide which of the patient's regular medicines should be suspended. This can include drugs which are not to be given during the admission. This helps ensure medications are not overlooked during the admission or at discharge

PRESCRIBING FOR DISCHARGE

A detailed explanation of the process is contained in *Medications for Discharge within MedChart*, taken from Prescribing Discharge Medications in ePMA-Enabled Facilities (Med Chart) PD2013_043:PCP 43.

IN THE EVENT OF POWER FAILURE/NETWORK INTERRUPTION

In the event of an outage, it is the responsibility of the Nurse in charge to decide, based upon ward/patient acuity, when to commence printing paper charts. Refer to ePMA – Disaster Recovery and Clinical Area Processes in HNE Health ePMA Enabled Facilities HNELHD PD2013_043:PCP 38

IMPLEMENTATION, MONITORING COMPLIANCE AND AUDIT

The Children, Young People & Families Clinical Quality and Patient Care Committee (CYPFS CQ&PCC) will:
Request monitoring compliance reports from IIMS at the local Quality Use of Medicines Committee
Distribute the PCP to relevant Clinical Streams, Medical Directors and Pharmacists
Distribute to the District Educators, local educators, CNCs, NUMS and Nurse Managers

APPENDICES

One: Label descriptors available in NSW hospitals
Two: Single-check medication list
Three: Example of Medication Reconciliation Risk Stratification Tool

REFERENCES

ePMA – Disaster Recovery and Clinical Area Processes in HNE Health ePMA Enabled Facilities HNELHD PD2013_043:PCP 38
Prescribing Discharge Medications in ePMA-Enabled Facilities (MedChart) PD2013_043:PCP 43.
Australian Immunisation Handbook

FEEDBACK

Any feedback on this document should be sent to the Contact Officer listed on the front page

APPROVAL

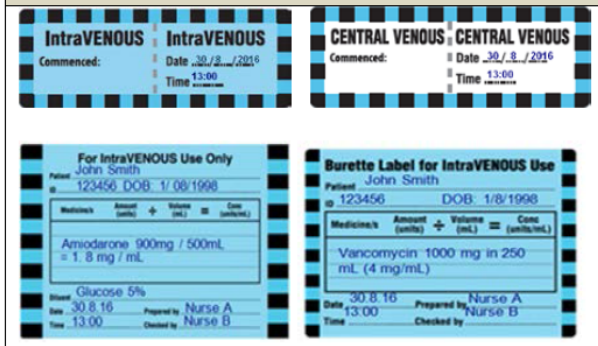
JHH QUM – December 2018
CYPFS QUM – April 2019
HNELHD QUM – May 2019
CYPFS CQ&PCC – May 2019

APPENDIX 1: LABEL DESCRIPTORS AVAILABLE IN NSW HOSPITALS

Example of correct labels

Labels for lines and containers

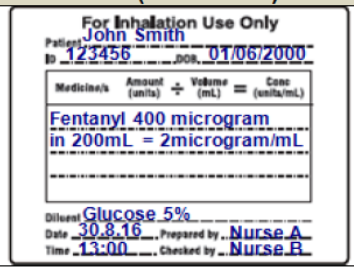
Intravenous and CVAD



Subcutaneous line

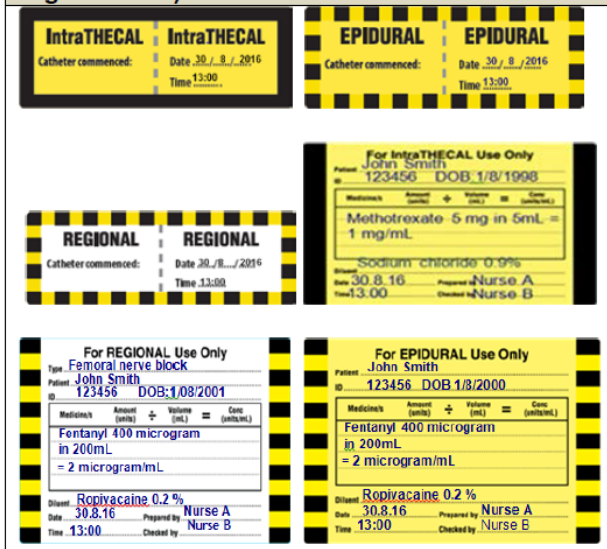
Sodium Chloride Flush

Inhalation (Nebuliser)

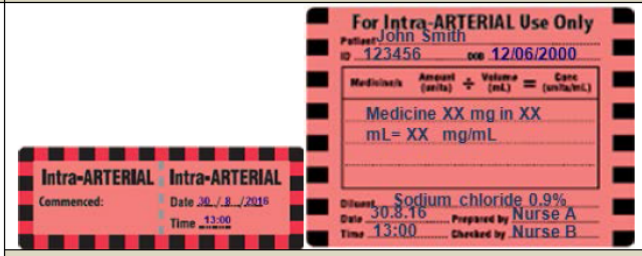


Sterile field containers (injectable or non-injectable)

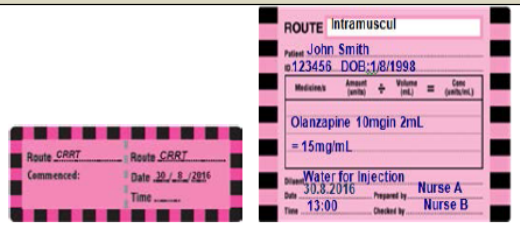
Neutral Tissue line (intrathecal, epidural or regional line)



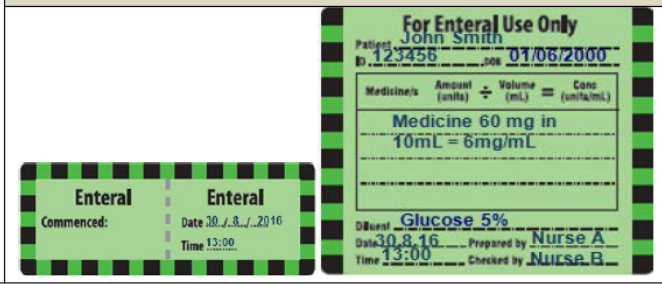
Arterial Monitoring Line



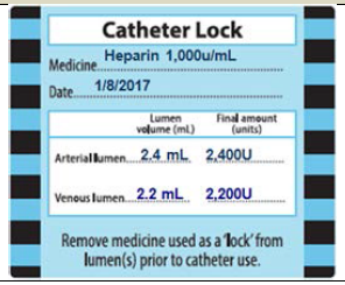
Miscellaneous line



Enteral line



Catheter Lock



APPENDIX 2 - PAEDIATRIC SINGLE-CHECK MEDICATION LIST

The single-check procedure does not, under any circumstances, stop any health practitioner from seeking a second check from a registered nurse, endorsed enrolled nurse or pharmacist

ORAL PREPARATIONS	
Generic name	**Examples of trade name(s)**
Lactobacillus acidophilus preparations	Inner Health Plus
Alginic acid compound	Gaviscon Infant
Aluminium hydroxide hydrate, magnesium hydroxide, simethicone	Mylanta
Ascorbic acid	Melrose Vitamin C Calcium Ascorbate
Cetirizine hydrochloride	Zyrtec
Dioctyl sodium sulfosuccinate	Coloxyl
Dioctyl sodium sulfosuccinate with sennosides	Coloxyl with Senna
Ibuprofen	Rapifen, Nurofen
Lactulose	Duphalac, Actilax
Macrogol with electrolytes	Movicol Half, Movicol
Magnesium aspartate dihydrate 500 mg tablets	MagMin
Multivitamin preparations	Pentavite, Centrum, VitABDECK
Nystatin	Nilstat, Mycostatin
Omeprazole	Losec, Maxor, Probitor
Ondansetron	Zofran
Sodium pancreatic enzymes	Creon Micro, Creon 10,000, Creon 25,000
Paraffin, liquid	Parachoc, Agarol
Phytomenadione (Vitamin K)	Konakion
Poloxamer	Coloxyl Drops
Ranitidine	Zantac, Rani 2
Senna fruit extract	Senokot
Simethicone	Infacol
Sodium chloride 600 mg tablets	Toppin Salt Tablets
Sodium bicarbonate, citric acid, tartaric acid	Citravescent, Ural
Sucralfate	Carafate, Ulcyte
Sucrose	Sucrose 25%

Tocopheryl (Vitamin E)	Micelle E
Triglycerides, medium chain	MCT Oil
Ursodeoxycholic acid	Ursofalk
Zinc sulfate	Zincaps
INHALED PREPARATIONS	
Generic name	**Examples of Trade name(s)**
Budesonide	Pulmicort
Budesonide with formoterol (eformoterol)	Symbicort
Fluticasone	Flixotide
Fluticasone with salmeterol	Seretide
Ipratropium bromide monohydrate	Atrovent
Nedocromil sodium	Tilade
Salbutamol	Ventolin, Respolin
Salmeterol	Serevent
Sodium cromoglycate	Intal
Sodium chloride 0.9% for nebuliser only (higher strengths for nebulisation must be double-checked)	Sodium chloride 0.9%
TOPICAL PREPARATIONS	
Generic name	**Examples of Trade name(s)**
Tetracaine (amethocaine) hydrochloride gel 4%	AnGel
Aqueous cream	Aqueous Cream
Benzydamine hydrochloride	Difflam
Calamine lotion	Gold Cross Calamine Lotion
Cetomacrogol cream	Sorbolene Cream
Chlorhexidine gluconate 0.2% mouth rinse	Curasept
Choline salicylate gel	Bonjela
Dexamethasone, framycetin, gramicidin ear drops	Sofradex
Lanolin – liquid paraffin	Alpha Keri Bath Oil
Lidocaine (lignocaine) 4%	LMX4
Lidocaine (lignocaine)/ tetracaine (amethocaine) hydrochloride/adrenaline (epinephrine) gel	Laceraine
Lidocaine (lignocaine)/prilocaine 5% cream	EMLA
Lidocaine (lignocaine)/phenylephrine nasal spray	Co-Phenylcaine Forte

Miconazole cream 2%	Daktarin. Resolve
Nystatin cream/ointment	Nilstat, Mycostatin
Paraffin, liquid; paraffin, white soft; lanolin	Duratears Lubricating Eye Ointment
Paraffin, liquid; emulsifying wax; paraffin, hard	Parrafin Cream
Paraffin, white soft	Adaptic
Permethrin 5% cream	Lyclear, Quellada
Sodium bicarbonate mouth swabs	Toothette Oral Swabs with Sodium Bicarbonate
Silver sulfadiazine	Flamazine
Silver nitrate, potassium nitrate	Grafco Silver Nitrate Applicators
Sodium bicarbonate mouthwash 1%	Sodium Bicarbonate Mouthwash 1%
Triamcinolone, neomycin, gramicidin, nystatin cream/ointment	Kenacomb, Otocomb
Triclosan skin cleaner 1%	Microshield T, pHisoHex
Zinc oxide cream 15.25%	Sudocrem
Zinc oxide, castor oil cream	Zinc & Castor Oil Cream
RECTAL PREPARATIONS	
Generic name	**Examples of Trade name**
Sodium citrate, sodium lauryl sulfoacetate, sorbitol	Microlax

APPENDIX 3: EXAMPLE OF MEDICATION RECONCILIATION RISK STRATIFICATION TOOL