

Medication Prescribing and Administration Procedure

Objective

This document outlines the principles of medication prescribing and administration for Dental Health Services Victoria (DHSV). It is supported by the DHSV Poisons Control Plan.

This document is applicable to all DHSV staff involved in drug administration and prescribing, although the majority of procedures relate to the Day Surgery Unit (DSU) within the Royal Dental Hospital of Melbourne (RDHM).

Expected Outcome

The correct patient receives the correct drug, in the correct dose, in the correct form, at the correct time as prescribed by a medical officer or dentist.

Procedure

DHSV is committed to ensuring the health and safety of all patients in dental care settings and providing a safe and healthy working environment for all employees, contractors and visitors. This commitment includes adopting medication prescribing and administration procedures that minimise the risk of misuse, and of prescribing and drug administration errors.

DHSV endorses best practice guidelines for the safe prescribing and administration of medications that are designed to ensure that drugs and poisons are used safely in patient care.

DHSV will ensure that:

- A current permit to purchase or obtain scheduled poisons is maintained, as required by the Drugs, Poisons and Controlled Substances Act 1981
- A Poisons Control Plan is maintained
- Medication charts and prescriptions are written in a safe and legible format that minimises the potential for prescribing errors
- Medications are administered lawfully and safely so that patients receive the correct medication in the correct dose, in the correct form and at the correct time
- Appropriate orientation and training of all staff involved in the management and/or administration of medications is provided in a timely manner, and updated as required.

All staff participating in the administration of drugs are expected to have knowledge related to the specific drug, common dose strengths, routes, possible reactions and contraindications, and they must be familiar with the Drug, Poisons and Controlled Substances Act and Regulations.

Nurses, dental/medical officers and oral health therapists must be familiar with their professional responsibilities according to the respective Nurses Act 1993, Medical Practitioners' Act 1994 and Dental Board of Australia requirements.

Where the requirements are either one of law or policy, and have applications to a registered nurse in the checking and administration of medications, the following are to be noted:

- Hospital policy requires that all Intramuscular, Intravenous, or Schedule 8 drugs must be checked by two Registered Nurses Div 1. Enrolled nurses who have a medication endorsement may **only** administer schedule 8 drugs intramuscularly. When this is not possible, then the second person must be a medical officer, a pharmacist, dentist or dental specialist. The exception to this policy includes:

- Single person checking medications
- Patient self-administration medications
- Nurse Immuniser as per Nurses Board of Victoria, Approval under regulation 5(4) Drugs, Poisons and Controlled Substances Regulations 1995.
- It is recommended that patients who may require cardiac monitoring for possible adverse reaction to a drug (e.g. inotropes) are managed in another facility with a critical care unit. However, if a request is made to administer this type of drug in DSU, consultation should be sought with the patient's medical consultant and the Nurse Unit Manager (NUM). The drug to be administered must be prescribed with instructions as to the frequency of observations and their reportable levels.

Prescribing

Drug orders must be legible, written in either black or blue ink and unambiguous. They must be written by the dentist, dental specialist or medical officer and dated and signed in full.

Refer to the Medication History Reconciliation and Plan Policy.

Where a drug is to be administered to a patient outside the hospital or clinic, PBS pads may be used. PBS pads are either dental or medical. Each order must contain:

- Patient's family and given name
- Dental Record number (DR)
- Generic or approved name of the drug
- Strength of the drug
- Dose of the drug
- Route of administration
- Frequency of administration
- Date on which the order commences
- Medical officer, dentist or dental specialist signature
- Medical officer, dentist or dental specialist prescriber code (or name in capital letters).

Medical officers and Dentists are reminded of several points:

- It is recommended that all orders/prescriptions are written in plain English
- Medication strengths and dose forms should each be ordered separately e.g.

Do not write

Stemetil 12.5 mg IM/O

This should be written as two separate orders

Stemetil 12.5 mg IM 4 Hrly PRN

Stemetil 5 mg Orally 4 Hrly PRN

- Each medication should be ordered separately. It is not acceptable to write, e.g. Panadol/Panadeine. These must be written as individual orders on a separate line.
- Medications should be ordered using their full name (generic or approved combinations name). It is not acceptable to use abbreviations.
- Each item ordered should be accompanied by a signature and medical/dental officer's name. It is not acceptable to bracket orders together with a single signature.
- Prescriptions should not be altered to change doses, strengths or forms of medication. A new medication order must be completed in each instance.
- Care should be taken with units of dosages. For clarity, micrograms should be written in full, and not abbreviated to µg or mcg and units should be written as "units" and not abbreviated with "u".

- Ensure the exact dosage and strength is clear. Avoid using the terminal zero to the right of the decimal point to avoid 10 fold dosing errors (e.g. 5 not 5.0) and use a zero to the left of a dose less than 1 to avoid a 10 fold dosing error (e.g. 0.1 not .1)
- A dental assistant must not under any circumstances administer or supply any drug, medication or restricted substances to anyone.
- A registered nurse or an enrolled nurse who has a medication endorsement must not administer Schedule 4 drugs (restricted substances) or Schedule 8 drugs (drugs of addiction) to a person except on the written authorisation of a medical officer dentist, or dental specialist.
- A registered nurse Division 1 or an enrolled nurse who has a medication endorsement may administer a Schedule 4 or Schedule 8 medication on the oral instructions of a medical officer, dentist or dental specialist where, in the opinion of such practitioner, an emergency exists; and the medical officer, dentist or dental specialist must confirm the oral instructions in writing on the Medication Record for the patient concerned within 24 hours.

Prescribing: Telephone orders

- Where, in these circumstances, the medical officer requires a drug to be given via a telephone order, two registered nurses or one registered nurse and one enrolled nurse who has a medication endorsement must, in their professional judgment, decide if the drug ordered, dose ordered or route to be administered is such that it would be reasonably safe for nursing staff to administer prior to the patient having a medical assessment performed.
- Verbal instructions, including telephone orders, should be given only in an emergency by medical officers, dentists or dental specialists acquainted with the patient and may only be accepted by the Registered Nurse Division 1.
- The registered nurse taking oral instructions, including a telephone order, must ask the medical officer dentist or dental specialist to:
 - spell the name of the drug
 - state the strength of the drug
 - state the dosage
 - state the route
 - state the time the drug is to be given.
- The medical officer, dentist or dental specialist must repeat this order to a second Registered Nurse Division 1.
- This must be written down and repeated back to the medical officer, dentist or dental specialist.
- Any telephone order is for a single dose only.

Checking and Administering

No drug is to be administered by any route by the registered nursing staff or enrolled nurse who has a medication endorsement without a clearly written and duly signed order by a medical officer, dentist or dental specialist except:

- In an emergency, on the verbal instruction of a medical officer dentist or dental specialist
- If there is **any doubt** as to the meaning, legibility or durability of the medical officer, dentist or dental specialist's order, **do not administer the drug**. Contact the medical officer, dentist or dental specialist immediately and have the order rewritten.
- Drugs of addiction must be checked by two Registered Nurses Division 1 or if the drug is to be given intramuscularly, an enrolled nurse who has a medication endorsement whenever possible. When this is not possible, then the second person must be either a medical officer, a pharmacist, dentist or dental specialist.

Patient Self Administration of Medication

Provided that a registered nurse, dentist/dental specialist or medical officer has assessed the appropriateness of the situation, a patient may be allowed to self administer prescribed medications brought in to the hospital.

Multi Dose Vials

Multi Dose Vials should be treated as single dose vials and any remaining solution should be discarded at the end of each case.

The authorised person(s) involved with drug administration are required to follow all the procedures related to the administration of that drug. The following criteria must be checked:

- The correct patient; that is, family and given name and UR number
- The correct drug; that is, generic and approved name
- The correct strength
- The correct dose and form
- The correct route of administration
- The correct time of administration
- The date on which the order commences
- Any known allergies

Drugs are not to be left unattended between the process of checking and administration. If staff find a drug that has been previously prepared and it cannot be identified, then it must be discarded.

The Order

The signed order of the medical officer, dentist or dental specialist must be checked to ensure it fulfils the requirements set out in the previous section on prescribing.

Each order (without abbreviations) must contain the following:

- Family and given name and unit registration number of the patient
- Generic or approved name of the drug
- Strength of the drug
- Dose of the drug
- Route of administration
- Frequency of administration
- Date on which the order commences
- Full signature and name of the prescriber

Each order must be checked in the medication record administration section for any indication that the order has been ceased. In case of a telephone order, one of the persons taking the order also participates in checking and administering the drug.

The use of roman numerals is not acceptable in prescribing drugs and should be avoided at all times.

The Drug

The authorised persons must:

- Check the labels of the containers against the order of the medical officer, dentist or dental specialist.
- Check the name, strength and expiry dates on the containers
- Calculate the correct volume/dosage of the drug required
- Place the drug into the appropriate receptacle

- Recheck label and calculation before administration of the drug to the patient

The Patient

The authorised persons must:

- Ask, where possible, that the patient state their full name.
- Check the surname, given name and unit registration number and date of birth on the patient's identity band against the surname, given name, date of birth and unit registration number on the Medication Record.
- Ask the patient if they have any known allergies.
- Check medication chart for known allergies.
- Advise the patient that a drug is to be administered.
- Both persons involved in the administration of parenteral drugs and oral drugs of addiction must remain with the patient while the drug is being administered and document immediately the administration has been completed.

The Route of Administration

The persons must read and state the route by which the drug is to be administered.

The Time of Administration

The authorised persons must read and state:

- The frequency for which the drug is ordered
- The time the drug was last administered
- The time elapsed since then

With drugs of addiction both persons must check the Medication Record and the relevant page in the Drugs of Addiction Register for the time when the drug was last given, and that the balance is correct.

Documenting***Administration of the Drug***

The administration of a drug of addiction by any route must be documented in the Drugs of Addiction Register and signed by the two persons involved in checking and administering the drug.

The time of administration of all medications must be specific and recorded on the Medication Record (Medication Management Plan or General Health Questionnaire) by the person(s) involved in the checking and administering procedure.

Both Registered Nurses must sign the Medication Record in the appropriate place for all administered drugs.

- An additive label must be completed and attached to the respective container, syringe or burette for such drugs administered to a patient.
- The additive label must include:
 - Patients name and DR number
 - name of solution/diluent
 - name of drug added to solution/diluent
 - dosage of drug added to solution/diluent
 - final concentration of drug in solution/diluent
 - date of preparation
 - time of preparation
 - signature of person preparing the additive
 - signature of person checking the additive

Schedule S8 Drugs

Refer to Drugs of Dependence Medication Management- S8/S11 Procedure

Drug Errors

If an error occurs, either in omission, drug dosage, or method of administration or person to whom the drug is administered, a VHIMS report must be completed and both the medical officer and the NUM of the DSU on duty must be notified immediately. It should also be noted as a clinical Indicator in the patient's record.

Documenting: Telephone Orders

An oral instruction for a drug to be administered to a patient in an emergency must be written and signed in the designated section of the Medication Record by the person taking the telephone order. A signature is also required from the second person checking the drug, who may be a registered nurse or pharmacist. The name of the medical officer, dentist or dental specialist giving the oral instruction must also be stated on the Medication Record.

Administration of the prescribed drug requires a further signature in the designated area on the Medication Record by the person taking the oral instructions and the second person, who may be a registered nurse or a pharmacist. See section on Prescribing: Telephone Orders

Intravenous Injections and Infusions

Prior to commencing procedure, inspect the intravenous cannula site and report and record any redness, bruising or swelling.

Via burette

- A completed additive label must be attached to the burette when the drug is infused, the following information must be completed on the label
 - Patient full name, date of birth and DR number
 - Drug added, volume and final concentration
 - Signed by person preparing the drug and person checking
- It is prudent to flush the infusion line with prescribed intravenous fluid before adding a second drug.

Via side-arm / injection port

- Clamp tubing above the sidearm, before injecting drug at recommended rate release clamp and check/reset rate of infusion according to prescribed order.

Via three way tap / Cannula

- Gently aspirate a small volume of blood to confirm patency of intravenous cannula/needle. (If intravenous cannula/needle is not patent, withhold drug and contact medical officer for further orders.
- Gently inject drug into intravenous cannula/needle, observe the patient for any reports of pain and assess the site for oozing or swelling on completion, the intravenous cannula/needle is gently flushed with sodium chloride 0.9 %, and a sterile cap placed over the injection port/tubing.

Intramuscular Injection

- Select site for injection, either:
 - The middle third of the antero-lateral aspect of the thigh
 - The upper outer Quadrant of the buttock
 - The middle third of the lateral aspect of the upper arm (deltoid).

Selection of the appropriate site is at the discretion of the registered nurse checking and administering the drug.

- Swab site with sterile alcohol swab and let dry. Insert 23G needle into muscle at 90 degree angle, withdraw plunger to check that blood vessel has not been punctured, and slowly inject solution.
- Withdraw needle and swab skin as above.

Care must be taken not to inject greater than 5 ml of fluid into an Intramuscular site for patients of average (or greater) weight. For thin or emaciated patients a 25G needle may be appropriate and a maximum of 2ml may be injected into any site. For very obese patients a 22G x 2" needle may be appropriate.

Subcutaneous Injections

- Select site for injection: either upper arms or anterior aspect of thigh or abdomen.
Exception: Heparin may only be given into the thigh or abdomen, into four areas of these, in a rotating sequence.

Administration of Subcutaneous Heparin

Pre-operative injections of Heparin must never be given at the operation site.

- Swab skin with sterile alcohol swab and let dry.
- Pinch skin-fold between thumb and forefinger, inserting needle at 90 degree angle to the skin surface.
- Withdraw plunger to check that needle has not punctured a blood vessel.
- Inject solution, release skin fold.
- Withdraw needle and swab skin as above.

Tablets/Mixtures

- When required, assist patient to swallow drug by assisting with position changes, providing fluids, offering the patient a straw or feeding cup etc.
- When administering oral liquid medications in a syringe, only **orange coloured syringes** can be used.
- Where appropriate, some capsules may be opened and the powder sprinkled over food to help swallowing.
- Slow release tablets or granules must not be crushed.
- Ensure the patient has sufficient fluid to prevent tablets or capsules lodging in the oesophagus.

Sublingual Tablets

- Instruct the patient not to chew the tablet.
Exception: Glyceryl Trinitrate (Anginine) which can be chewed and retained in the mouth for quicker dissolution.
- Assess patient's ability to keep tablets in situ.
- Record responses in Progress Notes of medical history, if appropriate.

Topical: Lotions, Ointments, Creams

- Wash and dry area of skin.
- Don disposable latex gloves and apply topical medication.

Transdermal Ointments or Patches

Ointment

- If any Glyceryl Trinitrate ointment comes into contact with the person administering the drug, it should be washed off immediately.

- The site should be changed for each dosage.
- Before new Glyceryl Trinitrate ointment is applied, old applications should be removed and the site washed thoroughly.
- Place dose measuring applicator on a flat surface, printed side down.
- Squeeze the ordered dosage in centimetres onto the applicator.
- Choose a convenient area of skin to place the Glyceryl Trinitrate ointment, it should be free of hair and excessive movement.
- Using the applicator place the Glyceryl Trinitrate ointment on the skin. Spread over a small area of skin in a thin uniform layer. Do not rub in.
- Secure applicator in place using plastic wrapping or tape.

Patch

- Remove backing from patch.
- Choose a convenient area of skin to place the pad, it should be free of hair and excessive movement.
- The site should be changed for each application.

Labelling

All drugs and solutions must be fully labelled with the only exception being when the drug is prepared by a person and is immediately administered to the patient and does not leave the hands of the person preparing the drug/solution.

Drugs/solutions drawn up on a sterile field must have a sterile label applied identifying the drug/ solution

Syringes: When a drug is prepared to be given in increments a syringe label must be applied with the patient's name, date of birth, DR number, name of drug volume and concentration.

Intravenous solutions: drugs added to an intravenous infusion either in the bag or burette must have the appropriate label attached with the following information the patient's name, date of birth, UR number, name of drug volume and concentration.

Irrigation solutions: must have a label attached to identify the solution.

Drugs and Materials Management

- Stock must be rotated to avoid materials or drugs becoming outdated.
- Regular checking of dates of the materials or drugs must take place to avoid using stock after the "use by" date has expired. Materials or drugs must also be stored at the correct temperature according to manufacturers' instructions and out of direct light in a cupboard if recommended by the manufacturer.
- Materials and drugs must be stored in the original containers until ready for use. This maintains linkage with the use by dates and manufacturer's instructions protects the drug or material and prevents the mixing of different types of drugs.
- It is recommended that new stock is always placed behind current stock in a store area. This ensures the oldest stock is used first.

Definitions

Drug	A drug is any chemical compound that may be used or administered in the diagnosis, treatment or prevention of disease, ailment, defect or injury, including radiopaque dyes, isotopes and others.
Drugs of Addiction Register	Is the record by which unit drug holdings and usage are controlled and monitored.

Drugs of addiction discrepancy	Is the loss or use of a drug of addiction other than by correctly authorised administration to a patient.
Authorised Person	An authorised person is a member of a health profession authorised and regulated by the Drugs, Poisons, and Controlled Substances Act 1981 to possess and use scheduled poisons in the lawful practice of their profession.
Registered Nurse	Is a person registered under Division 1 or Division 3 of the register kept by the Australian Health Practitioner Regulation Agency as a requirement under the Nurses Act 1993.
Enrolled Nurse	Was previously known as a Registered Nurse Division 2. An Enrolled Nurse who has a medication endorsement may administer prescribed drugs of dependence, S4 poisons, S8 poisons or S9 poisons via topical, enteral, intramuscular and subcutaneous routes only. This must be done under the direct supervision of a Division 1 Registered Nurse. An Enrolled nurse must not administer intravenous drugs.
Senior Nurse	The Nurse Unit Manager in the Day Surgery Unit or the most senior registered nurse on duty in the absence of the Nurse Unit Manager.
VHIMS	Victorian Health Incident Management System- the organisation wide incident reporting system.

Communication

Action	Responsibility
The procedure will be introduced at the RDHM management team meeting	ED RDHM
The procedure will be introduced & discussed at team meetings	Managers/Team Leaders
The procedure will be introduced at the Clinical Leadership Group meeting	Principal Oral Health Advisor RDHM
The procedure will be circulated to clinical staff	RDHM Managers
The procedure will be circulated to university clinical supervisors and students	Manager Dental Teaching Clinic

Revision date

November 2019

Policy owner

Manager Specialist Care

Approved by

Executive Director RDHM

Date approved

November 2017

Related documents

- Drugs, Poisons and Controlled Substances Act 1981
- Drugs, Poisons and Controlled Substances Regulations 1995
- DHSV Poisons Control Plan
- Standard for the Uniform Scheduling of Drugs and Poisons No.18, 2003
- DHSV Medication Management Policy
- DHSV High Risk Medication Management Policy
- Medication Storage, Security and Disposal Procedure
- Drugs of Dependence Medication Management- S8/S11 Procedure
- DHSV Medication Dispensing Procedure
- DHSV Medication History Reconciliation and Plan Procedure
- Medication Allergies and Adverse Drug Reactions Procedure
- Guidelines: Extended scope of practice for Div 2 Registered Nurses to Administer Medications. Nurses Board of Victoria, 2006
- Nurses Act 1993
- Medical Practice Act 1994
- Dental Board of Australia requirements