

## Medication Handling in NSW Public Hospitals

**Document Number** PD2007\_077

**Publication date** 18-Oct-2007

**Functional Sub group** Corporate Administration - Governance  
Clinical/ Patient Services - Medical Treatment  
Clinical/ Patient Services - Pharmaceutical  
Clinical/ Patient Services - Nursing and Midwifery  
Population Health - Pharmaceutical

**Summary** Legislative requirements and policies on drug storage, supply, prescribing, dispensing and administration in NSW public hospitals. A number of amendments have been made to Policy Directive PD2005\_206 which include, but are not limited to, amendments to reflect amendments to the Poisons and Therapeutic Goods Act 1996 & Regulation; recognise the role of specially trained enrolled nurses; reflect changes to the Australian Health Care Agreement; help ensure patient safety through the use of the National Inpatient Medication Chart, the use of acceptable abbreviations and symbols when prescribing, the continuity of care in medication management on discharge from hospital.

**Replaces Doc. No.** Medication Handling in NSW Public Hospitals - Policy [PD2005\_206]

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**Applies to** Area Health Services/Chief Executive Governed Statutory Health Corporation, Board Governed Statutory Health Corporations, Affiliated Health Organisations - Non Declared, Affiliated Health Organisations - Declared, Dental Schools and Clinics, Government Medical Officers, Public Hospitals

**Audience** Administration, Clinical Governance Units, pharmacy, nursing, medical, allied health staff

**Distributed to** Public Health System, Dental Schools and Clinics, Government Medical Officers, Health Professional Associations and Related Organisations, NSW Ambulance Service, NSW Department of Health, Public Hospitals, Tertiary Education Institutes

**Review date** 18-Oct-2012

**Director-General** **File No.** 07/8785

**Status** Active

This Policy Directive may be varied, withdrawn or replaced at any time. Compliance with this directive is **mandatory** for NSW Health and is a condition of subsidy for public health organisations.

**NSW⊕HEALTH**

**Medication Handling**

**in**

**NSW Public Hospitals**

**October 2007**

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## 1 INTRODUCTION

This policy directive supersedes Policy Directive PD2005\_206, *Policy on the Handling of Medication in New South Wales Public Hospitals*.

This policy directive consolidates the requirements of the NSW Poisons and Therapeutic Goods Act 1966, Poisons and Therapeutic Goods Regulation 2002 and NSW Health Department policies on drug storage, supply, prescribing, dispensing and administration in NSW public hospitals.

This policy directive is based on legal requirements, Departmental directives and best practice principles including recommendations made consequent to Coronial inquiries, and is to be observed by all public hospitals in New South Wales.

The policy directive is to be used as the basis for the development of **detailed individual policies and procedures** by each hospital or Area Health Service to give effect to the document. It is also recommended that all licensed private health facilities have regard to the document in the development of their own local policies on medication handling.

The term **public hospital** in this document means a public hospital within the meaning of the Health Services Act 1997.

Guidelines for medication handling in community health centres are provided in section 3.1 of Policy Directive PD2005\_105, *Guidelines for the Handling of Medication in Community-Based Health Services and Residential Facilities in New South Wales*.

Guidelines for medication handling in private health facilities are provided in TG115, *Guide to Poisons and Therapeutic Goods Regulations - Private Hospitals, Day Procedure Centres and Nursing Homes*, available from Pharmaceutical Services Branch.

This policy directive is intended to provide a comprehensive policy on medication handling and other relevant Department policies have been incorporated where possible. In the case of some other policies, only a reference may be given, as those policies may be updated from time to time. Policy Directives, Guidelines, Information Bulletins and other documents referenced throughout this circular are those that were **current at the time of issue** of this Policy Directive.

Relevant publications on pharmaceutical matters are available at:  
[http://www.health.nsw.gov.au/pubs/subs/sub\\_pharma.html](http://www.health.nsw.gov.au/pubs/subs/sub_pharma.html)

Cross-referencing is given frequently in this document to direct the reader to other relevant sections.

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For clarification of this policy directive or for further advice contact the **Duty Officer, Pharmaceutical Services Branch**, NSW Health Department.  
Phone: **(02) 9879 3214**. Fax: (02) 9859 5165.

## 1.1 Nurse/Midwife Practitioners

*Nurse/midwife practitioners* are registered nurses/registered midwives who are authorised by the Nurses Registration Board of NSW to practise as nurse/midwife practitioners; persons so authorised may use the title of 'nurse practitioner'/'midwife practitioner' and are expected to practise at an advanced level.

Some nurse/midwife practitioners may be permitted certain privileges within clinical guidelines **approved by the Chief Executive of the Area Health Service**, as delegate of the Director-General of Health. These privileges may include possession, use, prescribing and supply of certain medications in accordance with the approved clinical guidelines. Clinical guidelines are developed for, and apply to, individual positions in specific settings (specific clinical context).

**The Area or Hospital Drug Committee must approve the drugs that are identified for use in the clinical guidelines to ensure clinical appropriateness and consistency with local policy.**

Where nurse/midwife practitioner positions and formularies are established in conjunction with clinical guidelines, approved by the Chief Executive, the principles stated in this Policy Directive will apply to the practice of the nurse/midwife practitioner, in their capacity as registered nurses/registered midwives and within the parameters established by the position. The term *prescriber* where used in this policy directive may include a nurse practitioner or a midwife practitioner within their context of practice.

**Refer to Policy Directive PD2005\_556, *Nurse/Midwife Practitioners in NSW*.**

For further information on nurse/midwife practitioners, contact the Principal Adviser, Nurse/Midwife Practitioners, at the Nursing and Midwifery Office, NSW Health Department, on (02) 9391 9490.

## 2 DEFINITIONS

In this document the term:

- **“drug”** or **“medication”** may include any substance used in the course of treatment or testing (including irrigating solutions, fluids, diagnostic agents)
- **“Director of Medical Services”** means the chief medical officer (medical superintendent) of the hospital
- **“Director of Nursing”** means the chief nurse of the hospital
- **“Director of Pharmacy”** means the chief pharmacist of the hospital
- **“must”** indicates a mandatory practice required by law or by Departmental directive. In the case of a legal requirement, reference to the Poisons and Therapeutic Goods Regulation 2002 is provided. A Departmental directive is only issued where it is considered necessary in the interests of patient safety.
- **“Operating Theatres”** includes similar areas in the hospital where surgical procedures are carried out, such as endoscopy suite, day surgery, etc.
- **“prescriber”** or **“authorised prescriber”** includes a medical practitioner and may also include a dentist, nurse practitioner or midwife practitioner, within their context of practice.
- **“public hospital”** means a public hospital within the meaning of the Health Services Act 1997.
- **“should”** indicates that the practice referred to is considered to be best practice by the NSW Health Department.
- **“ward”** includes any ward, operating theatre, laboratory or department of the hospital, other than the Pharmacy Department.

## 3 DRUG COMMITTEE

All hospitals must have a committee (or have access to an Area committee) which is the responsible body for considering all aspects of drug use in the hospital.

This committee will be termed the "Drug Committee" in this document, but in some hospitals the committee may be differently named and may have extended functions.

The Drug Committee should include **representation** from each clinical discipline (including pharmacy, medical, nursing) and from the hospital's management. Individual hospital or Area committees may wish to include other relevant representatives.

The **functions** of the Drug Committee should include:

- ❑ promotion of quality and cost-effective drug use through activities such as Drug Usage Evaluation
- ❑ development and approval of drug policies and procedures whether hospital or unit based
- ❑ approval of drugs to be used within the hospital
- ❑ analysis of medication incident reports (refer 7, Medication Incident Reporting) and the development of strategies for medication error prevention as part of the hospital's quality improvement program
- ❑ design of medication charts.

The Drug Committee must ensure that all its decisions and policies are **effectively communicated** throughout the hospital.

The hospital's management must ensure that they are **put into practice**.

## 4 PHARMACY DEPARTMENT

### 4.1 DRUG STORAGE

#### 4.1.1 Responsibility

The Director of Pharmacy is the person responsible for the storage of all drugs at the hospital other than those that have been supplied to a ward. Specific functions may be delegated to a registered pharmacist.

In the case of a hospital that does not employ a pharmacist, this responsibility falls on either the Director of Nursing or the Director of Medical Services as determined by the hospital's chief executive officer (however named). In this case, the term Director of Pharmacy, wherever used in this circular, applies to either the Director of Nursing or Director of Medical Services, whoever is determined to have this responsibility. Specific functions may be delegated to a registered nurse or registered medical officer.

Clauses 30, 73, Poisons and Therapeutic Goods Regulation 2002.

The Director of Pharmacy should oversee the storage of pharmaceuticals in other areas of the hospital (eg. patient care areas, IV fluid store).

#### 4.1.2 Security

The Pharmacy Department is an area requiring **high security**.

Reference must be made to the NSW Health Department's Policy Manual, *Protecting People and Property: NSW Health Policy and Guidelines for Security Risk Management in Health Facilities*, for advice concerning management of security issues in a hospital pharmacy department or pharmacy storage area. Refer to Policy Directive PD2005\_339, <http://www.health.nsw.gov.au/audit/manuals/>

**Access during opening hours** must be **restricted** to staff authorised by the Director of Pharmacy. Keys to the pharmacy must be held by the Director of Pharmacy or delegate.

The Pharmacy Department **must not remain open for supply** unless a pharmacist is present in the pharmacy. If the pharmacist is absent from the hospital, and access to the pharmacy is required, then emergency after hours access procedures must be followed, as outlined below.

## 4.1.2.1 Emergency After Hours Access

**Entering the pharmacy after hours should rarely be necessary.** Refer to 4.1.5 and 4.1.6 re After Hours Store and Emergency Department Store.

A pharmacist should be made available (where staffing permits), on an on-call basis, to attend the hospital for emergency after hours access to the pharmacy.

When a pharmacist is unavailable, emergency after hours access to the pharmacy to obtain medication **must be limited** to **senior medical** or **senior nursing staff**, as designated by the Drug Committee.

A hospital Security officer may enter the pharmacy after hours at times of emergency, such as fire or an alarm sounding.

A key for emergency access to the pharmacy should be held under maximum security when not in use.

Hospitals should develop appropriate systems of documentation of every occasion of after hours access to the pharmacy and the purpose of this access.

**Note:** This access **must not** include access to the Schedule 8 stock.

## 4.1.3 Storage Conditions

All stocks of drugs in the Pharmacy Department must be regularly checked to ensure proper storage conditions are being met including **temperature** and **security**.

Temperature storage must be consistent with the specification on the manufacturer's label.

A system of **stock rotation** and monitoring of expiry dates must be in place.

### 4.1.3.1 Security of Pharmacy Orders on Delivery

Pharmacy orders that are received by the hospital's Stores Department must be transferred to the Pharmacy Department immediately on arrival. Pharmacy orders received at an outside dock area of the Pharmacy Department must similarly be immediately transferred into the Pharmacy Stores area and entered into stock.

### 4.1.3.2 Pseudoephedrine

Due to the potential for the diversion and misuse of pseudoephedrine single ingredient tablets, particular care must be taken to ensure that the procurement, storage and supply of these products is closely supervised. In order to reduce the risk of pilfering and theft (including break-ins) of these products, stock levels must be kept to a minimum. Refer to Guideline GL2005\_016, *Misuse of Pseudoephedrine*.

## 4.1.4 Storage of Schedule 8 Drugs in the Pharmacy

**4.1.4.1** All Schedule 8 (S8) drugs at the hospital other than those supplied to a ward must be stored in a **separate safe** apart from all other drugs or goods (except cash or documents).

**Note:** No Schedule 4 Appendix D (S4D) drugs may be kept in this safe.

Clause 75, Poisons and Therapeutic Goods Regulation 2002.

The safe must be firmly attached to a wall or to the floor and must comply, as a minimum, with Clause 75, Poisons and Therapeutic Goods Regulation 2002.

However, this minimum may not be sufficient if the quantity of drugs is significant. In this case, a heavier duty safe (such as one of torch and drill resistant quality) will be needed.

Alternatively, the drugs may be stored in a strongroom. For further advice contact the Duty Officer, Pharmaceutical Services Branch, on (02) 9879 3214.

S8 drugs that have been dispensed for a ward or for a patient, and are being held at the pharmacy for pick-up by a nurse or the patient, must be stored in the S8 safe or strongroom until they are picked up. They must not be left out of locked storage on a bench in the Pharmacy.

**4.1.4.2** The person designated in 4.1.1 or their appropriate delegate **must** keep the safe or strongroom **securely locked when not in immediate use** and must hold the key **on his/her person**.

Clause 75, Poisons and Therapeutic Goods Regulation 2002.

## 4.1.5 After Hours Drug Supply Store

At least one after hours drug store should be established for emergency supply of in-patient drugs to minimise the need to access the pharmacy after hours.

It should be stocked by pharmacy with an appropriate range of drugs either in manufacturers' original packs, or packed in suitable quantities and labelled for in-patient use.

The store, which may be a sturdy cupboard or a small room, should be located in a convenient, supervised area, may be accessed after hours by authorised nursing or medical staff only, and must be locked when not in immediate use.

This store **must not** contain Schedule 8 or Schedule 4 Appendix D drugs.

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Any removal of stock from this store must be documented, including, as a minimum, such details as:

- the date
- the name and strength of the medication removed,
- the name of the patient,
- the name of the patient care area in which the medication is to be used, and
- the name of the staff member removing the medication.

[Note: A separate after hours drug store may not be needed at a small site]

## 4.1.6 Emergency Department Store

The Emergency Department should have access to an emergency drug supply for the supply of medication to patients attending the Emergency Department **out of normal pharmacy opening hours**.

This emergency supply **should only be accessed when the pharmacy is closed** and should contain a limited stock of the drugs most likely to be prescribed for Emergency patients. These should be in manufacturers' original packs or in re-packs, both labelled appropriately by Pharmacy.

Supply to an Emergency patient must be authorised by a prescriber.

The details on the label (patient's name, directions for use and date of supply to the patient) **must be filled in by the prescriber**. The prescriber must make a record of this supply in the patient's medical record. Individual hospitals may require an additional record for stock control purposes.

Clauses 5, 25, 68, Poisons and Therapeutic Goods Regulation 2002.

Registered nurses are authorised in remote areas to supply emergency medications on medical authority to outpatients **in exceptional circumstances only** under an authority that was issued in August 2005. This authority applies to Schedule 2, 3, and 4 medications only and is **subject to a number of conditions**. Refer to **Appendix A** of this policy directive for details.

## 4.2 DRUG PURCHASING

Refer to Information Bulletin, IB2006\_005, *Purchasing and Supply Manual – Public Health Organisations*, Chapter 1 Purchasing Procedures. For advice on this manual, contact Asset and Contract Services Branch, NSW Health Department, on 9424 5912.

## 4.2.1 Purchase orders for drugs of addiction

Purchase orders for drugs of addiction must be provided to wholesale suppliers in the form of signed written orders. Wholesale suppliers must also obtain a signed receipt for the goods.

Orders may be placed by telephone, electronic mail or facsimile but these orders have to be followed up by confirmation in writing within 24 hours. In this case, many suppliers enclose a “Confirmation of Order and Receipt” or similar with deliveries of drugs of addiction. This document may be signed, to confirm order and receipt, after checking it against the original order, and it must be forwarded to the supplier within 24 hours.

Note that written orders for drugs of addiction must be signed only by persons so authorised under clause 101, Poisons and Therapeutic Goods Regulation 2002. The persons so authorised are:

- the Director of Pharmacy or his/her pharmacist delegate, or,
- where no pharmacist is employed, the Director of Nursing or the Director of Medical Services of the hospital, whoever is determined to have this responsibility by the hospital's Chief Executive.

These orders must be countersigned by a second person for audit control purposes, as outlined in the *Purchasing and Supply Manual – Public Health Organisations*. (The above authorised persons may be the persons who countersign).

Clauses 95, 101, Poisons and Therapeutic Goods Regulation 2002.

## 4.3 PREPARATION OF PHARMACEUTICALS

Reference should be made to:

- Health Policy Directive PD2005\_590, *Principles for the Preparation of Pharmaceuticals in Hospital Pharmacy Departments in New South Wales*, October 1995, and to
- The National Coordinating Committee on Therapeutic Goods' (NCCTG) document, *Standard for the Preparation of Pharmaceuticals in Australian Hospital Pharmacy Departments*, September 1993.

### 4.3.1 Packaging and Labelling

Pharmaceuticals supplied from the Pharmacy Department to patient care areas and other departments should preferably be in original manufacturers' packs. These packs do not have to be labelled by Pharmacy in addition to the manufacturer's label.

Where re-packaging is necessary, this must be carried out by, or under the direct supervision of, a pharmacist.

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**Packaging** used for **re-packed items** should be consistent with the provisions of the *Standard for the Uniform Scheduling of Drugs and Poisons* (the 'Uniform Standard') and any applicable manufacturers' recommendations. However, child-resistant packs need not be used for ward stock. Where ampoules are supplied for ward stock in strips, they do not have to be placed in Pharmacy cartons and labelled, as long as the manufacturer's information on each ampoule is adequate.

**Labelling of re-packed items** that are to be used for **imprest ward stock** is exempt from the requirements of the Uniform Standard and instead **must include**, as a *minimum*, the following details:

- ❑ the name and address of the hospital or the Area Health Service
- ❑ if the substance is intended for external use only, the words FOR EXTERNAL USE ONLY or the word POISON in red on a white background
- ❑ the generic name of the drug (as the principal drug name) and its brand name, and the strength of the drug (where applicable)
- ❑ the manufacturer's Batch Number and Expiry Date as stated on the pack OR the Pharmacy batch number and Pharmacy expiry date (same as the manufacturer's Expiry Date or an earlier date) given to that batch of preparation. Where a Pharmacy batch number is used, the manufacturer's Batch Number must be easily traceable.

#### **Notes:**

- Warning statements, as may be required for medicines dispensed on prescription, are **not** required for ward stock items. A pharmacist may choose to apply these labels, however, if considered appropriate.
- Due to their particular storage and recording requirements, pharmacy labels applied to Schedule 4 Appendix D and Schedule 8 drug re-packs for ward stock should identify these categories of drugs as such according to their scheduling, for the information of nursing staff.

Clauses 5, 25, 68, Poisons and Therapeutic Goods Regulation 2002 (**as varied** under Director-General's exemption powers in Clauses 9, 27, 71, Poisons and Therapeutic Goods Regulation 2002).

**Labelling of medication dispensed on prescription** for an individual patient (eg discharge, outpatient prescriptions) must comply with Appendix A to the Regulation.

Clauses 5, 25, 68, Poisons and Therapeutic Goods Regulation 2002.

### **4.3.2 Aseptic Preparations**

Refer Policy Directive, PD2005\_590, *Principles for the Preparation of Pharmaceuticals in Hospital Pharmacy Departments in New South Wales*.

No aseptic preparation may be undertaken unless the Pharmacy Department has in place the correct standards of skills, training, manufacturing and quality assurance procedures and facilities to provide a high level of confidence that preparations of a consistent, high quality can be made.

Facilities used for aseptic preparation, such as cleanrooms, clean workstations and isolators, must comply with the relevant Australian Standards.

Intravenous medication should be prepared, wherever possible, under controlled environmental conditions – refer 6.4.4.4. The hospital should consider what other types of preparations should be prepared under such conditions.

### **4.3.3 Sensitisation due to Occupational Exposure**

All staff should be aware that allergy or sensitisation to pharmacological agents can occur through occupational exposure. Any symptoms experienced by staff that may be related to such exposure should be reported as soon as possible to the relevant manager and an incident report completed. This will assist in the likely agent(s) being promptly identified, and allow for appropriate action to be taken to minimise the individual's exposure and manage any symptoms.

Occupational health and safety legislation in NSW requires that all workplace risks, including those associated with the handling of pharmacological agents, must be identified, assessed and controlled.

Therefore, to ensure that the risk of sensitisation is reduced as far as practical when preparing and administering pharmacological agents, the following principles are to be applied:

- Unnecessary occupational exposure is avoided
- Appropriate personal protective equipment (PPE) is provided eg. masks, gloves, gowns, respirators etc as necessary
- Local practices and procedures minimise exposure as far as possible
- Such practices and procedures are regularly reviewed for ongoing effectiveness and are reinforced
- Prompt action is taken where symptoms of allergy or sensitisation occur.

Where NSW Health policies and guidelines exist in relation to specific agents such as glutaraldehyde, latex and cytotoxic drugs, they must be adhered to.

For further information on the identification, assessment and control of workplace risks, see NSW Health policies and guidelines on workplace health and safety and on the safe use of hazardous substances.

For further advice on risk management strategies, contact your local Occupational Health and Safety (OHS) and/or risk management staff.

## 4.4 SUPPLY

### 4.4.1 Supply to In-patients

#### 4.4.1.1 Supply to Wards

Drug distribution to wards should involve the active participation of pharmacy staff at ward level.

Medication must only be supplied **to a ward**:

- on the written authorisation of an authorised prescriber (that is, prescription or medication chart order), OR
- on the written requisition of an authorised prescriber or of the nurse in charge of the ward in which the drug is to be used or stored.

Clauses 48, 99(1), Poisons and Therapeutic Goods Regulation 2002.

This does not preclude the supply of stock items to a ward on a pre-determined *imprest* list. The range of drugs and stock levels on this list must be set by agreement between the nurse in charge of the ward and the Director of Pharmacy (or delegate).

**When a pharmacist dispenses medication for an individual patient**, a pharmacist **must view** the **original** medication chart order or prescription.

When a person **delivers an S8 drug** to a ward from the pharmacy, he/she must hand it to a registered nurse who must sign and date **a receipt**. This receipt must then be held in the pharmacy. (Refer 4.5.).

Clause 99(2), Poisons and Therapeutic Goods Regulation 2002.

In the case of a medication which is to be administered on a **regular**, but **intermittent basis** (eg. on one day per week), the pharmacy must supply to the ward no more than **one week's quantity** for that individual patient.

**Patients' own medication** may only be used in the event that the hospital does not have in stock that medication or its generic equivalent. The medication must be purchased by the hospital as soon as possible and, upon its receipt, the patient's own medication withdrawn from use. (Refer 4.4.1.3 re return of patient's own medication at time of discharge.) Exception may be made in the case of specialised formulations for individual patients only, such as may apply in the case of paediatric patients.

Medication brought into the hospital by patients, which is not returned to the patient (for whatever reason), should be disposed of appropriately. The medication should not be placed into pharmacy stock for supply to other patients as the integrity of the medication cannot be guaranteed.

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Hospitals must ensure that planning for patients' week end leave or day pass includes the arrangement of medication supplies during pharmacy opening hours so that a dispensed supply is provided for the patient to take with them. Where a dispensed supply from pharmacy has not been arranged, the medication must be appropriately packed and labelled by a medical officer.

#### **4.4.1.2 Provision of Medication under the 2003-08 Australian Health Care Agreement (AHCA)**

All supply of pharmaceuticals to public hospital patients must be made in accordance with the requirements of the 2003-08 Australian Health Care Agreement between the Australian Government and New South Wales. Refer to Information Bulletin **IB2005\_005, 2003-08 Australian Health Care Agreement.**

Under this Agreement, all Area Health Services/hospitals must pay for the cost of all pharmaceuticals provided to:

- in-patients during their hospital stay.
- in-patients at time of discharge. Patients are to be dispensed an adequate quantity of medication by the hospital pharmacy to ensure continuity until the patient is able to obtain further supplies outside the hospital. Hospitals must not issue prescriptions for dispensing outside the hospital.
- non-admitted hospital patients. The only exceptions are privately referred outpatients of medical specialists with right to private practice at the hospital, and private patients of general practitioners in rural hospitals, as outlined in IB2005\_005.

#### **4.4.1.3 Supply of Discharge Medication**

Discharge medication should only be dispensed on a prescriber's authorisation that is **separate** to the in-patient order. A pharmacist employed at a hospital may dispense discharge medication from the pharmacy department of the hospital on the basis of:

- (a) a separate prescription, or
- (b) an authorisation on a section of the medication chart dedicated for discharge orders, or
- (c) a tear-off section of the discharge summary.

Hospitals must develop appropriate systems for the supply of medication to patients at discharge, with the aim of reducing adverse events resulting from the discharge process and ensuring continuity of care between hospital and the community. When developing such systems, hospitals should refer to the Australian Pharmaceutical Advisory Council's *Guiding principles to achieve continuity in medication management*, July 2005. This document is accessible at <http://www.health.gov.au>

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(listed under National Medicines Policy) and hard copy is available from the APAC Secretariat on phone: (02) 6289 8023.

Such systems must include the following:

- A prescriber reviews the patient's medication prior to authorising discharge medication;
- An adequate quantity of medication is supplied to ensure continuity until the patient is able to obtain further supplies outside the hospital;
- Accurate information on the patient's medication is communicated to the patient's general practitioner in a timely fashion;
- Patients understand how they are to take their medication when they go home and are made aware of any changes to their medication regimen since admission; and
- Any supplies of medication brought into the hospital by the patient, which are planned for return to the patient, do not conflict with discharge supplies being provided by the hospital.

Clause 99, Poisons and Therapeutic Goods Regulation, 2002.

#### **4.4.1.4 Supply of methadone and buprenorphine for the treatment of opioid dependence**

Due to security and safety issues, methadone syrup for the management of opioid dependence should only be supplied to patient care areas as unit doses per individual patient, not as a stock bottle, except in exceptional circumstances. Where considered necessary, a small emergency stock of a minimal range of unit doses of methadone syrup may be held in a designated ward.

However, due to their easier accountability, stocks of buprenorphine tablet preparations may be held in patient care areas, if necessary.

Public opioid treatment program clinics or administration points, however, may hold stock quantities of methadone and buprenorphine.

For further information, refer to:

Policy Directive PD2006\_049, *Management of Opioid Dependent Persons Admitted to Hospitals in New South Wales*.

Guideline GL2006\_019, *New South Wales Opioid Treatment Program - Clinical guidelines for methadone and buprenorphine treatment of opioid dependence* (a NSW Health publication available from Better Health Centre on (02) 9816 0452 or online at <http://www.health.nsw.gov.au>).

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Policy Directive PD2006\_052, *Dosing Facilities in Public Hospitals for Patients on Opioid Treatments.*

**Note:** Hospitals that have opioid treatment program clinics or administration points for clients on the NSW opioid treatment program should ensure that *auditing* of register records & drug storage is carried out in these areas by persons *independent* of the unit staff in the same manner as ward audits. Refer 6.2.6.

#### **4.4.1.5 Supply to Operating Theatres**

Requisitions for supply to Operating Theatres and similar areas must be based on a set *imprest* stock list that has been developed by joint consultation of Pharmacy staff with Theatre medical and nursing staff. Any amendment to this list should also be made in joint consultation.

When supplying products to Theatres, any variation from the item as named on the set list, such as a different brand name to that usually supplied, **must** be checked with a pharmacist before the item is supplied to Theatres. Similarly, any requests for items not included on the imprest list must be referred to a pharmacist.

Pharmacists who receive requests for items not on the list must obtain further information from Operating Theatres staff as to the item's intended use and assess the suitability of the product for this use.

A procedure must be in place in Operating Theatres for the careful checking by nursing staff of all orders for pharmaceuticals received, whether supplied by Pharmacy or from a Supply Service. Refer 6.1.5.

#### **4.4.2 Supply to Outpatients**

Matters relating to charges and quantities of drugs supplied to outpatients are outlined in Policy Directive PD2007\_005, *Outpatient Pharmaceutical Charges and Safety Net Arrangements.*

Refer also to Policy Directive PD2005\_395, *Funding Arrangements for Outpatient Use of High Cost Drugs Not Funded by the Commonwealth.*

For further advice on the above policies, contact the Department's Inter-Government and Funding Strategies Branch on (02) 9391 9533.

#### **4.4.3 Supply of Morphine to Ambulance Officers**

Under the Poisons and Therapeutic Goods Regulation 2002, ambulance officers may be approved by the Ambulance Service of NSW to carry and to administer morphine in accordance with written protocols developed by the Ambulance Service. The approved officers are provided with a letter of authority, signed by the General Manager, Operations, Ambulance Service of NSW.

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Routinely, these officers obtain supply of morphine either directly from the Ambulance Service's central store in Sydney or from an area Ambulance Service store in their Area. No supplies of morphine should need to be obtained from a public hospital.

However, should an *emergency* situation arise where an ambulance officer needs to obtain morphine from a public hospital, such supply can only be made by a hospital pharmacist. The hospital pharmacist must obtain a copy of the ambulance officer's letter of authority plus a written order for the drug, signed by the ambulance officer, before supply of morphine may be made.

**Note:** Supply of morphine to ambulance officers from public hospitals **must not** be made by Emergency Department staff or other ward area staff.

Clause 101(1)(g), Poisons and Therapeutic Goods Regulation 2002.

#### 4.4.4 Clinical Trial Drugs

A clinical trial drug, which is not yet registered or listed by the Commonwealth Therapeutic Goods Administration, but is approved for use in the hospital by the Drug Committee (or other committee which approves clinical drug trials in that hospital), should be treated as a Schedule 4 drug for the purposes of storage, supply, prescribing and administration.

Persons conducting clinical trials in public hospitals should be aware of the following:

- The National Health and Medical Research Council's *National Statement on Ethical Conduct in Research Involving Humans* ; and
- Policy Directive PD2005\_078, *Highly Specialised Drugs Program – Guidelines for Undertaking Clinical Trials*.

#### 4.5 PHARMACY RECORDS

Records must be kept of the supply of all scheduled substances from the Pharmacy Department (or from a pharmacy store, where there is no pharmacist employed) to other areas of the hospital. These records must be retained on the hospital premises, preferably in the pharmacy, and must be available for inspection on request by an authorised officer of the NSW Health Department or a police officer.

Clause 172, Poisons and Therapeutic Goods Regulation 2002.

The following **retention periods** apply to records relating to dispensing and supply of pharmaceuticals in hospitals:

- **2 years** for prescriptions (except Section 100), records of medication chart orders, requisitions, receipts/records of delivery, stock and inventory control records and orders for pharmaceuticals.

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- **7 years** for drug registers, records related to supply of medicines under the Section 100 Highly Specialised Drugs Program (including prescriptions, declaration forms) and Special Access Scheme drugs consent forms for non-admitted patients.
- **10 years** for records relating to reports of lost/ stolen Schedule 8 drugs and of lost/stolen Schedule 8 drug registers.

The above take into account the requirements of the Poisons and Therapeutic Goods Regulation 2002 and of the General Retention and Disposal Authority Public Health Services: Patient/Client Records GDA 17 under the State Records Act 1998 (refer Information Bulletin IB2004/20).

## 4.5.1 Dispensing Records

A pharmacist in a hospital must maintain records of dispensing from medication chart orders or prescriptions by **EITHER**:

- (a) using a computer system which complies with the *Dispensary Computers in New South Wales 2001 Standard - Records, Output and Security* (Pharmacy Board of New South Wales), **OR**
- (b) using a prescription book, **OR**
- (c) keeping the prescription (or a copy of the prescription) or keeping a copy of the medication chart order (photocopy/ tear-off carbon copy etc). In the case of prescriptions, each copy must be given a consecutive letter or number that is incorporated in the prescription number, and be held together in sequential order. Copies of medication chart orders should be kept in order of the date on which the items were supplied.

Note: Prescriptions for drugs of addiction must be kept apart from other prescriptions (other than prescriptions for pentazocine and Appendix B substances (barbiturates and anabolic steroids)).

Clauses 54, 89, 113, Poisons and Therapeutic Goods Regulation 2002.

Requirements for record keeping under the Highly Specialised Drugs Program (HSDP) are provided in Policy Directive PD2005\_183, *Section 100 Highly Specialised Drugs Program - Guidelines*, or contact the Section 100 HSDP Adviser, Pharmaceutical Services Branch, phone: (02) 9879 3214.

## 4.5.2 Pharmacy Drug Register

In a hospital pharmacy, a record must be kept of all transactions involving Schedule 8 drugs in a "**drug register**". (Refer 6.2.1 regarding the register required to be kept in a ward.)

This register must be a bound book and its pages must be numbered consecutively.

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A separate page must be used for:

- ❑ each drug,
- ❑ each form of a drug, and
- ❑ each strength of a drug.

Clause 111, Poisons and Therapeutic Goods Regulation 2002.

The record in the register must be made on the day the transaction occurred and must include the following details (as are relevant to the transaction):

- date
- name and address of the person from whom the drug was received or to whom supplied
  - in the case of supply to a ward, this is the name of the ward
  - in the case of supply to an in-patient **only**, the patient's Medical Record Number can be entered in lieu of their address, if desired
- quantity of drugs received or supplied
- balance remaining after the transaction
- prescription reference number, in the case of a drug supplied on prescription
- name of the person who ordered or authorised the drug (that is, name of the requisitioning nurse or name of prescriber)
- signature of the person making the entry

**Note:** Signatures in registers must be **full signatures**, so that the person signing can be identified.

Clause 112, Poisons and Therapeutic Goods Regulation 2002.

A person making an entry in a drug register:

- (i) must not make any false or misleading entry, and
- (ii) must not make any alterations, obliterations or cancellations. That is, **no** lines may be drawn through entries, no entries scribbled out or crossed out in any way, no numerals altered.

If a **mistake** is made, **it must be left as it is**, marked with an asterisk, rewritten as appropriate on the next line, and a note explaining the error must be made in the margin or at the foot of the page, initialled and dated.

Clause 173, Poisons and Therapeutic Goods Regulation 2002.

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**Drug registers must be kept** on the hospital premises, preferably in the Pharmacy Department, **for a minimum of 7 years** from the date of the last entry made.

Clause 172, Poisons and Therapeutic Goods Regulation 2002.

**Note:** Information Bulletin IB2005\_017, *Standard Forms Stocked by cmSolutions (Government Printing Service)*, provides information on the purchasing of drug registers.

#### 4.5.2.1 Balance Checks

- A check of the balance of all Schedule 8 drugs held in the pharmacy must be made during March and September each year as a minimum and at other times as deemed necessary by the Director of Pharmacy. The balance must be recorded under the last entry for **each** drug, signed and dated. It is **not** sufficient to make a single entry on one page of the register to cover checks of all drugs.
- A person who assumes control over the Schedule 8 stock for one month or more must, immediately on assuming control, perform a full balance check as described above.

Clause 117, Poisons and Therapeutic Goods Regulation 2002.

#### 4.5.2.2 Loss of a Schedule 8 or a Schedule 4 Appendix D Drug

If an S8 or S4D drug is lost or stolen from the pharmacy, the Director of Pharmacy (or delegate) must immediately notify the Director-General of Health by telephoning or faxing the Duty Officer, Pharmaceutical Services Branch, phone: (02) 9879 3214, fax: (02) 9859 5165. (Note that there is no longer a requirement under the Regulation to notify the police.)

Following this immediate notification, the Director of Pharmacy (or delegate) must forward a full written report describing the circumstances surrounding the loss.

When there is no apparent loss of drugs, but concern exists of possible, or admitted, misappropriation of drugs by a staff member, this must similarly be reported to the Pharmaceutical Services Branch. Failure to do this may result in harm to a patient or to the member of staff, particularly where a possibility exists that this staff member is drug dependent or is impaired.

Clauses 66, 122, Poisons and Therapeutic Goods Regulation 2002.

**Hospitals can pro-actively prevent misappropriation of S8 and S4D drugs by ensuring adherence to Departmental and hospital policies and procedures.**

#### 4.5.2.3 Loss or Destruction of a Pharmacy Drug Register

If a register is lost or destroyed in the pharmacy, the Director of Pharmacy (or delegate) must immediately

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- a) **notify** the Director-General of Health **in writing** of that fact and of the circumstances of the loss. The notification may be faxed on (02) 9859 5165 or sent to:

Chief Pharmacist  
Pharmaceutical Services Branch  
NSW Health Department  
PO Box 103  
GLADESVILLE NSW 1675

For advice, telephone the Duty Officer on (02) 9879 3214.

- b) **carry out a balance check** of S8 drugs held and enter the particulars in a new register.

Clause 118, Poisons and Therapeutic Goods Regulation 2002.

Refer 4.5.2.

## 4.6 DESTRUCTION OF UNUSABLE SCHEDULE 8 DRUGS

Schedule 8 drugs **in the pharmacy** which are deemed unusable for any reason, may be destroyed only by an authorised officer of the NSW Health Department or, if this is not possible, a member of the police service.

Clause 123, Poisons and Therapeutic Goods Regulation 2002.

Refer to 6.3 re destruction of these drugs on a ward. **No** unusable S8 drugs held in a ward should be sent to pharmacy for destruction.

## 4.7 DISPOSAL OF PHARMACEUTICAL WASTE

General pharmaceutical waste should be disposed of in accordance with Health Department Policy Directive PD2005\_132, *Waste Management Guidelines for Health Care Facilities*.

Expired stock should not, under any circumstance, be collected for the purpose of donation for humanitarian relief. Refer to the *Australian guidelines for drug donations to developing countries*, as endorsed by the Australian Pharmaceutical Advisory Council (APAC), November 1996 (<http://www.health.gov.au>, Search for apac). The Australian guidelines are based on the international *Guidelines for drug donations* developed by the World Health Organisation.

## 5 PRESCRIBING

### 5.1 ON MEDICATION CHARTS

A person employed at a hospital must not administer a **Schedule 4** or a **Schedule 8** medication (prescription-only medication) to a patient in the hospital other than on the authorisation of a medical officer, dentist, nurse practitioner, midwife practitioner or optometrist. This authorisation must be provided in the form of

- (a) a **prior written medication order** on an individual patient's medication chart or anaesthetic record, or
- (b) a **standing order** (refer 5.2), or
- (c) an **emergency telephone order** (refer section 5.3).

Clauses 57, 119, Poisons and Therapeutic Goods Regulation 2002.

A person employed at a hospital must also not administer an **unscheduled, Schedule 2** or **Schedule 3** medicine to a patient in the hospital other than on the authorisation of a medical officer, dentist, pharmacist, nurse practitioner, midwife practitioner, or optometrist. This authorisation must be provided as above in (a), (b) and (c). Exception are those unscheduled, Schedule 2 or 3 medicines that are included in a list of nurse-initiated medicines, which may be initiated and administered by nurses in accordance with section 6.4.9 of this policy directive.

Clause 16, Poisons and Therapeutic Goods Regulation 2002.

Authority issued January 1997, pursuant to the Poisons and Therapeutic Goods Regulation 1994

The medication chart that must be used for prescribing medication and for recording administration of medication to inpatients is the National Inpatient Medication Chart (NIMC).

The aims of the **National Inpatient Medication Chart** are to:

- Provide a standard medication chart across all NSW Health inpatient facilities;
- Reduce medication prescribing, dispensing and administration errors, and therefore reduce associated patient harm; and
- Standardise training for staff on safe medication management processes across the State, including prescribing, dispensing and administration.

Information on chart supply is available in Policy Directive PD2006\_028, *NSW Implementation of the National Inpatient Medication Chart*.

Note that the implementation of the NIMC does not preclude the use of specialty charts where appropriate. The hospital or Area Health Service Drug Committee must approve any specialty charts that are in use.

## Guidelines for Use of the National Inpatient Medication Chart

Guidelines for use of the National Inpatient Medication Chart are on the NSW Health Department website at the following address:

<http://www.health.nsw.gov.au/quality/natmed/pdf/guidelines.pdf>

## Regular Review of Medication Orders

Hospitals must ensure that adequate systems are in place for **regular medical review** of in-patient medication orders at a frequency determined by the Drug Committee.

The committee must also develop policy and procedures to require and guide prescribers and pharmacists to follow up medication orders with the treating team, in an appropriate time frame, when those orders have been highlighted for review. These procedures should include contact with the patient's treating consultant where a pharmacist remains concerned about the appropriateness of a prescribed medication and/or dosage of that medication. Documentation of the outcome of such follow up in the patient's clinical record must be made.

## Principles for Consistent Prescribing Terminology

A critical patient safety issue and a major cause of medication errors is the ongoing use of potentially dangerous abbreviations and dose expressions in the prescribing of medicines. In order to establish the state wide use of **acceptable terminology, abbreviations and symbols** used in the prescribing and administration of medicines, a set of prescribing principles and recommended terms is attached at **APPENDIX B**. Included in the document is a separate list of error-prone abbreviations, symbols and dose designations that must be avoided.

The Drug Committee must use the document attached at Appendix B for the development of local policy.

## Prescribing of Discharge Medication

Hospitals must develop systems to ensure **continuity of care** when the patient leaves the hospital. When developing such systems, hospitals should refer to the Australian Pharmaceutical Advisory Council's **Guiding principles to achieve continuity in medication management, July 2005**. This document is accessible at <http://www.health.gov.au> (listed under National Medicines Policy) and hard copy can also be obtained from the APAC Secretariat on phone: (02) 6289 8023.

The following must be included in such a system:

- At the time of discharge, the patient's medication should be **reviewed** by the prescriber, as part of the patient's general review prior to leaving the hospital.
- The supply of discharge medication should be **authorised separately** to the in-patient order, either on the discharge summary, on a dedicated section of the medication chart or on a separate prescription.

The discharge supply section of the NIMC may be used to authorise the dispensing of a supply of medication on discharge by the hospital pharmacy, including the supply of Schedule 8 medication. Where more detailed instructions need to be prescribed, such as a reducing dosage regimen, a separate prescription will be required for that medication.

- All the patient's current medication at time of discharge should be included in the **discharge summary**, whether or not it is to be supplied by the hospital pharmacy. Care should be taken to amend the discharge summary if a late change is made to the discharge medication. A legible copy of the discharge summary must be despatched or otherwise communicated to the patient's nominated general practitioner in a timely fashion.

Refer also to 4.4.1.3 Supply of Discharge Medication.

## 5.2 STANDING ORDERS

Standing orders provide authorisation for nursing staff to administer medication in certain situations without a **prior** written order on a medication chart.

Standing orders fall into **two categories**:

- (i) **Protocols which are developed by the hospital** for the administration of medication in life saving or other specific situations within the hospital.

Examples may include the administration of naloxone for narcotic-induced respiratory depression, lignocaine as part of a resuscitation protocol for ventricular tachycardia and Vitamin K to newborn infants to prevent Vitamin K deficiency bleeding in infancy.

Medication should be administered according to these protocols by hospital-accredited staff only.

The protocol must be **approved by the Drug Committee** and be in the form of a written instruction, signed and dated by an appropriate senior medical officer. It must be reviewed at least annually by the Committee and re-signed.

Such protocols should include sufficient detail on **each medication** for the direction and information of nursing staff. They should include the medication name, strength, dose, route, frequency of administration (etc), indications and contraindications (including possible interaction with other drug therapy), any restrictions on categories of staff who may administer the medication and any other information deemed necessary.

When a nurse administers a medication according to one of these protocols, he/she **must record** administration in ink on the medication chart (or anaesthetic record). This record must be written in some place on the chart other than the section for on-going regular, or "prn", medication.

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A medical officer must check this record and **confirm by signing within 24 hours**.

- (ii) **Individual medical officer's authorisation** for administration of medication by nursing staff to **his/her patients only**.

Each medical officer's protocol must be **approved by the Drug Committee** and must be in the form of a written instruction (as described in (i)), signed and dated by the medical officer. It must be reviewed at least annually by the Committee, and re-signed by the medical officer.

Again, as in (i), the nurse **must record** administration in ink on the medication chart or anaesthetic record and the medical officer must check this record and **confirm by signing within 24 hours**.

## 5.3 EMERGENCY TELEPHONE ORDERS

When a prescriber is unable to be present, he/she may give a medication order **verbally, by telephone, by facsimile or by electronic mail**.

The person who **receives** the telephone order should either be a registered nurse, prescriber or pharmacist.

Due to the risk of misinterpretation of drug names and dosages over the telephone, all orders received by telephone **must be read back to the prescriber** (in figures and words – eg 50mg: fifty milligrams, five 0 mg). As a further check, where possible, the prescriber should repeat the order to **a second person**.

The nurse should make a full **record** of the order, including the prescriber's name, in the patient's medical notes. The administration of the medication must be recorded on the patient's medication chart. This record must be written in ink in some place on the chart other than the section for on-going regular, or "prn", medication.

The prescriber **must confirm** this order by **EITHER**

- (i) **counter-signing** the nurse's record of administration, as soon as is practicable, and in any case **within 24 hours** of ordering; **OR**
- (ii) **sending written confirmation** of the order to the nurse **by facsimile or by electronic mail**, as soon as is practicable, and in any case **within 24 hours** of ordering. The facsimile or electronic mail should include all details of the medication order.

In any event, the prescriber giving the order **must attend to review the patient**, as soon as he or she considers it appropriate in the circumstances of the case.

Subclauses (2), (3), (5) of Clauses 57, 119,  
Poisons and Therapeutic Goods Regulation 2002.

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Note: If the prescriber ordered the medication by facsimile or electronic mail, rather than by telephone, there is no need to send a second facsimile or electronic mail message as confirmation.

The facsimile must be able to be received on dry paper, or otherwise a photocopy kept, such that the image does not fade with time. The prescriber's facsimile or electronic mail should be placed with the medication chart.

In the case of on-going medication, the prescriber must, at the time of attending the hospital, write an order in the regular medication or "prn" section of the chart, as the case may be, for the medication to continue to be administered.

The Drug Committee must develop a procedure for ensuring that emergency telephoned orders are confirmed by the prescriber within 24 hours by either (i) or (ii) above, and vigorously followed up if confirmation is not forthcoming.

If this procedure is unsuccessful in obtaining the doctor's confirmation after a 7 day period has elapsed, the administering nurse must inform the nurse in charge of the hospital (or delegate) who must report this fact to the Director-General of Health by telephoning or faxing Pharmaceutical Services Branch. Phone: 9879 3214. Fax: 9859 5165.

Subclause (4) of Clauses 57, 119, Poisons and Therapeutic Goods Regulation 2002.

Subclauses (3), (4) and (5) of Clauses 57 and 119 do not apply to the administration of an S4 or S8 medication to a patient in an institution conducted by the Corrections Health Service, if the substance is administered in accordance with the requirements of a protocol approved by the Director-General.

Subclause (6) of Clauses 57, 119, Poisons and Therapeutic Goods Regulation 2002.

### **5.3.1 Medication Orders at Admission**

At time of admission, a letter accompanying a patient detailing his/her current medication, provided by his/her medical practitioner, should be treated as an information source only and not as an authority to administer, particularly when the patient has been admitted for specialist treatment.

The medication must be assessed by a prescriber at the hospital who is aware of the reason for the patient's admission.

If no prescriber is available, the medication must be checked by telephone with the medical practitioner, *under whose care the patient is being admitted*, and a verbal order given, if necessary. This order must be treated in the same way as an emergency telephone order as detailed above.

However, where the medical practitioner providing the patient's letter is the same medical practitioner who will be treating the patient in hospital, and has provided confirmation in his/her letter as to the medication to be taken by the patient following admission, no telephone confirmation is considered necessary. A copy of the letter should be placed in the patient's medical notes. The nurse must record administration of the medication on the patient's chart in the same manner as a verbal order. The patient's doctor must then enter the patient's on-going medication orders on the chart as soon as possible when they attend the hospital.

## 5.4 WRITING A PRESCRIPTION FOR A SCHEDULE 4 DRUG

When writing a prescription (as distinct from an authorisation on a medication chart) for a Schedule 4 drug in a hospital, for dispensing at the hospital pharmacy, the prescriber **must** include the following details:

- (i) date,
- (ii) name and address of the patient,
- (iii) the name, strength and quantity of the drug,
- (iv) adequate directions for use,
- (v) number of repeats, if any,
- (vi) name and designation of the prescriber (eg. RMO, Staff Specialist, Nurse Practitioner) and the prescriber's pager number, if applicable,
- (vii) name, address and telephone number of the hospital,
- (viii) the prescriber's signature.

In the case of a hand-written prescription, the details in (i) - (v) must be made out in the prescriber's handwriting. The details in (vi) and (vii) may be pre-printed.

In the case of a 'computer-generated' prescription, the details in (i) - (vi) may be generated by the computer ((vii) should be pre-printed), provided that the system complies with the criteria set out in TG184, *Criteria for the Issuing of Non-Handwritten Prescriptions* (available from Pharmaceutical Services Branch). An essential criterion of any system used to produce a 'computer-generated' prescription is that only an authorised prescriber can generate the prescription.

A prescriber must confirm any dose that could be regarded as being dangerous or unusual by underlining the dose and initialling the prescription in the margin.

Clause 34, Poisons and Therapeutic Goods Regulation 2002.

## 5.4.1 Criteria for Use of Addressograph Labels on Prescriptions

Addressograph labels must not be applied to *prescriptions* (that is, not medication charts) for patient identification other than in accordance with the following approved criteria:

- a) The prescription is not for a Schedule 8 drug.
- b) The prescription is for dispensing solely within the hospital by the hospital pharmacy and is endorsed: ***For hospital use only.***
- c) The addressograph label shows the patient's name *and address* (not just the Medical Records Number).
- d) The prescriber affixes the addressograph label at the time of writing the prescription. It is the prescriber's responsibility to ensure that the patient for whom they are prescribing has been correctly and unambiguously identified on the prescription.

Clause 34 (2) (b), Poisons and Therapeutic Goods Regulation 2002.

## 5.4.2 Storage of Prescription Pads

Due to the detection of forgeries on prescription forms that have been stolen from hospitals, all hospitals must ensure that prescription pads are **securely stored** in all areas of the hospital, including outpatient clinics. Prescription pads must not be held in Schedule 8 drug safes.

## 5.5 RESTRICTIONS ON PRESCRIBING CERTAIN SCHEDULE 4 DRUGS

Due to certain hazards associated with their use, prescribing restrictions apply to those Schedule 4 drugs listed in clause 36 of the Poisons and Therapeutic Goods Regulation 2002.

Medical practitioners with specified qualifications and, in some cases, in specified circumstances, are automatically authorised to prescribe these drugs for any of their patients unless specifically restricted.

Medical practitioners who do not have the specified qualifications may only prescribe these drugs with the prior authority of the NSW Department of Health.

The drugs concerned and the restrictions that apply to them are as follows, in related groupings:

- A. **acitretin**  
**etretinate**  
**isotretinoin for oral use**

## Authorised prescribers:

- Specialist dermatologists who hold the qualification *Fellow of the Australasian College of Dermatologists (FACD)*.
- Patient admitted for unrelated treatment, already prescribed the drug by a specialist dermatologist and still undergoing treatment at the time of admission. In this case, authority has been issued under the Poisons and Therapeutic Goods Act 1966 that allows an attending medical officer in a public hospital to prescribe the above drugs on the patient's medication chart for the term of the patient's hospital stay.

## B. clomiphene cyclofenil

### Authorised prescribers:

- Specialists who hold at least one of the following qualifications:  
*Fellow of the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (FRANZCOG).*  
*Fellow of the Royal College of Obstetricians and Gynaecologists (FRCOG).*  
*Fellow of the Royal Australasian College of Physicians (FRACP) (practising endocrinology in a Specialist Endocrinology Unit).*
- Patient admitted for unrelated treatment, already prescribed the drug by a specialist medical practitioner and still undergoing treatment at the time of admission. In this case, authority has been issued under the Poisons and Therapeutic Goods Act 1966 that allows an attending medical officer in a public hospital to prescribe the above drugs on the patient's medication chart for the term of their hospital stay.

## C. dinoprost (Prostin F<sub>2</sub> alpha)

### Authorised prescribers:

- Specialists who hold at least one of the qualifications, FRANZCOG or FRCOG.
- GP Obstetricians in rural locations where no specialist is present, for the treatment of severe postpartum haemorrhage in extreme life-saving situations, in accordance with PD2005\_264, *Framework for Prevention, Early Recognition and Management of Postpartum Haemorrhage* and
  - only after comprehensive consultation and collaboration with the consulting obstetrician; and
  - only in preparation for retrieval of the patient to a tertiary hospital; and
  - only with conditions consistent with 'an anaesthetist on standby'.

Note: A GP Obstetrician is defined as a medical practitioner who is not a specialist obstetrician or gynaecologist, but who has completed the Diploma RANZCOG after January 1992, or, who completed the Diploma RANZCOG prior

to 1 January 1992 and has attended a RANZCOG or RACGP update program on the use of prostaglandins in obstetrics.

## D. dinoprostone (any form)

### Authorised prescribers:

- Specialists who hold one of the following qualifications: FRANZCOG, FRCOG
- GP Obstetricians
- Registrars in obstetrics in public hospitals may prescribe or administer dinoprostone, in any form, for obstetric purposes only, **subject to the following conditions:**
  - (a) The registrar is approved in writing by the Director of Obstetrics and Gynaecology to perform obstetrics, including the use of dinoprostone, provided that the hospital is equipped to carry out foetal and maternal monitoring and operative delivery; and
  - (b) The registrar prescribes, supplies or administers the substance at all times in accordance with a written protocol for the use of the substance in the hospital that includes relevant warnings, contraindications, precautions and possible adverse reactions and that has been approved and signed by the Director of Obstetrics and Gynaecology. (Refer Information Bulletin 2004/38, *Authority for Registrars in Obstetrics to Prescribe Dinoprostone*)

**Note:** A registered nurse may administer dinoprostone vaginal gel or pessaries (or other form) on the medication chart order of an authorised prescriber, as described above.

## E. follitropin beta luteinising hormone urofollitrophin

**Authorised prescribers:** Specialist endocrinologists

## F. tretinoin for oral use

**Authorised prescribers:** Specialist haematologists

Clause 36, Poisons and Therapeutic Goods Regulation 2002.  
Authority issued pursuant to clauses 147, 148, subclause 36 (2),  
Poisons and Therapeutic Goods Regulation 1994.

When authorising therapy with any of the above drugs on a *medication chart*, there is no requirement for authorised prescribers to endorse the medication order with the prescribers' *CL, RA, PGT* number or other authority reference number, as is required on a discharge (or other) *prescription*. Hospitals, however, may determine as local policy that medication chart orders should be so endorsed, if desired.

## 5.6 PRESCRIBING BY INTERNS

Interns employed in hospitals may prescribe medication on medication charts and prescriptions, provided that, as with all aspects of their medical practice, there is appropriate close supervision by fully registered medical staff. Refer also to 4.4.1.2.

## 5.7 PRESCRIBING BY DENTISTS

Dentists may prescribe medication for dental treatment **only**. Medication for other purposes may only be authorised by medical officers, nurse practitioners or midwife practitioners. Prescriptions (as distinct from medication chart orders) written by dentists must be endorsed with the words *FOR DENTAL TREATMENT ONLY*.

Dentists may prescribe any Schedule 4 drug for use in the course of dental treatment.

The following restrictions apply to the prescribing of Schedule 8 drugs by dentists for hospital patients, as follows:

- Dentists may prescribe any Schedule 8 drug other than amphetamines for the dental treatment of a patient in a hospital (an in-patient or outpatient).
- Dentists may prescribe Schedule 8 drugs for a period not exceeding one month's continuous treatment.

Clauses 32, 78, 83, Poisons and Therapeutic Goods Regulation 2002.

## 5.8 PRESCRIBING SCHEDULE 8 DRUGS

### 5.8.1 On Medication Charts

An order for a Schedule 8 drug (drug of addiction) **must** include either

- ❑ a maximum number of doses, OR
- ❑ a finite time period of administration,

with the **exception** of

- a regular (ie. not "prn") long-term treatment order for a chronic condition, or
- a "Fixed Interval Variable Dose" regimen which is approved by the Drug Committee.

As is the case with all drug therapy, a Schedule 8 drug order **must** clearly specify the dose and the frequency of administration, thus providing **adequate directions for use**. The terms *as directed* or *prn* alone are **not** sufficient.

Examples of correctly written Schedule 8 drug orders:

- (i) Pethidine 50mg IV every 4 hours prn for severe pain up to max. of 10 doses.
- (ii) Morphine 10mg IM every 4 hours prn for severe pain up to max. of 3 days.

## 5.8.2 On a Prescription

When writing a prescription (as distinct from an authorisation on a medication chart) for a Schedule 8 drug in a hospital, for dispensing at the hospital pharmacy, the prescriber **must** include the following details:

- (i) the date;
- (ii) the name and address of the patient. Addressograph labels must not be used on prescriptions for Schedule 8 drugs;
- (iii) the name, strength and quantity of the drug - the **quantity** must be expressed in both **figures and words**;
- (iv) **adequate directions for use** (*as directed* or *PRN* alone are not sufficient);
- (v) the number of repeats, if any;
- (vi) **repeat intervals**, if repeats are specified;
- (vii) the name and designation of the prescriber (eg. RMO, Staff Specialist, Nurse Practitioner) and the prescriber's pager number, if applicable;
- (viii) the name, address and telephone number of the hospital; and
- (ix) the prescriber's signature.

In the case of a hand-written Schedule 8 prescription, the details in (i) - (vi) **must** be in the prescriber's handwriting. The details in (vii) and (viii) may be pre-printed.

In the case of a 'computer-generated' Schedule 8 prescription, the details in (iii) - (vi) **must** be in the prescriber's handwriting but those in (i), (ii) and (vii) may be generated by the computer ((viii) should be pre-printed), **provided that** the system complies with the criteria set out in TG184, *Criteria for the Issuing of Non-Handwritten Prescriptions* (available from Pharmaceutical Services Branch). An essential criterion of any system used to produce a 'computer-generated' prescription is that only an authorised prescriber can generate the prescription.

A prescriber must not issue a prescription that includes:

- (a) more than one preparation containing a drug of addiction, or
- (b) both a preparation containing a drug of addiction and another preparation.

This means that where a patient is prescribed the same Schedule 8 (S8) drug in several strengths, the prescriber has to write a separate prescription for each strength. This legal provision is intended to prevent a person obtaining S8 drugs by deception by adding a S8 drug preparation to an existing prescription.

A prescriber must confirm any dose that could be regarded as being dangerous or unusual by underlining the dose and initialling the prescription in the margin.

Clause 77, Poisons and Therapeutic Goods Regulation 2002.

### 5.8.3 Schedule 8 Drug Authority Requirements

The authority requirements referred to below are those that apply to the prescribing of Schedule 8 drugs (drugs of addiction) in NSW under section 28 of the (NSW) Poisons and Therapeutic Goods Act 1966. Note that authorities issued by the NSW Department of Health are distinct and independent of authorities issued by the Australian Government for the prescribing of Pharmaceutical Benefits.

The requirements and the exemptions that apply to these requirements are outlined below.

**Authority is required on an individual patient basis to prescribe Schedule 8 drugs as follows:**

- (a) For any person who, in the opinion of a medical practitioner or nurse practitioner, is a **drug dependent person**.
- (b) For any other person for **continuous treatment for a period exceeding two months** with the following listed drugs:
  - any Schedule 8 drug in an injectable form
  - buprenorphine (all forms other than transdermal patches)
  - flunitrazepam
  - hydromorphone
  - methadone
- (c) For any person a **central nervous system stimulant**, namely dexamphetamine or methylphenidate.

Specialist medical practitioners who are approved by the NSW Department of Health for the management of Attention Deficit Hyperactivity Disorder are exempted to requirements for individual patient authority for stimulants where their prescribing is within set Departmental criteria. Copies of these criteria may be obtained from Pharmaceutical Services Branch or on the website at <http://www.health.nsw.gov.au/public-health/psb/pubs.html> (and click on 'Pharmaceutical Services Publications').

For further information on authority requirements, contact Pharmaceutical Services Branch, Education and Monitoring Unit on (02) 9879 5239.

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For clinical guidelines on the treatment of opioid dependence refer to the NSW Health publication: *New South Wales Opioid Treatment Program, Clinical guidelines for methadone and buprenorphine treatment of opioid dependence, GL2006\_019.*

### **5.8.3.1 Exemption to authority requirements in public hospitals**

In a *public or private hospital* exemption to the above authority requirements applies **for a period of up to 14 days** following a person's admission as an **inpatient**.

Refer PD2006\_049, *Management of Opioid Dependent Persons Admitted to Hospitals in New South Wales.*

**Note:** This exemption applies to the prescribing of **any** Schedule 8 drug (including dexamphetamine and methylphenidate) in a hospital for up to 14 days.

Section 28, Poisons and Therapeutic Goods Act 1966.  
Clauses 82, 83, 121, 121A, Poisons and Therapeutic Goods Regulation 2002.

## 6 PATIENT CARE AREAS

The term *patient care areas* refers to all areas in a hospital where patient treatment/care may be carried out and **includes** wards, operating theatres, day surgery and other treatment areas.

### 6.1 STORAGE

#### 6.1.1 Responsibility

The **nurse in charge of a ward** is responsible for the storage of **all drugs** in the ward. He/she must ensure that the drugs are stored in accordance with the legal requirements outlined below and that the correct conditions are met in relation to security, temperature and stock rotation (expiry date).

If needed, further advice on storage conditions required for particular products should be sought from a hospital pharmacist.

Clauses 30(3), 73(3), Poisons and Therapeutic Goods Regulation 2002.

**Systems for management of pharmaceutical stock should form part of the facility's Quality Improvement program.** Such systems should include provision for the following:

- ❑ Storage in all areas in a manner that minimises medication error. Substances that may be dangerous if administered in error due to mix-up with other products must not be stored together with those products. For example, potassium chloride should not be stored next to routine fluids such as Normal Saline or Water for Injection.
- ❑ Pharmaceutical stock held in each patient care area to be appropriate for the needs of that area in terms of products and quantities held.

#### 6.1.2 Storage of Schedule 4 Drugs

##### 6.1.2.1 General Schedule 4 Drugs

Schedule 4 drugs are the "prescription-only" drugs, other than Schedule 8s. They include those drugs listed in Appendix D to the Poisons and Therapeutic Goods Regulation (Schedule 4 Appendix D - S4D).

All Schedule 4 drugs must be stored out of patient and public access in either a **locked cupboard** securely attached to a part of the premises, or in a **locked room** or **locked medication trolley**. Special requirements apply to the storage of S4D drugs - refer 6.1.2.2.

The cupboard, room, drawer or trolley must be kept locked when not in immediate use and the keys must be kept **on the person** of the nurse in charge of the ward, or his/her delegate, who must be a registered nurse. An S4 key may be handed from time to time to an endorsed enrolled nurse for access to administer medication.

Drug cupboard keys must be **kept separate** from other ward keys.

Schedule 4 drugs held on emergency, resuscitation or anaesthesia trolleys are exempt from the above requirements for locked storage. Quantities of drugs held on these trolleys must be kept to a minimum and the drugs left in original manufacturer's packs, where possible. Refer below re Appendix D drugs on these trolleys.

### 6.1.2.2 Schedule 4 Appendix D Drugs

Schedule 4 Appendix D (S4D) drugs are those Schedule 4 drugs that are liable to abuse and include benzodiazepines, ephedrine, ketamine and anabolic steroids.

S4D drugs must be stored **apart** from all other drugs (except Schedule 8 drugs) in a **separate** sturdy cupboard, **preferably a metal safe**, which is securely attached to a wall or to the floor, and kept locked when not in immediate use.

**No other goods**, including keys, cash or documents, may be kept in this cabinet.

These storage requirements apply equally to all S4D drugs **in any form**, including parenteral and oral drugs. For example, midazolam and diazepam ampoules must be stored in the same manner as oral diazepam.

The **key** to the S4D cabinet must be **kept separate** from all other keys, except an S8 cupboard key, and be kept **on the person** of the nurse in charge or his/her delegate, who must be a registered nurse. The key may be handed to an endorsed enrolled nurse for the purpose of administration of an S4D drug as long as storage is separate to S8 drugs.

It should be noted that S4D drugs do not have to be recorded in a ward register, unless the hospital decides otherwise. Refer 6.2.1.

Clause 32, Poisons and Therapeutic Goods Regulation 2002.

S4D drugs held on emergency and resuscitation trolleys are exempt from the above requirements for locked storage, as long as the quantity held is kept to a minimum, and the trolley is located in a position where unauthorised access to the drugs is unlikely, eg. adjacent to a nurses' station where the trolley can be observed.

A similar exemption applies to S4D drugs on anaesthesia trolleys whilst in use during operating theatre sessions. However, these drugs must be returned to locked storage overnight or when the operating theatre is closed. Drugs should remain in original packs on anaesthesia trolleys other than a small quantity of certain drugs required for use in an anaesthetic emergency.

### 6.1.2.3 Storage of Self-Medication Drugs

Refer also to 6.4.8 Self-Medication.

Self-medication drugs must be stored in secure bedside storage that is inaccessible to other patients or visitors, such as a locked bedside drawer or cabinet (to which the patient may hold a key).

A policy should be developed as to whether S4D drugs are to be included among those available for self-administration (either in no cases, all cases or individual cases) and if so, what conditions should apply.

The nurse in charge of the ward is responsible for ensuring that the storage of self-medication is monitored.

Schedule 8 drugs must not be included in bedside storage due to the security and recording requirements of these drugs.

### 6.1.3 Storage of Schedule 8 Drugs

A regularly updated list of Schedule 8 (S8) drugs is available from Pharmaceutical Services Branch, telephone (02) 9879 3214.

The nurse in charge of a ward is responsible for the storage of all S8 drugs in that ward.

S8 drugs must be stored **apart** from all other drugs or goods (other than S4D drugs) in a **separate** sturdy cupboard, **preferably a metal safe**, securely attached to a part of the ward and kept securely locked when not in immediate use. The lock should be a five lever lock (or one which provides at least equivalent security).

**No** keys, cash, documents or other goods may be kept in a ward S8 drug safe.

When new facilities are built, or existing facilities renovated, any remaining wooden S8 cupboards should be upgraded, eg by installation of metal safes.

The **key** to the S8 safe must be kept **separate** from **all** other keys (except an S4D cupboard key) and **on the person** of the nurse in charge, or his/her delegate, who must be a registered nurse.

In Operating Theatres, in the case where the only registered nurse present is the scrub nurse, the key to the S8 safe should instead be held by the anaesthetist.

When an area is closed, the keys to that area's S8 drug safe **must not** be placed in another ward area's S8 safe. The keys should be held securely, eg. by Nursing Administration.

Hospitals must ensure that patient care areas that are routinely closed over short periods, eg weekends, are securely locked to prevent unauthorised access. When

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areas are closed for longer periods, the S8 and S4D drugs should be removed to another secure safe in the hospital, such as the Pharmacy Department safe.

Patients' own S8 drugs held in a ward must be kept in the S8 safe and recorded in the ward register, on a separate page to ward stock. If they are not returned to the patient, they must be held in the ward S8 safe until destruction *on the ward* by a pharmacist – refer 6.3. Patients' own S8 drugs should not be sent to Pharmacy.

Clause 74, Poisons and Therapeutic Goods Regulation 2002.

Due to security considerations, discharge medication that contains an S8 drug should be handed to the patient as soon as possible following delivery of the medication from Pharmacy.

Stock levels of S8 drugs in all wards should be kept to the lowest practical level.

**Note:** There is **no** legal requirement for the S8 safe to be placed within another cupboard nor for the lock to have a key-retaining feature.

### 6.1.3.1 Storage of S8 drugs in Disaster Packs

The term “disaster pack” refers to a pack, kit, bag or box that contains a range of drugs and other supplies that may be needed urgently for use in an external disaster, such as a plane crash or a natural disaster (eg bushfire, flood). An example of such a pack is a ‘Thomas Pack’.

In order to facilitate the urgent access to the disaster pack when a disaster occurs, the Schedule 8 drugs that are included in the range of drugs held in the pack, **may be stored within the pack**, instead of in a Schedule 8 safe, **on condition that:**

- the disaster pack is stored within a locked room, with limited access by authorised personnel only;
- a suitable person, such as the nurse in charge of the adjacent ward or a pharmacist, is nominated as responsible for the secure storage of the disaster pack and for the maintenance of the supplies held in the pack.

When transferring Schedule 8 drugs to the disaster pack, they must be entered out of the pharmacy or ward register to indicate that they are contained within the pack.

Clause 72(1)(b), Poisons and Therapeutic Goods Regulation 2002.

### 6.1.4 Storage in Original Packs

All drugs should be stored in patient care areas in the **same container** as received from pharmacy. This principle applies to medication in the form of ampoules and vials as well as oral medication. That is, for example, ampoules supplied by pharmacy in manufacturers' cartons of 5s or 50s must remain stored in those cartons until use.

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Any **unpacking** out of the original container as supplied by pharmacy can lead to medication errors due to the mix-up of different drugs, strengths, batch numbers and expiry dates. Accumulation of expired stock can also occur.

Exception is made for drugs required urgently for medical emergencies on **emergency, resuscitation or anaesthesia trolleys**, where rapid access is essential and the quantity held is minimal.

The following **re-packing** practices **must not** occur:

- ❑ the "pooling" into one container of a patient's medication or the transfer of drugs from one patient's container to another patient's container.
- ❑ re-labelling or over-labelling of containers.
- ❑ bulking together smaller packs as received from pharmacy or a wholesaler.
- ❑ re-packing from bulk stock into small containers.

## 6.1.5 Operating Theatres Stock Management and Use

As part of quality improvement programs, systems must be established in operating theatres and similar areas for the management and use of pharmaceutical stock with the aim of preventing adverse events with medication.

Such systems should include the following:

- Development of a set 'imprest' stock list by agreement between the Director of Pharmacy (or delegate) and Theatre medical and nursing staff.
- Requisitions or medication chart orders for non-imprest items to be accompanied by information identifying the items' intended purpose of use so that the supplying pharmacist or other appropriately qualified person (such as a radiologist in the case of contrast media) can assess product suitability. Supply systems should be designed to force review by qualified persons prior to supply of non-imprest items.
- Systems for the careful checking by Theatre nursing staff of all stock received by Operating Theatres. On receipt of new stock, where any variation from the usual stock held is observed, eg a different pack size or different brand name, nursing staff must check with a pharmacist or medical officer to ensure that the item is suitable for its intended use in Theatres, before the item is placed into stock.
- Pharmacy or Supply Departments to formally notify Theatre staff when new products or formulations are introduced. Where required, pharmacists or other appropriately qualified persons should provide education on the new product.
- Regular monitoring of storage areas in Operating Theatres to be carried out under pharmacy supervision. Any design or redesign process for storage facilities in Operating Theatres should include a pharmacist as part of the team.

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- Care in the storage of parenterals and fluids to prevent the possibility of mix-up leading to errors in administration.
- **Careful checking** of all substances administered to patients in Operating Theatres by end-users, ***immediately before use***. The label on the container must be carefully read *by the end-user* to check the product's suitability for its prescribed purpose, noting any warnings stated on the label. All relevant hospital policy and procedure documents must explicitly identify the end-user's responsibility in this regard. Refer 6.2.4 (3<sup>rd</sup> dot point).
- Separate, clearly labelled storage of imprest and non-impres items. Non-impres items that are no longer in use should be returned to Pharmacy or Supply.
- Educational programs on pharmaceutical products for end-users in Operating Theatres, with the involvement of pharmacists and other relevant staff (eg radiologists). Education should focus on safe use of potentially hazardous products and on issues highlighted via quality activities.
- Accurate documentation in medical records of **all** substances administered. A regular review process should be in place for ensuring appropriate documentation of all procedures is carried out. Refer 6.4.3 (4<sup>th</sup> dot point).
- Local protocols or preference lists to be developed to cover standard procedures carried out in Operating Theatres. The protocols should detail surgeons' preference for product use for each procedure. A mechanism should be in place for approval and regular review of such protocols. Substitution of alternate products must be approved and this approval documented. Copies of approved protocols should be distributed to all staff involved in the medication use process, including those involved in supply.

Refer also to 6.2.4 - Schedule 8 Drugs in Operating Theatres.

## 6.2 SCHEDULE 8 DRUG PROCEDURES

### 6.2.1 Ward Register

The nurse in charge of the ward is responsible for ensuring that a record is kept of all **Schedule 8 drugs** in a "**ward register**".

A ward register must be in the form of a **bound book** (whose pages cannot be removed or replaced without trace), with **consecutively numbered pages**.

Clause 115, Poisons and Therapeutic Goods Regulation 2002.

No other drugs are required to be recorded in this way by the Poisons and Therapeutic Goods Regulation 2002. However, due to a number of reports received at the Department's Pharmaceutical Services Branch of misappropriation of the drug, *midazolam*, in public hospitals, a ward register record of this drug should be kept, especially in areas of high use, such as Operating Theatres.

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A hospital may decide to include other drugs on the list of those that are to be recorded in a ward register at that hospital. The hospital should give consideration, in particular, to those S4D drugs that appear to have been misappropriated at that hospital or Area Health Service.

Under the State Records Act 1998, a ward register must be kept, on the hospital premises, for a minimum of 7 years from the date of the last entry made in it. Refer Information Bulletin IB2004/20, *General Retention and Disposal Authority – Public Health Services: Patient /Client Records (GDA 17)*.

**Note:** Information Bulletin IB2005\_017, *Standard Forms Stocked by cmSolutions (Government Printing Service)*, provides information on the purchasing of drug registers.

## 6.2.2 Entries in Ward Registers

A separate page must be used for each drug, each form of the drug and each strength of the drug. The record must show the following details (as are relevant to the transaction):

- date
- time of day
- patient's name, in the case of a drug which is administered to a patient
- amount received, in the case of receipt of drugs from the pharmacy (or from a central S8 store, in the case where no pharmacist is employed) - the entry should state, *Received from .....*
- amount administered, in the case of administration of a drug to a patient
- amount discarded, in the case of only part of an ampoule or tablet being administered to a patient
- amount destroyed, in the case of the destruction of a drug which has become unusable (refer 6.3)
- balance of stock remaining
- signature of the person making the entry (either receiving, administering, discarding, destroying or carrying out a balance check)
- signature of the person witnessing the transaction. **All entries must be countersigned** by a witness who is *present* during the entire transaction.
- name of the prescriber.

## Notes:

- (i) The record of the **discarding** of any unused portion of a drug must be made on a **separate line** to the record of the amount administered, preferably on the next line.
- (ii) Signatures in registers must be **full signatures** so that the person signing can be identified.

Clauses 115, 116, Poisons and Therapeutic Goods Regulation 2002.

A person making an entry in a ward register

- (i) must not make any false or misleading entry, and
- (i) must not make any alterations, obliterations or cancellations. That is, **no** lines may be drawn through entries, no entries scribbled out or crossed out in any way, no numerals altered.

If a mistake is made, **it must be left as it is**, marked with an asterix, the entry re-written as appropriate, and a note explaining the error must be made in the margin or at the foot of the page, initialled and dated.

Clause 173, Poisons and Therapeutic Goods Regulation 2002.

## 6.2.3 Witness to Administration and Discarding

When a registered nurse administers a Schedule 8 drug to a patient, another person must be present to witness the procedure.

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

- removal of the drug from the cupboard,
- recording in the ward register,
- transfer to the patient,
- administration to the patient, **and**
- discarding of any unused portion of the drug.

Clause 116(2), Poisons and Therapeutic Goods Regulation 2002.

The witness to administration and discarding should be a person who is fully familiar with the procedure, preferably a registered nurse, a prescriber, a pharmacist or an enrolled nurse.

Any unused portion of a parenteral drug **must not** be discarded in the original ampoule or vial, but drawn up into a syringe and the contents discarded in the presence of a witness.

Where only half a tablet of a Schedule 8 drug is administered, the unused half must be discarded in the presence of a witness and a separate line entry made of this discarding.

The discarding of **partially used** intravenous or epidural infusions or "patient-controlled analgesia" syringes containing S8 drugs (i.e. remainder taken down following administration to a patient) can be done on the ward. Two persons (one of whom is a registered nurse, prescriber or pharmacist) should be present. A record should be made of the discarding, either on the medication chart or in the patient's notes. These solutions must not be sent to the Pharmacy Department for destruction.

Refer also to 6.2.4 re discarding in Operating Theatres.

## 6.2.4 Schedule 8 Drugs in Operating Theatres

Due to the high volume of Schedule 8 drugs used in the Theatres and Recovery areas the following should be noted:

- Only sufficient drug **for one patient** should be issued at the one time from the Schedule 8 safe.
- **No** ampoule or vial should be shared between patients ("multi-dosed"), due to the possibility of compromising the sterility of the drug, the risks of cross-infection and the difficulty in accounting for each dose
- Drugs used in Theatres **must not** be drawn up ready for future patients due to the risks of contamination, instability and mix-up with other drugs and particularly in the case of S8 drugs, for security reasons. They must be prepared for only one patient at a time, just before use, **by, or under the direct supervision of**, the medical practitioner (anaesthetist, surgeon, radiologist etc) who will administer the drugs.
- Anaesthetic drugs (S8 drugs and other drugs) drawn up in Theatres should be labelled in accordance with the Australian Standard: AS & NZS 4375: 1996, *User-applied labels for use on syringes containing drugs used during anaesthesia*.
- The **discarding** of any unused portions of an S8 drug by an anaesthetist (including a trainee anaesthetist) **must be recorded** and **should also be witnessed**. It is preferred that this record is made in a drug register but, if this is not possible, the record could be made on the patient's anaesthetic chart.

## 6.2.5 Supply of Schedule 8 Drugs to Wards

The nurse in charge of the ward must provide the pharmacy with a signed written requisition in order to obtain Schedule 8 drugs for ward stock.

When these drugs are delivered to the ward, or collected from the pharmacy, they must be received by a registered nurse, who signs and dates a receipt for them. This receipt is then held in pharmacy.

The nurse in charge of the ward must ensure that all S8 drugs are placed in the ward S8 safe **immediately** on arrival and entered in the ward register in accordance with 6.2.2.

Clauses 99, 115, 116, Poisons and Therapeutic Goods Regulation 2002.

Systems for delivery or pick-up of S8 ward stock should be designed to prevent any possible diversion of the drugs at the time of supply from pharmacy. Such systems could include any *one* of (or a *combination* of) a variety of procedures. Suggested examples of appropriate systems include:

- When a registered nurse collects S8 drugs from pharmacy, a witness accompanies the nurse; OR
- When a registered nurse collects S8 drugs from pharmacy, the ward register is taken to pharmacy so that stock received is entered directly into the ward register at the pharmacy; OR
- The S8 delivery to the ward is made by a pharmacist (or by the Director of Nursing, where no pharmacist is employed) and, together with a ward nurse, the stock is placed immediately into the ward S8 safe & entered into the register; OR
- Regular audits of ward registers, which include checks of stock ordered and received, are carried out. Refer 6.2.6.

## 6.2.6 Balance Checks

- ❑ The nurse in charge of the ward should ensure that the balance held of Schedule 8 drugs is checked at least once every 24 hours. Where possible, a balance check should be done during, or at the change of, each shift.
- ❑ A balance check must be carried out by a registered nurse and another person and must be recorded by an entry in the ward register on the relevant page for each drug. It is **not** sufficient to make a single entry on one page of the register to cover checks of all drugs.
- ❑ The entry must state the quantity of drug actually held at the time of the balance check.

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- When the nurses checking the balance find a **discrepancy** that cannot be accounted for by an error in calculation, they must **immediately** notify the nurse in charge of the ward, who then must follow the procedure as described in 6.2.7.
- A nurse who assumes control over the Schedule 8 stock for one month or more must, immediately on assuming control, perform a full balance check as described above.

Clause 117 Poisons and Therapeutic Goods Regulation 2002.

- Regular **audits** of ward registers should be carried out for the purpose of monitoring that records are being kept in accordance with legislative requirements (as detailed in 6.2.2) and to detect any possible misappropriation of the drugs. These audits should be done by persons who are **independent** of that patient care area's nursing staff eg. members of Nursing Administration (or registered nurse delegates) or pharmacists.

In addition to balance checks, these audits should include:

- (i) checks of entries recording stock ordered and received. Where necessary, these should be checked against pharmacy records.
- (ii) identification of staff signatures for the purpose of detecting forgeries. Signatures in the register must be full signatures and be identifiable.
- (iii) review of the frequency of broken ampoules or discarded portions of ampoules.
- (iv) review of the presence of altered or crossed out entries.

## **6.2.7 Loss of a Schedule 8 or a Schedule 4 Appendix D Drug**

The nurse in charge of a ward must **immediately** report the loss or theft of an S8 or S4D drug to the hospital Director of Pharmacy (or where no pharmacist is employed, the Director of Nursing or Director of Medical Services), who must then immediately notify the Director-General of Health by contacting the Duty Officer, Pharmaceutical Services Branch on phone: (02) 9879 3214, fax: (02) 9859 5165.

When there is no apparent loss of drugs, but concern exists of possible or admitted misappropriation of drugs by a staff member, this must similarly be reported to the Pharmaceutical Services Branch. Failure to do this may result in possible harm to a patient or to the member of staff, particularly where a possibility exists that this staff member is drug dependent or is impaired.

Clauses 66, 122, Poisons and Therapeutic Goods Regulation 2002.

**Hospitals can pro-actively prevent misappropriation of S8 and S4D drugs by ensuring adherence to Departmental and hospital policies and procedures.**

## 6.2.8 Loss of a Ward Register

The nurse in charge of a ward must **immediately** report the loss or destruction of a ward register to the hospital Director of Pharmacy (or where no pharmacist is employed, the Director of Nursing or Director of Medical Services), who then must notify the Director-General of Health **in writing** of that fact and of the circumstances of the loss.

The notification should be **addressed to**:

Chief Pharmacist  
Pharmaceutical Services Branch  
NSW Health Department  
PO Box 103  
GLADESVILLE NSW 1675

or may be **faxed** on (02) 9859 5165. For advice, telephone the Duty Officer on (02) 9879 3214.

The nurse in charge of the ward must immediately carry out a balance check of all S8 drugs held in stock and enter the particulars in a new ward register.

Clause 118, Poisons and Therapeutic Goods Regulation 2002.

Note: Disposal of a ward register, after the required retention period of 7 years, does not have to be reported to the Director-General of Health. Refer 6.2.1.

## 6.3 DESTRUCTION OF UNUSABLE SCHEDULE 8 DRUGS IN PATIENT CARE AREAS

The term *unusable* refers to any items that are deemed **by the hospital** to be unsuitable for use **for whatever reason**. This could include drugs which are expired, contaminated, broken (by accident), patients' own drugs brought into the hospital which are not returned to the patient, partly used packs not appropriate for re-supply by pharmacy to another ward, etcetera.

The term *unusable* in this context does not include the balance remaining after part of an ampoule is administered or balances of partially-used intravenous or epidural solutions, as referred to in 6.2.3.

When an S8 drug becomes unusable **on a ward**, the nurse in charge of the ward must immediately (or at least on the next working day) notify the hospital Director of Pharmacy (or delegate) of the fact and of the circumstances.

The drug may then be **destroyed on the ward** by a registered pharmacist in the presence of a registered nurse. A record of the destruction of the drug must be made in the ward register, signed and dated by the pharmacist, and countersigned by the witnessing nurse.

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Where no pharmacist is employed, the drug may be destroyed on the ward by the Director of Nursing or the Director of Medical Services (refer 4.1.1), in the presence of a registered nurse, and an entry made in the register in the same way as above.

**Note: No unusable S8 drug should be sent to the Pharmacy Department for destruction. It should be destroyed on the ward, in the manner described above, as provided in the legislation.**

Clauses 124, Poisons and Therapeutic Goods Regulation 2002.

## 6.4 MEDICATION ADMINISTRATION

### 6.4.1 Authorisation

A person employed at a hospital must not administer a Schedule 4 or a Schedule 8 medication (prescription-only medication) to a patient in the hospital otherwise than on the **prior written authorisation** of an authorised prescriber (refer Definitions), with the **exception** of those situations given in 5.2 (**standing orders**) and 5.3 (**emergency telephone orders**).

Clauses 57, 119, Poisons and Therapeutic Goods Regulation 2002.

### 6.4.2 Who May Administer?

Hospitals must ensure that employees who are administering medication have **appropriate qualifications and training**.

The Department considers that the classes of persons who are clearly competent to undertake the task of administering medication (including prescription-only medication) are medical practitioners, dentists, nurse practitioners, midwife practitioners, registered nurses, registered midwives, pharmacists and, as outlined below, endorsed enrolled nurses.

Enrolled nurses who have completed a Nurses and Midwives Board of NSW accredited medication course (termed *endorsed enrolled nurses*) may administer Schedule 4 medication, including Schedule 4 Appendix D medication, via all routes, in addition to unscheduled, Schedule 2 and Schedule 3 medication. This extension of the role of the enrolled nurse does not permit the administration of Schedule 8 medication. For further policy advice on the role of the endorsed enrolled nurse, refer to Policy Directive PD2005\_343, *The Administration of Medication by Endorsed Enrolled Nurses*.

Enrolled nurses, who have not completed a Board accredited medication course, are not permitted to administer Schedule 4 medication. These enrolled nurses may only administer unscheduled, Schedule 2 and Schedule 3 medications when, and only when, certain conditions are satisfied. These conditions are stated in Policy Directive PD2005\_047, *Recommendations Arising from the Review of the Education, Role and Function of the Enrolled Nurse in New South Wales, August 1991*. Exceptions to this are provided in sections 6.4.4.12 and 6.4.6.

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For further information or advice on the role of enrolled nurses, telephone the Office of the Chief Nursing Officer, NSW Health Department, on (02) 9391 9531.

Other persons who are suitably qualified to administer **certain** medications (may include prescription-only medications), **within their context of practice**, include the following (may not be all inclusive):

- ❑ ambulance officers (as approved by the Ambulance Service of NSW)
- ❑ podiatrists
- ❑ dental therapists
- ❑ physiotherapists
- ❑ optometrists
- ❑ orthoptists
- ❑ radiographers
- ❑ other persons named in 6.4.4.2 as suitably qualified/trained to administer medication by the intravenous route (within their context of practice).

### 6.4.3 Principles for Safe Medication Administration

As part of a hospital's quality improvement programs, systems and procedures should be established throughout the hospital that are designed to prevent the possibility of adverse events with medication.

**All** aspects of medication handling should be examined, including purchasing, supply, storage, prescribing, dispensing and administration, for their potential for error or for contributing to error.

The following principles should be observed **on every occasion** that a person administers a medication, in all patient care areas including Operating Theatres (Note: This is not an all inclusive list):

- A person administering a drug must refer **directly** to the prescriber's instructions on the medication chart.
- A strict protocol should be followed for checking the identity of the patient. The patient's allergies/ previous adverse drug reactions should also be checked before administering.
- As a general principle, the **same** person must select a medication, administer the medication and record its administration. However, where, for example, a nurse prepares a medication for administration by a prescriber, the prescriber must check the medication before he/she administers it to the patient.

In the case of medication which is to be administered over a period of time, such as an intravenous infusion, the maintenance of the infusion may be carried out by more than one member of staff, when there is a change of shift or the patient is transferred to another patient care area.

- Each time a person administers a medication to a patient, he/she must make a record on the medication chart, anaesthetic record or other appropriate part of the medical record, signed and dated. Records of medication administration must be accurate and include all required details.
- To avoid selecting the wrong drug product, it is emphasised that the person **must carefully read the label** on the container **and check**:
  - the name and strength of the medication against the medication chart order.
  - the expiry date and physical appearance of the medication.
  - any warning statements on the label, eg *NOT FOR INJECTION*.
- If there is any doubt regarding the medication selected, contact the prescriber or a pharmacist before administering.
- If a nurse is administering a drug on the verbal order of a prescriber (who is present), the prescriber should check the preparation before it is administered.
- Prescribers must ensure that medication orders are clear, legible and not open to misinterpretation.
- If a medication order is unclear or ambiguous, the person administering the medication must contact the prescriber or, if this is not possible, another prescriber or a pharmacist, for clarification before administering.
- If a person is concerned that a medication order may be incorrect or inappropriate (for example, an apparent high dose), the prescriber (or other prescriber or pharmacist) must be contacted for clarification.

Hospitals must have policy and procedures in place to require and guide prescribers and pharmacists to follow up medication orders with the treating team in an appropriate time frame, when those orders have been highlighted for review. These procedures should include contact with the patient's treating consultant where a pharmacist remains concerned about the appropriateness of a prescribed medication and/or dosage of that medication. Documentation of the outcome of such follow up in the patient's clinical record must be made.

- Medication should only be drawn up into a syringe for **immediate administration**, not for later use, due to the risks of contamination, instability and mix-up, and additionally in the case of Schedule 8 drugs, for security reasons. Refer to 6.2.4.
- To avoid the mix-up of medication, prepare and administer only one medication for the one patient at any one time.
- Where only a portion of an ampoule or tablet is required for a patient, the unused balance should be discarded. Refer 6.2.3 regarding discarding of S8 drugs.
- Multi-dose vials or ampoules must not be used other than in accordance with the principles stated in Policy Directive PD2007\_036, *Infection Control Policy*.

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- A person must administer a drug directly from the container, as supplied by Pharmacy or Supply (except as given in 6.1.4).
- Due to the danger of inadvertent access to medication by visitors or patients (especially children), trolleys should not be left unlocked unless in immediate use. Medication should not be left by a patient's bedside to be taken later by the patient, unless the medication is stored securely.
- All staff should be aware that allergy or sensitisation to pharmacological agents can occur through occupational exposure. Refer to section 4.3.3.

## 6.4.4 The Administration of Intravenous Medication

- 6.4.4.1** Hospitals must develop policies and protocols for the administration of intravenous (IV) medication. In developing such policies, a multi-disciplinary approach should be taken including medical, nursing, pharmacy, infection control and occupational health & safety personnel.

All policies and protocols for the administration of intravenous medication, whether Area, hospital or unit based must be approved by the hospital or Area Drug Committee and should be reviewed at least annually.

Note: Mental health facilities should refer to the relevant section of Policy Directive PD2007\_054, *Seclusion Practices in Psychiatric Facilities*.

- 6.4.4.2** Hospitals must ensure that staff who are administering intravenous medication have appropriate qualifications, education and training.

Training must include relevant occupational health and safety issues and infection control issues (refer Policy Directive PD2007\_036, *Infection Control Policy*).

Hospitals and health services should ensure that staff who are involved in IV medication administration are regularly assessed for their competence.

Classes of persons considered to be suitably qualified/trained to administer intravenous medication, ***within their context of practice***, include the following (may not be all inclusive):

medical practitioners

dentists

registered nurses

nurse practitioners

midwife practitioners

endorsed enrolled nurses

enrolled nurses (who are not 'endorsed'), *only* as may be provided in section 6.4.4.12 of this circular

ambulance officers (as approved by the Ambulance Service of NSW)

medical radiation scientists (Nuclear Medicine)

medical radiation scientists (Radiography)

anaesthesia technicians who have completed the Australasian Society of Anaesthesia Technicians Diploma Course

clinical perfusionists who are certified by the Australasian Board of Cardiovascular Perfusion as certified clinical perfusionists

cardio-pulmonary technicians/technical officers

anaesthesia technicians and clinical perfusionists in training, *only* under the direct supervision of a medical officer

medical students, *only* under the direct supervision of a medical officer

nursing students, *only* under the direct supervision of a registered nurse

ambulance officers in training, *only* under the direct supervision of a qualified ambulance officer, a prescriber or a registered nurse.

- 6.4.4.3** Hospitals must consider what level of experience, education, training, and supervision is required by staff in cases where a higher level of skill is needed for the safe administration of an individual drug or class of drug, or for the carrying out of certain functions. The level of medical backup required should also be considered.

Staff carrying out such functions should have completed appropriate education and training and should have been assessed for competence.

- 6.4.4.4** It is preferable that all additives to intravenous solutions are made under **controlled environmental conditions**.

Such conditions consist of either cleanroom facilities housing laminar flow clean workstations, or pharmaceutical isolators, which comply with the Australian Standards. Refer to Policy Directive PD2005\_590, *Principles for the Preparation of Pharmaceuticals in Hospital Pharmacy Departments in New South Wales*.

- 6.4.4.5** When not prepared under controlled environmental conditions, as defined above, IV medication **must** be prepared immediately prior to administration using aseptic technique.

**6.4.4.6** Cytotoxic drug solutions are to be prepared, administered and disposed of in accordance with the WorkCover NSW guidelines, as referenced in Health Department Policy Directive PD2005\_081, *Guidelines and Competencies for the Handling of Cytotoxic Drugs and Related Waste in NSW Health Care Establishments*.

**6.4.4.7** Whenever substances are added to IV fluids, their physical and chemical compatibility with the fluid and with any other added substances must be checked prior to making the addition.

As a general rule, no more than one substance should be added to any IV fluid.

Care must be taken to adequately mix the final solution prior to administration. The solution should be inspected for a change in colour or clarity that might indicate that precipitation or other reaction has occurred.

**6.4.4.8** In order to reduce the need for manipulation of IV preparations, thereby reducing patient and staff risk, it is recommended that hospitals purchase pre-loaded products, where available, from licensed manufacturers.

Care must be taken with the storage of pre-loaded fluids to prevent their mix-up with other fluids.

**6.4.4.9** All infusion solutions to which substances have been added must be accurately and adequately labelled. The Area or hospital Drug Committee should establish what information is to be included on the label of an IV admixture.

It is recommended that, **as a minimum**, the label should include:

- patient's name
- name and volume of IV fluid
- name of drug and amount added (dose)
- date and time of addition
- date and time to be discarded
- signature of person making addition
- signature of person checking

Other items such as the patient's medical record number, name of prescriber, bag number, date and time infusion started, etc, could also be considered for inclusion on the label.

**6.4.4.10** When intravenous medication is to be administered by a registered nurse in the **hospital** setting, a second person should check the drug, dose, calculation, IV fluid and the patient's identity prior to administration.

Additionally, where an infusion pump or other rate-limiting device is used, the settings should be checked by a second person. The person checking should be a registered nurse, a medical practitioner or a pharmacist.

In situations where these staff members are not available, it may be acceptable for an enrolled nurse to carry out this checking function, provided that the hospital has established that the enrolled nurse is competent to do so.

This may require formal (documented) training of the enrolled nurse by the hospital in the process of checking an intravenous medication, including procedures to be followed for checking that the correct drug and fluid have been selected, the dose is appropriate, the calculations are correct and that a rate limiting device, such as an infusion pump, has been correctly set.

- 6.4.4.11** When intravenous medication is administered by a registered nurse in the **community** setting, it is acknowledged that a second person may not be available, at the point of administration, to check the medication and its preparation immediately prior to administration.

Notwithstanding the above, a check at an earlier stage in the process should be achievable in most circumstances.

For example, in the case of a nurse obtaining the medication from the hospital or from the community health centre where he/she is based, a check of the medication and fluid selected and of the nurse's calculation may be made by a second person before leaving to visit the client. The person checking should be either a registered nurse, a medical practitioner or a pharmacist (other than as may be provided in 6.4.4.10). The person administering must re-check the medication against the medication order just prior to administration.

#### **6.4.4.12 The Administration of Intravenous Medication During an Anaesthetic Emergency in the Operating Suite**

**Note:** The conditions of this section are an exception to the normal provisions for the administration of medication by enrolled nurses as set out in Policy Directive PD2005\_047, *Recommendations Arising from the Review of the Education, Role and Function of the Enrolled Nurse in New South Wales, August 1991*.

Where the function of a registered or enrolled nurse involves the provision of nursing assistance to an anaesthetist during the administration of anaesthesia, the nurse may, upon the verbal direction of, and under the direct supervision of the anaesthetist, administer intravenous medication during an emergency situation.

It is preferable that the nurse administering the medication draws up and/or prepares the medication. The prepared medication and the original

ampoule/vial must be visually checked by the anaesthetist immediately prior to injection.

The anaesthetist must sign the necessary drug administration documentation as required by legislation and any Departmental or hospital policy before the patient leaves the Operating Suite.

For the purpose of this section the definition of an *emergency situation* is where an unpredicted situation involving the patient arises. *Direct supervision* means visual access of the action of the nurse by the anaesthetist.

A verbal direction by an anaesthetist to a nurse in accordance with this section is a direction given in a manner approved by the Director General for the purposes of sub-clauses 57 (2) (b) and 119 (2) (b) of the Poisons and Therapeutic Goods Regulation 2002. Refer 5.3.

For further information on the extension of the role of enrolled nurses, contact the Office of the Chief Nursing Officer, NSW Health Department, on (02) 9391 9531.

## 6.4.5 The Administration of Medication via the Epidural Route

Hospitals must develop policies and protocols for the administration of epidural anaesthesia/analgesia. A multi-disciplinary approach should be taken in developing such policies and they must be approved by the hospital or Area Drug Committee and reviewed at least annually.

Registered nurses, who are required to administer epidural infusions subsequent to the first dose (i.e. 'top-up' doses), must have completed appropriate education and training and be accredited to administer medication via this route.

## 6.4.6 Inhaled Medication

As is the case with other routes of administration, care must be taken to ensure that medication that is administered by the inhaled route, is done so safely, by suitably qualified staff. Persons that are considered by the Department to be clearly competent to administer inhaled medication are medical practitioners, dentists, nurse practitioners, midwife practitioners, registered nurses, registered midwives, endorsed enrolled nurses and pharmacists.

Persons who are suitably qualified to administer **certain** inhaled medications **within their context of practice**, due to their qualifications, education and training include, for example, ambulance officers (as approved by the Ambulance Service of NSW), physiotherapists, and anaesthesia technicians.

## 6.4.7 Renal Haemodialysis Medication

Medications, such as anti-coagulants, that are administered routinely at renal haemodialysis sessions must be authorised by authorised prescribers.

Such authority may be provided in the form of standard written protocols that are signed by a renal physician and approved and signed by the Drug Committee, as long as regular medical review of haemodialysis patients is carried out.

The standard protocols must contain specific, detailed instructions to nursing staff on how the medications are to be used. Nursing staff must keep a record of each patient's medication according to such protocols.

## 6.4.8 Self-medication

The Area or hospital Drug Committee should determine which types of patients should undertake self-administration of their medication ('self-medication').

In all cases where patients self-medicate, the medication must be ordered by a prescriber on a medication chart. A record must be made of each dose taken.

The Drug Committee should develop formal **patient education programs** for those patients who require education on how to take their medication prior to leaving the hospital. These programs should include, as a minimum, protocols for selection, assessment and monitoring. The Society of Hospital Pharmacists of Australia's Practice Guideline, *SHPA Self-Medication Guidelines*, may be utilised as a reference resource in the development of a patient education program.

Refer 6.1.2.3 re storage.

### 6.4.8.1 Medication compliance aids

These are aids that are sometimes used to assist patients who are likely to need special help in taking their own medication when they go home.

They should not be used in public hospitals for the routine administration of medication (other than blister packs used in a public nursing home).

They may consist of either:

- (a) 'blister' packaging (or a system of packaging with similar effects, with each 'blister' containing medication needed at a specific medication administration time), or
- (b) 'boxes' made up of compartments containing medication needed at specific administration times.

Blister packs must be packed and fully labelled by a pharmacist, including the use of precautionary labels (such as the potential effect of certain drugs on driving ability) and are sealed at the time of dispensing by the pharmacist.

'Box' compliance aids should be filled and labelled by a pharmacist at the time of dispensing the patient's prescription. Alternatively, patients can be educated on how to fill their own 'boxes' from fully labelled dispensed packs. A registered nurse may fill a box compliance aid when a pharmacist is not available to fill the aid or in the process of educating a patient on how to fill an aid. Nurses may only fill box compliance aids from packs that have been individually dispensed for patients by a pharmacist, not from stock medication.

The hospital Drug Committee should establish a protocol determining the circumstances for the use of compliance aids and criteria for assessing patient suitability. In developing its protocol the Drug Committee should recognise the different features of compliance aids and take into account the following factors:

- The need for child-resistant closures on medication packs particularly where this is a statutory requirement for certain medication (blister packaging is legally recognised as being inherently child-resistant).
- The need for a moisture-proof container for some medication and protection of individual doses from contamination (sealed packs provide this protection).
- The possibility of spillage and consequent mix-up of medication, especially for persons with poor eye-sight and poor manual dexterity.

## 6.4.9 Nurse-Initiated Medication

Medication that may be administered by a registered nurse without a prescriber's authorisation may be **approved by the Drug Committee** provided appropriate **written protocols** for its use are also developed. This medication may be termed 'nurse-initiated medication'.

**No** preparation containing a Schedule 4 or Schedule 8 drug may be included as nurse-initiated medication.

**Written protocols** for nurse-initiated medication must provide sufficient detailed information about **each** medication, so that nursing staff can make informed decisions as to when and when not to administer a medication.

When a nurse administers a dose of a nurse-initiated medication to a patient, the nurse must make a record in ink on the medication chart of the name of the medication, date, time, dose and any other relevant details and sign the entry. The record should be made in an appropriate section of the chart, such as an area dedicated to nurse-initiated medication or the 'stat' (once only) section.

Medication from this list should **not** be administered on an **ongoing** basis without a prescriber's review. If, on this review, the medication is to continue, it must be ordered on the medication chart by the prescriber.

It is important for nursing staff to remain aware that:

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- minor ailments may be symptoms of other more serious diseases or they may be adverse reactions to medication already prescribed, and
- nurse-initiated medication may interact with the patient's prescribed medication.

## 7 MEDICATION INCIDENT REPORTING

As part of quality improvement programs, hospitals must have in place systems for medication incident reporting.

All disciplines should be encouraged to report incidents (including near-miss incidents) associated with drugs or other products to the Drug Committee for review, evaluation and appropriate action.

Staff should be made aware that the object of collecting information on medication incidents is **not** punishment of individuals but rather the identification of system and process deficiencies that can be remedied.

Interventions by pharmacists with prescribers regarding medication orders and the results of those interventions should be included in this reporting.

Refer to PD2005\_608, *Patient Safety and Clinical Quality Program*. For further advice, contact Quality and Safety Branch on (02) 9391 9569.

## 8 COMPLEMENTARY MEDICINES

Information to assist public hospitals in formulating local policy on the use of complementary medicines is available in NSW Health Department Information Bulletin 99/18, *Complementary Medicines in Public Hospitals*.

This information bulletin is available on the NSW Health Department website at the following address:

<http://www.health.nsw.gov.au/archive/cib/information-bulletins/1999/ib99-18.pdf>

## 9 RECALL OF DRUGS AND DEVICES AND PROBLEM REPORTING

A national procedure exists for the recall and reporting of therapeutic goods (medicines or devices) whose quality, safety or efficacy does not comply with standards or which are otherwise unacceptable.

This scheme is administered by the Commonwealth Therapeutic Goods Administration (TGA).

It is vital that all hospitals respond effectively and promptly to any recall advice. In order to streamline responding to recalls, hospitals should establish **internal procedures** and appoint a **coordinator** who is responsible for coordinating the prompt removal of goods which are the subject of recall and for keeping staff informed of recalls and problem alerts.

The coordinator must ensure that goods which are the subject of a **recall** are removed from use in **all locations** in the hospital. Goods that have been transferred to another hospital in the area must also not be overlooked.

All hospital staff must be alert to the possibility of defects in the goods they handle and must report any anomaly which may indicate a deficiency in the quality, safety or efficacy of the goods to the appointed hospital coordinator.

Any suspected or known **problems or defects** with drugs or therapeutic devices should be reported promptly by the coordinator **to the TGA** since these may indicate a fault in a manufacturer's processes or be symptomatic of a general problem which requires correction and/or recall. Such problems could include incorrect or illegible product labelling, discolouration, cloudiness, foreign tablets or capsules in a pack, faulty devices, etc.

To enquire regarding whether to report a product defect, telephone the TGA on (02) 6232 8637 or Pharmaceutical Services Branch on (02) 9879 3214.

**Under no circumstances should goods which are suspected or known to be faulty be exchanged by a supplier or manufacturer without first establishing that the problem has been correctly reported to the TGA.**

Reporting forms issued by the TGA may be used for problem reporting. These are termed Medicine Problem Report and Therapeutic Device Problem Report. Alternatively, the hospital should write to the Australian Recall Coordinator, describing the problem, at Therapeutic Goods Administration, PO Box 100, WODEN ACT 2606.

**APPENDIX A**

## APPENDIX A

### **Authorisation issued to registered nurses in rural and remote areas to supply emergency medication in after hours' situations to outpatients on medical authority**

This authority was developed in response to recognition of the difficulties experienced in rural and remote areas in circumstances where an outpatient presents to a local hospital in need of emergency treatment and where no medical practitioner is able to be present and no pharmacy service is available. In this circumstance a registered nurse at the hospital may be required to supply medication to the outpatient on the basis of a telephone medication order from a medical practitioner.

Such circumstances are most likely to arise after hours, on weekends or on public holidays when the usual medical and pharmacy services may not be available or in areas where there are limited services.

### **The Authority applies to unscheduled, Schedule 2, 3 and 4 medicines only and is subject to the following conditions:**

- (1) the nurse is employed by an Area Health Service, and
- (2) a medical practitioner is unable to be present to supply the substance to the patient, and
- (3) the supply of the substance to the patient is for emergency use and has been authorised by a medical practitioner at that time, and
- (4) the patient is in immediate need of the substance and a community or hospital pharmacy service is not available in close proximity at that time, and
- (5) the range and quantity of substances which may be supplied for emergency use has been determined by the Area Health Service, and
- (6) the nurse supplies the substance in the unopened container in which that nurse received it.

Note that the patient is to be in immediate need of the medication - this authority is not intended to provide for the on-going supply of patients' regular medications.

If a medical practitioner is able to be present to assess the patient, it is the medical practitioner who must supply any required medication to the patient.

This authority does not authorise the supply of drugs of addiction (Schedule 8 medicines).

In addition to the six conditions stated in the published Authority, the following must be included in the associated **policy and procedure** developed by the Area Health Service:

- ❖ The medical practitioner must confirm their telephone order for the medication as soon as possible by e-mail or by facsimile, as is normal practice;
- ❖ The nurse must record the details of the medication order received from the medical practitioner and the quantity of medication supplied to the patient in the patient's medical history;
- ❖ The medication for this purpose is to be requisitioned by the hospital's chief nurse from a hospital pharmacy nominated by the Area Health Service. As per condition (5) on the attached Authority, the range and quantity of substances, which may be supplied for emergency use, is to be determined by the Area Health Service.

The medication is to be provided by the hospital pharmacy in original manufacturer's packs or repacks, both appropriately labelled by the hospital pharmacy including the usual directions for use, with space for the nurse to fill in the full name of the patient (first and last names) on the label.

Where the medication is a paediatric mixture requiring calculation of the dose for that individual patient, the medical practitioner must calculate the dose according to the weight of the patient and specify the actual dosage amount for the nurse to enter on the medication label.

- ❖ In the case of antibiotics a full course of medication should be supplied.

**Note** that provision already exists in legislation for a medical practitioner to communicate a prescription by telephone to a pharmacist for a patient to collect medication. If there is a community pharmacy open within reasonable proximity, this is another option for the patient to be supplied with the medication.

This authority was issued under the Poisons and Therapeutic Goods Act 1966 and was published in the NSW Government Gazette No. 107 on 26 August 2005.

**APPENDIX B**



New South Wales  
Therapeutic  
Advisory  
Group Inc.

**SAFER<sub>x</sub>**  
Safer Medicines Group

## Recommendations for Terminology, Abbreviations and Symbols used in the Prescribing and Administration of Medicines

### Introduction

One of the major causes of medication errors is the ongoing use of potentially dangerous abbreviations and dose expressions.<sup>1</sup> This is a critical patient safety issue. A study to identify and quantify prescribing errors in a large US urban teaching hospital found that 29% of prescriptions contained a dangerous abbreviation.<sup>2</sup> An abbreviation used by a prescriber may mean something quite different to the person interpreting the prescription. Abbreviations may not only be misunderstood but can also be combined with other words or numerals to appear as something altogether unintended.

In addition, there have been changes to training of health care professionals, to health care delivery and to societal expectations, which also necessitate a rethinking of the language used to communicate medication prescribing and administration. Latin was once the language of health care and its use made medical literature universally readable among educated persons.<sup>3</sup> Today, English is the predominant language of medical literature.<sup>3</sup> Despite this, Latin abbreviations continue to be used amongst health professionals. Although this may be a timesaving convenience, their routine use does not promote patient safety.<sup>3</sup>

Changes to policy enabling staff with differing levels of training to administer medicines, also necessitates the use of English. This training does not include Latin nor does it include comprehensive

training in terms used for the administration of medicines. In addition, patients and their carers have the right to understand what is being prescribed and administered to them. Prescribing using codes or an outmoded language is no longer acceptable.

### Objectives

In order to promote patient safety and clear and unambiguous prescribing of medicines, this document establishes the following:

- Principles for consistent prescribing terminology (Table 1)
- A set of recommended terms and acceptable abbreviations (Table 2)
- A list of error-prone abbreviations, symbols and dose designations that have a history of causing error and must be avoided (Table 3)

### Scope

The principles and recommendations apply to:

- ALL medication orders or prescriptions that are handwritten, pre-printed, computer-generated (printed hard copy) or electronic
- ALL communications and records concerning medicines, including telephone/verbal orders/prescriptions, medication administration records and labels for drug storage.<sup>4</sup>

Printed or electronic orders/prescriptions should not contain ANY abbreviations other than those that are in universal and common use, such as the term 'prn' meaning 'when required'. All drug names, protocols and procedures should be in English and written in full.

It is recommended that hospitals develop policies for prescribing terminology together with strategies for implementation within their institutions. In developing strategies, hospitals may wish to refer to the Joint Commission on Accreditation of Healthcare Organisations (JCAHO) "implementation tips" for eliminating dangerous abbreviations (<http://www.jointcommission.org/PatientSafety/DoNotUseList/>).

Although this NSW TAG document provides recommendations it is not all-inclusive. There may also be specific circumstances where other terminology may be considered safe. However, before hospital Drug and Therapeutic Committees (DTCs) decide to include such terminology in local policies the principles outlined in Table 1 should be applied. DTCs should continue to monitor incidents associated with prescribing terminology.

*Please note this document is valid as at October 2006 and will be modified on the basis of reported adverse events associated with terminology, abbreviations and/or symbols used in the prescribing or administration of medicines. In addition, when moving to electronic prescribing a reassessment of what is safe terminology should be made.*

**TABLE 1: Principles for consistent prescribing terminology**

1. **Use plain English - avoid jargon**
2. **Write in full - avoid using abbreviations wherever possible, including Latin abbreviations**
3. **Print all text - especially drug names**
4. **Use generic drug names**

**Exception may be made for combination products**, but only if the trade name adequately identifies the medication being prescribed. For example, if trade names are used, combination products containing a penicillin (eg Augmentin®, Timentin®) may not be identified as penicillins.

**Exception may also be made where significant bioavailability issues exist**, for example cyclosporin, amphotericin
5. **Write drug names in full. NEVER abbreviate any drug name**

Some examples of **unacceptable** drug name abbreviations are: G-CSF (use filgrastim or lenograstim or pegfilgrastim), AZT (use zidovudine), 5-FU (use 5-fluorouracil), DTIC (use dacarbazine), EPO (use epoetin), TAC (use triamcinolone)

**Exception may be made for modified release products**  
For slow release, controlled release, continuous release or other modified release products, the description used in the trade name to denote the release characteristics should be included with the generic drug name, for example tramadol SR, carbamazepine CR

**For multi-drug protocols, prescribe each drug in full and do not use acronyms**, for example do not prescribe chemotherapy as 'CHOP'. Prescribe each drug separately
6. **Do not use chemical names/symbols**, for example HCl (hydrochloric acid or hydrochloride) may be mistaken for KCl (potassium chloride)

**Do not include the salt of the chemical unless there are multiple salts available**  
Where the salt is part of the name, it should follow the drug name and not precede it, for example, mycophenolate sodium or mycophenolate mofetil
7. **Dose**
  - **Use words or Hindu-Arabic numbers**, ie 1, 2, 3 etc  
**Do not use Roman numerals**, ie do not use ii for two, iii for three, v for five etc
  - **Use metric units**, such as gram or mL  
**Do not use apothecary units**, such as minims or drams
  - **Use a leading zero in front of a decimal point for a dose less than 1**, for example use 0.5 not .5  
**Do not use trailing zeros**, for example use 5 not 5.0
  - **For oral liquid preparations, express dose in weight as well as volume**, for example in the case of morphine oral solution (3mg/mL) prescribe the dose in mg and confirm the volume in brackets: eg 10mg (2mL)
  - **Express dosage frequency unambiguously**, for example use 'three times a week' not 'three times weekly' as the latter could be confused as 'every three weeks'
8. **Avoid fractions**, for example
  - 1/7 could be interpreted as 'for one day', 'once daily', 'for one week' or 'once weekly'
  - 1/2 could be interpreted as 'half' or as 'one to two'
9. **Do not use symbols**
10. **Avoid acronyms or abbreviations for medical terms and procedure names on orders or prescriptions**, for example avoid EBM meaning 'expressed breast milk'

### TABLE 2: Acceptable terms and abbreviations

The following table lists the terms and abbreviations that are commonly used and understood and therefore considered acceptable for use. Where there is more than one acceptable term the preferred term is shown first in the right hand column.

Intended meaning	Acceptable Terms or Abbreviations
<b>Dose Frequency or Timing</b>	
(in the) morning	morning, mane
(at) midday	midday
(at) night	right, nocte
twice a day	bd
three times a day	tds
four times a day	qid
every 4 hours	every 4 hrs, 4 hourly, 4 hrly
every 6 hours	every 6 hrs, 6 hourly, 6 hrly
every 8 hours	every 8 hrs, 8 hourly, 8 hrly
once a week	once a week and specify the day in full, eg, once a week on Tuesdays
three times a week	three times a week and specify the exact days in full, eg three times a week on Mondays, Wednesdays and Saturdays
when required	prn
immediately	stat
before food	before food
after food	after food
with food	with food
<b>Route of administration</b>	
epidural	epidural
inhale, inhalation	inhale, inhalation
intraarticular	intraarticular
intramuscular	IM
intrathecal	intrathecal
intranasal	intranasal
intravenous	IV
irrigation	irrigation
left	left
nebulised	NEB
naso-gastric	NG
oral	PO
percutaneous enteral gastrostomy	PEG
per vagina	PV
per rectum	PR
peripherally inserted central catheter	PICC
right	right
subcutaneous	subcut
sublingual	subling
topical	topical

### TABLE 2: Acceptable terms and abbreviations (continued)

The following table lists the terms and abbreviations that are commonly used and understood and therefore considered acceptable for use. Where there is more than one acceptable term the preferred term is shown first in the right hand column.

Intended meaning	Acceptable Terms or Abbreviations
<b>Units of Measure and Concentration</b>	
gram(s)	g
International unit(s)	International unit(s)
unit(s)	unit(s)
litre(s)	L
milligram(s)	mg
millilitre(s)	mL
microgram(s)	microgram, microg
percentage	%
millimole	mmol
<b>Dose Forms</b>	
capsule	cap
cream	cream
ear drops	ear drops
ear ointment	ear ointment
eye drops	eye drops
eye ointment	eye ointment
injection	inj
metered dose inhaler	metered dose inhaler, inhaler, MDI
mixture	mixture
ointment	ointment, oint
pessary	pess
powder	powder
suppository	supp
tablet	tablet, tab
patient controlled analgesia	PCA

### TABLE 3: Error-prone abbreviations, symbols and dose designations to be avoided

(Adapted from the Institute of Safe Medication Practices [ISMP] list of the same name<sup>4</sup>, with permission from ISMP)

Error-prone Abbreviation X	Intended Meaning	Why?	What should be used ✓
µg, mcg or ug	microgram	Mistaken as 'mg'	microgram
BID or bid	twice daily	Mistaken as 'tid' (three times daily)	bd
BT or bt	bedtime	Mistaken as 'BID' (twice daily)	bedtime
cc	cubic centimetres	Mistaken as 'u' (units)	mL
D/C	discharge or discontinue	Premature discontinuation of medications if discharge intended	'discharge' or 'discontinue' whichever is intended
e or E	ear or eye	Mistaken for 'ear' when 'eye' intended or for 'eye' when 'ear' intended	'eye' or 'ear' and specify whether 'left', 'right' or 'both'
gtt or gutte	drops	Latin abbreviation meaning 'drops', not universally understood.	'drops' or 'eye drops' whichever is intended
HS hs	half-strength at bedtime, hours of sleep	Mistaken as bedtime Mistaken as half-strength	'half-strength' or 'bedtime' whichever is intended
IJ	injection	Mistaken as 'IV' or 'intrajugular'	injection
IN	intranasal	Mistaken as 'IM' or 'IV'	intranasal
IT	intrathecal	Mistaken as Intravenous	intrathecal
IU	International units	Mistaken as 'IV' (Intravenous) or '10' (ten)	International units
M	morning	Mistaken for 'n' (night)	morning
N	night	Mistaken for 'm' (morning)	night
Oc or Occ	eye ointment	Mistaken for eye drops	eye ointment
mist	mixture	Latin abbreviation, not universally understood	mixture
o.d. or OD	once daily	Mistaken as 'right eye' (OD-oculus dexter), leading to oral liquid medications administered in the eye. Can also be mistaken for BD (twice daily)	'daily', preferably specifying the time of the day, eg 'morning', 'mid-day', 'at night'
OJ	orange juice	Mistaken as 'OD' or 'OS' (right or left eye); drugs meant to be diluted in orange juice may be given in the eye	orange juice
OW	once a week	Not universally understood	once a week
p/f	per fortnight	Not universally understood	every two weeks, per fortnight
qd or QD	every day	Mistaken as 'Qid', especially if the period after the 'q' or the tail of the 'q' is misunderstood as an 'i'	daily
pulv	powder	Latin abbreviation, not universally understood	powder
Qhs	nightly at bedtime	Mistaken as 'qhr' or every hour	'night', 'daily at bedtime'
Qh	every hour	Not universally understood	'hourly', 'every hour'
qod or QOD	every other day	Mistaken as 'qd' (daily) or 'qid' (four times daily)	'every second day', 'on alternate days'
Q6PM etc	every evening at 6 pm	Mistaken as every six hours	'6pm daily', 'every night at 6pm', 'every day at 6 pm'

### TABLE 3: Error-prone abbreviations, symbols and dose designations to be avoided (continued)

(Adapted from the Institute of Safe Medication Practices [ISMP] list of the same name<sup>4</sup>, with permission from ISMP)

Error-prone Abbreviation X	Intended Meaning	Why?	What should be used ✓
SC	subcutaneous	Mistaken as 'SL' (Sublingual)	'subcut', 'subcutaneous'
SL or S/L	sublingual	Mistaken as 'SC' (Subcutaneous)	'subling', 'under the tongue'
Ss	sliding scale (insulin) or half (apothecary)	Mistaken as '55'	'sliding scale' or 'half' whichever is intended
SSRI or SSI	sliding scale regular insulin or sliding scale insulin	Mistaken as selective serotonin reuptake inhibitor; Mistaken as Strong Solution of Iodine (Lugols)	sliding scale insulin
TID	three times a day	Mistaken as 'bd'	tds
TIW	three times a week	Mistaken as 'three times daily'	'three times a week' and specify exact days in full, for example 'on Mondays, Wednesdays and Saturdays'
iD	one daily	Mistaken as 'tid'	one daily
U or u	unit	Mistaken as the numbers '0' or '4', causing a 10-fold overdose or greater (eg 4U seen as '40' or 4u seen as '44'). Mistaken as 'cc' so dose given as a volume instead of units (eg 4u seen as 4 cc)	unit
ung	ointment	Latin abbreviation, not universally understood	ointment

Error-prone frequency and dosage abbreviations X	Intended Meaning	Why?	What should be used ✓
6/24	every six hours	Mistaken as 'six times a day'	'every 6 hrs', '6 hourly', '6 hrly'
1/7	for one day	Mistaken as 'for one week'	for one day only
1/2	half	Mistaken as 'one or two'	half
i, ii,iii,iv (Roman numerals)	1,2,3,4 etc		Hindu-Arabic numbers, 1,2,3,4 etc or words

### TABLE 3: Error-prone abbreviations, symbols and dose designations to be avoided (continued)

(Adapted from the Institute of Safe Medication Practices [ISMP] list of the same name<sup>4</sup>, with permission from ISMP)

Error-prone dose designations and other information X	Intended meaning	Why?	What should be used ✓
Trailing zero after decimal point (eg 1.0mg)	1mg	Mistaken as 10mg if the decimal point is not seen	Do not use trailing zeros for doses expressed in whole numbers
No leading zero before a decimal point (eg .5mg)	0.5mg	Mistaken as 5mg if the decimal point is not seen	Use zero before a decimal point when the dose is less than a whole unit
Large doses without properly placed commas (eg 100000units, 1000000 units)	100,000 units 1,000,000	100000 has been mistaken as 10,000, or 1,000,000; 1000000 has been mistaken as 100,000	For figures above 100 use words to express intent eg, one thousand, one million, six million etc. Otherwise use commas for dosing units at or above 1,000
10 <sup>6</sup> etc	one million	Not universally understood	Use one million or 1,000,000

Error-prone symbols X	Intended Meaning	Why?	What should be used ✓
X3d	for three days	Mistaken as '3 doses'	for three days
> or <	greater than or less than	Mistaken or used as the opposite of intended; '<10' mistaken as '40'	'greater than' or 'less than'
/ (slash mark)	separates two doses or indicates 'per'	Mistaken as the number 1 eg '25 units/10units' misread as '25 units and 110 units'	'per' rather than a slash mark to separate doses
@	at	Mistaken as '2'	at
&	and	Mistaken as '2'	and
+	plus or and	Mistaken as '4'	and
'	hour	Mistaken as a zero (eg q2' seen as q20)	hour

This document was prepared by a Working Group of the NSW TAG Safer Medicines Group in consultation with health practitioners and with reference to the following documents:

- St Vincent's Hospital, Sydney, Standard Abbreviations for Prescribing (adapted with permission from Central Coast Health)
- Sydney Children's Hospital, Recommendations on 'Safe Prescribing' October 03
- National Prescribing Service – National Prescribing Curriculum.
- Australian Medicines Handbook 2006
- Prince of Wales Hospital and Sydney Children's Hospital approved list of abbreviations
- National Inpatient Medication Chart – NSW Health Guidelines for use
- Australian Pharmaceutical Formulary and Handbook (APF), 19th Edition
- Joint Commission on Accreditation of Healthcare Organisations (JCAHO), Medication errors related to potentially dangerous abbreviations 2001
- Institute for Safe Medication Practices (ISMP), List of Error-Prone Abbreviations, Symbols, and Dose Designations, 2005
- NSW Health Policy Directive PD2005\_206, 'Policy on the Handling of Medication in New South Wales Public Hospitals'
- Queensland Health Department's state-wide abbreviation guidelines used in prescribing and administering medications.

NSW TAG gratefully acknowledges all those who provided comment during the consultation phase. The working group also acknowledges the assistance of Karen Kaye, Executive Officer, NSW TAG

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1. JCAHO. Sentinel Event Alert - Medication errors related to potentially dangerous abbreviations: Joint Commission on Accreditation of Healthcare Organisations, 2001.
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3. Dunn E, Wolfe J. Let Go of Latin! Vet Human Toxicol 2001; 43:235-236.
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October 2006

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