Implementation of Barcode Scanning in NSW Public Hospital Pharmacy Departments

Summary  The information bulletin outlines the requirements for all NSW Public Hospital Pharmacy Departments to implement barcode scanning within their dispensing processes.

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Applies to  Local Health Districts, Specialty Network Governed Statutory Health Corporations, Affiliated Health Organisations, Public Health System Support Division, Ministry of Health, Public Health Units, Public Hospitals, NSW Health Pathology

Distributed to  Public Health System, NSW Ambulance Service, Ministry of Health, Private Hospitals and Day Procedure Centres, Tertiary Education Institutes

Audience  Directors of Pharmacy; Pharmacy Staff
IMPLEMENTATION OF BARCODE SCANNING IN NSW PUBLIC HOSPITAL PHARMACY DEPARTMENTS

PURPOSE
To provide information to NSW public hospital pharmacy departments on the implementation of barcode verification in the dispensing process.

KEY INFORMATION
Product selection errors made during the dispensing process can cause adverse drug events leading to patient harm, prolonged hospitalisation and wasted resources.

The implementation of barcode scanning (verification) during dispensing is a patient safety initiative that is known to reduce the rate of product selection errors.

The implementation of barcode verification is supported by the following professional pharmacy bodies and is required under the National Safety and Quality Health Service Standards (Criterion 4.5.2):

- The Pharmacy Board of Australia recommends the use of barcode scanning by pharmacists in all settings and is revising the Guidelines for dispensing of medicines to strengthen their position on the use of barcode scanning;
- The Pharmaceutical Society of Australia (PSA) endorses the use of barcode scanning to verify the selection of correct medicines in its Professional Practice Standard 5: Dispensing;
- The Society of Hospital Pharmacists of Australia (SHPA) encourages the use of barcode scanners even where legislation does not mandate the practice.

Recommendations
It is strongly recommended that all public hospital pharmacy departments implement barcode verification in dispensing processes.

The following actions will be essential for successful implementation and require advanced planning:

- Directors of pharmacy departments (and/or their delegates) oversee the redesign of the dispensary workflow to incorporate barcode scanning into the dispensing process
- Barcode verification is incorporated into the dispensary workflow such that it acts as a checking process, rather than a product selection process
- The requirement to use barcode verification is incorporated into pharmacy department protocols and procedure manuals
- All pharmacy staff members are made aware of the need to use barcode scanning during dispensing, and undergo appropriate training to do so (see Staff Education)
- Barcode scanning is used just prior to attaching the label to the medicine
• Regular and routine monitoring of the rate of barcode scanning in the dispensing process. Where scanning rates are low, underlying reasons should be analysed and appropriate remedial action/s are undertaken.

The only exclusion to these recommendations is the dispensing of medication packs that do not include an appropriate barcode. This may be because they are:

• Supplied as a part of a trial or study
• Obtained under the Special Access Scheme (SAS)
• Extemporaneously prepared (i.e. those that are outsourced from external manufacturers, and those prepared locally).

**Staff Education**

All pharmacy staff involved in the dispensing process including pharmacists, pharmacy technicians and pharmacy interns, should be provided with education and training on how to use barcode scanning to verify product selection during the dispensing process.

The implementation of barcode scanning in public hospital pharmacy departments is expected to be incorporated in the next iteration of NSW Health Policy Directive PD2013_043 ‘Medication Handling in NSW Public Health Facilities’.

**Resources**

The Clinical Excellence Commission is developing an education package and promotional material to assist pharmacy departments in implementation of barcode scanning. These will be found at


The following professional standards can also be accessed online:

• PSA Professional Practice Standards version 4 - 2010: Standard 5: Dispensing  

• SHPA Practice Standards: Standards of Practice Guidelines for Hospital Pharmacy Outpatient Services – 2006 [Read-only PDF]  

• Pharmacy Board of Australia: Codes and Guidelines – Pharmacy Guidelines for Dispensing of Medicines  