Government of **Western Australia**
Department of **Health**

Clinical Audit Tool and Key Performance Indicators for High Risk Medication Policy

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Recommended Clinical Indicators

The following are recommended clinical indicators for health services to use to monitor the management of high risk medications.

The decision to adopt a clinical indicator is to be determined by the health service's Medication Safety Governance Group (or Drug and Therapeutics Committee) determined by the high risk medication risk register and action plans of the health service. Reference has been provided to the Clinical Excellence Commission's Quality Use of Medicines (QUM) Indicators and the Medication Safety Self-Assessment (MSSA) Tool where appropriate (links found at end of document).

NA- Not applicable (only acceptable if site/organisation does not supply, prescribe, administer or dispense medication class).

Anti-infectives	Met	Not Met	Date Assessed	NA	Comment
Strategies in place to distinguish between the different preparations when prescribing, dispensing and administering amphotericin.					
Local guidelines and education which articulate dose calculation and modifications and monitoring requirements of aminoglycosides.					
Local guidelines and education which articulate dose calculation, rate of administration, dose modification and monitoring requirements of vancomycin.					
An Antimicrobial Stewardship Program is in place to review and monitor prescribing of antimicrobials.					
Percentage of prescriptions for restricted antibiotics that are concordant with Drug and Therapeutics Committee approved criteria (refer to QUM indicator 2.2).					
Percentage of patients with a toxic or subtherapeutic aminoglycoside concentration whose dosage has been adjusted or reviewed prior to the next aminoglycoside dose delivered (refer to QUM indicator 3.6).					
Educational material is developed and readily available for the workforce.					

Intravenous Potassium Chloride	Met	Not Met	Date Assessed	NA	Comment
High Risk Medicine Management Policy on intravenous potassium chloride and associated protocols are readily available in all clinical areas.					
Compliance with the intravenous potassium chloride use policy is regularly assessed.					
A range of premixed potassium chloride containing intravenous solutions is continuously available in all clinical treatment areas.					
Concentrated potassium chloride injections are removed from ward stock in general clinical areas. (refer to MSSA 5.27)					
Health Service protocols are established to limit allowable concentration of potassium in intravenous solutions which can be administered in general clinical areas.					
Educational material is developed and readily available for the workforce.					

Psychotropic Medications	Met	Not Met	Date Assessed	NA	Comment
Local guidelines and strategies are readily available which articulate registration, dosing, prescribing, and monitoring requirements of clozapine.					
All components of the Clozapine Alert Program (CAP) or Clozapine Patient Management System (CPMS) are complied with.					
Concomitant use of other medications with the potential to cause agranulocytosis is discouraged and strategies for increased vigilance is present.					
All patients commenced on clozapine should be provided with full information on clozapine treatment and this education recorded in the patient's notes.					

Psychotropic Medications	Met	Not Met	Date Assessed	NA	Comment
Local guidelines and strategies are readily available that articulate safe dosing and monitoring requirements for lithium therapy.					
Baseline laboratory tests for patients on lithium therapy, including renal function, thyroid function, serum electrolytes and lithium levels, are performed on patients on admission.					
All patients commenced on lithium are provided with full information on lithium treatment and this education is recorded in the patient's notes.					
Educational material is developed and is readily available regarding high risk psychotropic medications (e.g. clozapine, lithium) for the workforce.					

Insulin	Met	Not Met	Date Assessed	NA	Comment
Is there promotion of insulin as a high risk medicine in your organisation?					
Local guidelines and strategies are readily available to address risk associated with subcutaneous and intravenous prescribing, dispensing, preparation administration and monitoring of insulin.					
Does your organisation promote use of the word 'units' in full instead of the dangerous abbreviation 'u' in prescriptions for insulin?					
Do guidelines exist for monitoring and responding to blood glucose levels?					
Do guidelines for insulin use exist in your organisation? Do these include information on: • Insulin Pens, penfills or cartridges are for single patient use only • Storage for ward stock • Storage for individual patient use • Labelling • Dose validation for unusual doses					

Insulin	Met	Not Met	Date Assessed	NA	Comment
Are insulin guidelines and procedures part of your organisation's training programmes (i.e. orientation and continuing education)?					
Do patients receive appropriate education, and insulin delivery devices for home administration and who is responsible for this?					
Does an organisational approach to self-administration of insulin exist?					
Educational material is developed and readily available which includes a wide range and names of insulin products for the workforce.					

Narcotic Analgesics	Met	Not Met	Date Assessed	NA	Comment
Local guidelines and strategies are readily available which articulate dosing adjustments, opioid conversion modification and drug interaction monitoring when prescribing opioids.					
Local guidelines and strategies are readily available that articulates the monitoring and frequency of monitoring requirements related to the administration of opioids.					
Local guidelines and strategies are readily available to address the risk associated with prescribing, dispensing, and administration of patient controlled intravenous analgesia (PCIA).					
Local guidelines are readily available which articulate dosing and monitoring requirements associated with patient controlled intravenous analgesia.(PCIA)					
Local guidelines and strategies are readily available that address the risks associated with prescribing, dispensing and administration of narcotic transdermal patch delivery systems.					
Monitoring of respiratory rate and sedation scores is documented for the patient when administered any form of opioid analgesics.					

Narcotic Analgesics	Met	Not Met	Date Assessed	NA	Comment
The hospital guidelines indicate a single standardised concentration of opioid solutions used throughout the hospital.					
Patient selection criteria has been established for using Patient Controlled Analgesia (PCIA) which exclude patients who will note be able to deliver the medication themselves due to their level of consciousness, physiological condition, or limited intellectual, developmental or psychological capacity. (refer to MSSA 1.19)					
Maximum doses have been established for opioids and included on prescribing guidelines as a reference for prescribers, nurses and pharmacists. (refer to MSSA 2.7)					
Percentage of parenteral opioid dosage units that are pethidine. (refer to QUM indicator 6.3)					
Percentage of postoperative patients that are given a written pain management plan at discharge and a copy is communicated to the primary care clinician. (refer to QUM indicator 4.2)					
Antidotes for moderate sedation and PCA/other IV infusion to treat pain and accompanying guidelines for emergency use are readily available near the point of use. (refer to MSSA 5.15)					
All patients commenced on an opioid should be provided with full information on opioid treatment and this education recorded in the patient's notes.					
Educational material is developed and readily available for the workforce on safe use of all forms of opioids.					
An Analgesic Stewardship Program is in place to review and monitor prescribing of opioids.					

Neuromuscular Blocking Agents (NMBA)	Met	Not Met	Date Assessed	NA	Comment
Local policy is readily available that articulates NMBAs are stored separately from other medications in a clearly marked sealed container that are labelled with a statement “WARNING: Paralysing agent – causes respiratory arrest – patient must be ventilated”.					
Local policies and procedures identifying who is permitted to administer the reversal agent in an emergency and provide readily available instructions for administration are readily available.					
Educational material is developed and readily available for the workforce on safe use of NMBAs.					

Heparin and other anticoagulants	Met	Not Met	Date Assessed	NA	Comment
Strategies to distinguish between the two brand name preparations (i.e. Coumadin® and Marevan®) when prescribing, dispensing and administering warfarin.					
Local guidelines are readily available to articulate dose modification and monitoring requirements of warfarin therapy.					
Local guidelines and strategies are readily available to address the risks associated with the prescribing, dispensing, preparation and administration of heparins.					
Local guidelines are readily available which articulate dose modification and monitoring requirements of Direct Oral Anticoagulant (DOAC) therapy.					
Health site has implemented WA Anticoagulation Medication Chart.					
Peri-operative instructions regarding anticoagulation are documented in the patient’s medical record.					
Warfarin therapy is initiated with a starting dose defined according to the guidelines on the WA Anticoagulation Medication Chart (refer to QUM indicator 1.4).					

Heparin and other anticoagulants	Met	Not Met	Date Assessed	NA	Comment
Number of patient receiving warfarin has a measured INR greater than 4.0 without prompt review and dose adjustment. (refer to QUM indicator 1.5)					
All patients transferred home on warfarin or Direct Oral Anticoagulants (DOACs) receive written information prior to transfer.					
A baseline renal function is obtained before commencing therapeutic doses of low molecular weight heparins.					
Percentage of patients prescribed enoxaparin whose dosing schedule is appropriate. (refer to QUM indicator 1.3)					
Educational material is developed and is readily available for the workforce.					

Chemotherapeutic Agents or Immunotherapy	Met	Not Met	Date Assessed	NA	Comment
There are strategies to distinguish between the different etoposide preparations (e.g. etoposide and etoposide phosphate) when prescribing, dispensing and administering etoposide.					
Percentage of patients receiving cytotoxic chemotherapy whose treatment is guided by a hospital approved chemotherapy treatment protocols. (QUM indicator 3.6)					
Local guidelines and strategies are readily available to address the risks associated with prescribing, dispensing and administration of methotrexate.					
Local guidelines and strategies that articulate the safe prescribing, dispensing, preparation, administration and monitoring requirements for vinca alkaloids are readily available.					
High Risk Medicine Management Policy on vincristine and associated protocols are readily available in all clinical areas.					

Chemotherapeutic Agents or Immunotherapy	Met	Not Met	Date Assessed	NA	Comment
Compliance with the vincristine use policy is regularly assessed.					
Protocols exist to ensure that only staff specifically trained and experienced in cancer treatments may prescribe, prepare, dispense, or administer vincristine to patients.					
All intravenous vincristine doses are administered via a minibag.					
All minibags containing vincristine are prepared in a cytotoxic drug safety cabinet, isolator or sourced commercially for the patient.					
Prepared doses of intravenous vincristine are not released from the Pharmacy Department until the day of administration.					
Extravasation guidelines are in place for all chemotherapy likely to cause tissue damage on extravasation including vincristine.					
Cytotoxic drug spill kits are present in all areas where chemotherapy is transported or administered.					
Local guidelines and strategies are readily available to articulate dosage, genotype testing, monitoring parameters, drug interaction monitoring and management of adverse reactions related to immunomodulatory thiopurines.					
Local guidelines and strategies are readily available to address the additional safety measures associated with the administration of intrathecal chemotherapy.					
Educational material is developed and readily available regarding chemotherapeutic agents and immunotherpay (i.e. etoposide, methotrexate, vinca alkaloids, and immunomodulatory thiopurines) for the workforce.					
All patients commenced on a chemotherapeutic or immunotherapy should have documented patient consent, be provided with full information on treatment and this education recorded in the patient's medical record.					

Safer systems	Met	Not Met	Date Assessed	NA	Comment
Strategies to address the risks associated with the administration of oral, enteral and nebuliser liquid preparations are evident.					
The HSP has adopted the Australian Commission for Safety and Quality in Health Care Recommendations for terminology, abbreviations and symbols used in medicine documentation.					
The HSP has adopted the Australian Commission for Safety and Quality in Health Care User Applied Labelling Standards for Injectable Medicines, Fluids and Lines with 50% stippling.					
Educational material is developed and readily available regarding safer systems for the workforce.					

QUM Indicators

Clinical Excellence Commission. Indicators for Quality Use of Medicines in Australian Hospitals. Version 1. August 2007.
http://www.cec.health.nsw.gov.au/patient-safety-programs/medication-safety/mssa

MSSA

Clinical Excellence Commission. Medication Safety Self-Assessment Tool
http://www.cec.health.nsw.gov.au/patient-safety-programs/medication-safety/mssa

This document can be made available in alternative formats on request for a person with a disability.