

**PRESCRIBING POLICIES:**

**4.7 PHARMACIST AUTHORITY**

The College of Pharmacists of BC Professional Practice Policy (PPP) 58 – Medication Management (Adapting a Prescription) became effective April 1, 2009. The intent of this policy is to improve the timeliness, safety and efficiency of meeting patients' drug-related needs by enabling pharmacists to perform select activities independently, within their scope of competence and experience. Orders will include date, signature, printed name and College ID number. In all cases the pharmacist must ensure that:

1. they are practicing within their scope of competence and experience
2. they have adequate information to make appropriate therapeutic decisions
3. the health needs of the patient are being met
4. the effectiveness of drug therapy is maintained or improved
5. the patient is not placed at increased risk
6. the appropriate documentation and communication is completed
7. they continue to manage and monitor the drug regimen, and to ensure there is a transfer of care before leaving the service.

**Exception:** Pharmacists cannot adapt prescriptions for Narcotic or Controlled drugs.

**PPP 1. Continuation, modification, and discontinuation of a medication**

**PPP 1A. Authority to continue initiate, modify, or discontinue a non-prescription medication:**

Clinical pharmacists may write orders for continuation, initiation, adjustment or discontinuation of non-prescription medications if they are indicated for a symptom/condition other than the patient's admitting diagnosis. Clinical pharmacists may also initiate the pre-printed nicotine replacement therapy (NRT) order form (PPO#638) at any time.

To ensure responsible drug therapy in the best interest of the patient, pharmacists will adopt the following procedure when initiating orders for non-prescription medication(s):

The Pharmacist

1. Identifies:
  - Medical indication for a non-prescription (OTC) medication
  - Too little of the correct OTC medication
  - Too much of the correct OTC medication
  - No indication for OTC medication
2. Reviews patient medication and disease state to rule out contraindication.
3. Consults with the patient explaining the benefits and risk of the OTC medication; patient must be in agreement. The NRT patient teaching sheet(s) are given to and discussed with patient, if indicated.
4. Writes orders for medication or medication modification.
5. Documents in progress notes the change in therapy, and rationale. Documents any follow-up required.
6. Monitors for desired therapeutic outcome and documents in patient's chart.

**Eligibility:** Unit-based clinical pharmacists.

## PHARMACIST AUTHORITY cont'd

### **PPP 1B. Authority to continue prescription medication taken prior to admission:**

Clinical pharmacists may write orders for continuation of prescription medication taken prior to admission, when confirmed by PharmaNet and verified with the patient or caregiver. The pharmacist must use professional judgment to avoid a situation where prior to admission medications have been purposely avoided due to changes in medical status or suspected adverse effects. The same procedures per non-prescription medication must be followed.

*Common situations where this authority could be employed:*

- Continuation of inhalers, thyroid medication, glaucoma medications

**Eligibility:** Unit-based clinical pharmacists

### **PPP 1C. Authority to reorder an in-patient prescription with an automatic stop-date:**

Clinical pharmacists may continue drugs that are scheduled to stop due to an automatic stop-order policy. The pharmacist has the authority to:

1. Extend the stop date of any medication that is potentially reaching a discontinuation date based on the VA Automatic Stop Date Policy as long as the pharmacist can be sure that continuation is in the best interest of the patient.
2. Write the order as "Drug Reorder" and sign their name to the order.
3. Document in progress notes the extension of therapy, and rationale. Document any follow-up required.
4. The pharmacists DO NOT assume the responsibility for ensuring that all drug therapy is ordered for the appropriate duration or for reordering medications which the pharmacist views as appropriately ending. Current methods of informing the physician of potential discontinuation dates will be continued.

**Eligibility:** Unit-based clinical pharmacists.

### **PPP 1D. Authority to discontinue PRN prescription medication no longer required:**

Clinical pharmacists may discontinue a PRN prescription medication if:

1. The PRN medication has not been administered for a minimum of 7 days.
2. There are no applicable clinical indications for the medication.

**Eligibility:** Unit-based clinical pharmacists.

## PHARMACIST AUTHORITY cont'd

### PPP 2. Adaptation of ambiguous orders or non-essential orders for non-formulary complementary medicines or vitamins

#### PPP 2A. Authority to adapt a prescription that is ambiguous:

Pharmacists may use their judgment to adapt a prescription that is ambiguous because of missing or obviously incorrect information.

1. Pharmacists have the authority to modify orders that are:
  - Obviously misstated
  - Clearly indicative of the sustained release formulation when not specified
  - Modify a formulation based on information from PharmaNet (verified with patient)
2. All revised orders require a written clarification/interpretation on the prescriber order form.

**Eligibility:** All pharmacists.

#### PPP 2B. Authority to discontinue complementary medicines and non-formulary vitamins

Pharmacists may discontinue any orders for medications with no legal status in Canada such as herbs or complementary alternative therapies, or non-formulary vitamins that are deemed non-essential during hospital stay. The pharmacist must:

1. Dispensary pharmacist will write a discontinuation order for the specific medication and send to the nursing unit. A copy of this order will be flagged for the clinical pharmacist to follow-up.
2. Clinical pharmacist will consult with the patient to explain discontinuation of therapy
3. Clinical pharmacist will document in the progress notes the discontinuation of therapy, and rationale.

**Eligibility:** All pharmacists.

### PPP 3. Adaptation of unsafe orders

#### PPP 3A. Modify an unsafe order

Pharmacists may use their judgment to adapt a prescription that has elements that could be unsafe, such as an obviously wrong dose or route so that the prescription is corrected as quickly as possible to minimize any risk of administration or delay in provision. An example of such an adaptation is changing from "mg" to "mcg" for a particular medication.

1. A written clarification on the prescriber order form is required.

**Eligibility:** All pharmacists.

## PHARMACIST AUTHORITY cont'd

### PPP 3B. Hold interacting drug

Clinical pharmacists may hold one drug if it is involved in a significant drug-drug interaction and the prescriber cannot be contacted (e.g. hold atorvastatin/simvastatin if clarithromycin initiated).

1. The interacting drug that is held is considered non-essential to immediate patient care.
2. The pharmacist must document the interaction in the progress notes, with the action taken.
3. Contact the prescriber as soon as possible.

**Eligibility:** Unit-based clinical pharmacists.

## PPP 4. Adaptation of dose, regimen or formulation

### PPP 4A. Modify dosage of anti-infectives or other medications based on renal and liver function

Clinical pharmacists can change the dose and/or frequency of oral or parenteral anti-infectives or other medications based on renal or liver function to improve the safety and/or effectiveness of a regimen according to the following conditions:

1. The prescribed dose and/or frequency of the anti-infective or other medications are not appropriate for the patient's level of renal or liver function.
2. The pharmacist has access to appropriate clinical information to make the regimen change.
3. The pharmacist ensures the modified dose is adequate for the indication.
4. If the patient is being followed by the Infectious Diseases (ID) team, the pharmacist should liaise with the ID pharmacist prior to any anti-infective dosage adjustments.
5. Recommendations are based on those listed in the VA PDTM, formulary, or Anti-infective Comparison Card, where listed.
6. The pharmacist documents this change in the progress notes to indicate the rationale for the change and the follow-up plan.
7. The pharmacist ensures appropriate laboratory tests are ordered for on-going monitoring (i.e. serum creatinine, BUN, drug levels).

**Assessment of Renal Function:** CKD-EPI (i.e. eGFR) can be used as a screen for assessment of renal function. If drug dosage adjustment is required based on eGFR, the normalized Cockcroft-Gault equation should be used to confirm degree of renal impairment and for drug dosage adjustment.

**Eligibility:** Unit-based clinical pharmacists.

**PPP 4B. Modify aminoglycoside and vancomycin dosage based on levels**

Unit-based clinical pharmacists can write orders to change the dosage for intravenous aminoglycosides and vancomycin based on levels.

1. All patients with aminoglycoside and vancomycin serum drug concentration measurements will be reviewed by a clinical pharmacist from Monday to Friday.
2. When necessary for monitoring or adjusting therapy in an individual patient, the pharmacist will order a serum drug level and/or serum creatinine for aminoglycoside or vancomycin therapy.
3. Dose adjustments for aminoglycoside and vancomycin will be made independently by the pharmacist based on drug level interpretation and other patient considerations, including: diagnosis, goals of therapy, clinical status, pharmacokinetic evaluation, and administration times.
4. The pharmacist documents any dosage changes and level interpretations in the progress notes.

**Eligibility:** Unit-based clinical pharmacists.

**PPP 4C. Modify all medication dosages based on levels**

Clinical pharmacists can write orders to change the dosage for any medication based on a drug level as long as the pharmacist is familiar with this medication. The same steps as per aminoglycoside and vancomycin serum level monitoring must be followed.

**Eligibility:** Unit-based clinical pharmacists.

**PPP 4D. Modify medication dosages based on a target level**

Clinical pharmacists can write orders to change the dosage of a medication based on a target level, e.g. INR, blood sugar, blood pressure. The pharmacist will discuss with the attending physician and document in the patient's health record that they will assume responsibility for the designated medication from M-F during working hours. When no further adjustments in drug dosage are required, the pharmacist may return the responsibility of dosing to the patient's physician, and document such transfer in the patient's health record.

**Eligibility:** Unit-based clinical pharmacists.

**PPP 4E. Pharmacist-managed IV-PO conversion program**

Refer to formulary policy 4.6 for IV-PO conversion of antimicrobials, proton pump inhibitors and H2 blockers.

**Eligibility:** Unit-based clinical pharmacists.

## PHARMACIST AUTHORITY cont'd

### PPP 4F. Ability to change formulation

Pharmacists (clinical and/or dispensary as stipulated) may change the formulation of a medication to an equivalent dose per interval as follows:

- a) solid to liquid, rectal or vice versa – dispensary or clinical pharmacist
- b) nebulized inhalers to MDI, discus, etc. – unit-based clinical pharmacists only
- c) IV to PO – antiemetics – unit-based clinical pharmacist only
- d) SODIUM phosphate IV to POTASSIUM phosphate IV if SODIUM phosphate backorder AND eGFR above 30 mL/min AND patient not hyperkalemic – unit-based clinical pharmacist only
- e) POTASSIUM phosphate IV to SODIUM phosphate IV if POTASSIUM phosphate backorder – unit clinical pharmacist only
- f) potassium chloride 20 mmol tablets (K-DUR, EURO-K) to potassium citrate 25 mmol tablets (K-LYTE) if ordered for enteral tube administration – dispensary or clinical pharmacist

Clinical pharmacists will document in the progress notes the change in therapy and rationale for b) and c)

### PPP 4G. Order serum drug levels and tests to guide in drug therapy monitoring

Clinical pharmacists may order serum concentrations of all measurable drug levels including (but not limited to) aminoglycosides, carbamazepine, cyclosporine, digoxin, lithium, phenobarbital, phenytoin (with serum albumin), tacrolimus, theophylline, valproic acid, and vancomycin.

Clinical pharmacists may order any tests or physical measurements (e.g. vital signs) to guide in drug therapy decision making.

Examples:

- a) Serum creatinine twice weekly and complete blood count (CBC) weekly for patients receiving vancomycin
- b) Hemoglobin A1C at baseline, at 3 months, and yearly for patients on anti-diabetic medications
- c) Weight, temperature, heart rate, blood pressure, and respiratory rate, when applicable.

Clinical pharmacists will document in the progress notes the test results ordered, the interpretation, and any changes required in drug therapy.

**Eligibility:** Unit-based clinical pharmacists.

**PHARMACIST AUTHORITY** cont'd

**PPP 4H. Adjust TPN formulations**

After the first TPN order is written by an authorized TPN physician, clinical pharmacists can adjust the formulation in collaboration with the TPN dietitian. Adjustments are based on laboratory results, fluid status, blood glucose, signs of refeeding, electrolyte replacement received, and enteral nutrition tolerance. Replacement of electrolytes outside of the TPN formulation may be ordered as appropriate.

**Eligibility:** Clinical pharmacists trained in TPN.

**PPP 5. Substitution of a drug for a drug from the same therapeutic class**

**PPP5A. Imipenem to Meropenem substitution**

Pharmacists can convert imipenem to meropenem according to the conversion table below. A pre-printed order of this conversion (PPO # 872) will be placed in the orders section of the chart.

**Eligibility:** All clinical and dispensary pharmacists.

<b>Imipenem to Meropenem Conversion</b>	
<b>Ordered: Imipenem</b>	<b>Dispensed: Meropenem</b>
1 g IV Q8H	500 mg IV Q6H *OR* 2 g IV Q8H if meningitis
500 mg IV Q6H	500 mg IV Q6H *OR* 2 g IV Q8H if meningitis
500 mg IV Q8H	500 mg IV Q8H *OR* 2 g IV Q12H if meningitis
500 mg IV Q12H	500 mg IV Q12H *OR* 1 g IV Q12H if meningitis
500 mg IVQ12H (dialysis dependent)	1 g IV Q24H (dialysis dependent)

## PHARMACIST AUTHORITY cont'd

### PPP5B. Substitution of a medication within the same therapeutic class

Pharmacists have the authority to independently substitute a medication ordered during a patient's hospital admission, within the same therapeutic class if:

- Safety/efficacy issues are sufficiently urgent that identification of alternative drug therapy cannot wait until the physician can be contacted, AND
- It will maintain or improve the effectiveness or safety of drug therapy, AND
- The physician cannot be contacted within a reasonable period to discuss alternatives ("reasonable period" is at discretion of the pharmacist involved).

*Common situations where this authority could be employed:*

- Formulary product substituted for another drug within the same therapeutic class during a drug shortage
- Change antibiotic to a more appropriate antimicrobial in a patient with a confirmed allergy to the original agent.

**Eligibility:** All unit-based clinical pharmacists.

### PPP Clinical Governance

The appropriate application of all PPPs will be evaluated with each audit of the Pharmacist Clinical services. For those where chart notes are required, copies of each chart note must be given to the resource pharmacist as a quality assurance measure.

### Delivery of Care

The pharmacist(s) will attempt to provide the above care to any patient without the need for a specific request from a physician or care team member. However, the provision of this care will be governed by the availability of appropriate staffing levels and in the context of patient priorities.