

Therapeutic Substitution in Times of Medication Shortages



Shortages of medications have become increasingly challenging for pharmacy teams in recent years. The COVID-19 pandemic, for various reasons, has led to increasing numbers of real shortages, combined with allocation issues. Pharmacists are faced with situations where continuity of medication therapy is threatened, and in those cases, pharmacists may be required to amend a patient's current prescription using therapeutic substitution.

This document is being provided to support pharmacists to more readily access references relating to prescribing a therapeutically equivalent medication.

Introduction

A pharmacist has a responsibility to their patients to ensure continuity of treatment in the face of medication shortages, while either working independently or collaborating with the original prescriber. This is part of medication management, and is consistent with our Code of Ethics¹ and Model Standards of Practice².

From the New Brunswick Pharmacy Act, 2014³:

- Definitions: "therapeutic equivalent" means a drug product that can be expected to have the same clinical effect and safety profile as another drug.
- 128(1) A pharmacist may dispense a pharmaceutically equivalent, a pharmaceutical alternative or a therapeutic equivalent, all as defined in this Act or in the Regulations, unless otherwise directed by the prescriber, or requested by the client.

From the Regulations of the New Brunswick College of Pharmacists⁴:

- 21.3 Prescribing may be categorized as: (a) adapting a prescription by; ... (iv) therapeutic substitution;
- 21.13(2) If the pharmacist identifies that the condition being assessed is outside his or her scope of practice, the pharmacist shall refer the client to an appropriate health care practitioner, and shall record the assessment and the referral in the client's profile.

Therapeutic substitution is different from generic substitution (or provision of a "pharmaceutically equivalent" medication, as defined in the Act³), in that this is a type of **prescribing**, and all requirements for prescribing (patient assessment, patient consent, notification and documentation, etc.) must be met. As with any other type of prescribing, pharmacists are permitted, but not obligated, to perform this function.

¹ <https://www.nbpharmacists.ca/site/codeofethics>

² https://napra.ca/sites/default/files/2017-09/Model_Standards_of_Prac_for_Cdn_Pharm_March09_layout2017_Final.pdf

³ <https://nbcop.in1touch.org/document/1734/2014%20Pharmacy%20Act.pdf>

⁴ <https://nbcop.in1touch.org/document/1733/2015%2007%2023%20REGS%20bilingual.pdf>

Suggested Resources

Pharmacists are encouraged to access available educational materials to support their decision to adapt prescriptions using a therapeutically equivalent medication. One possible resource for educational materials is available in British Columbia: <https://www.bcpharmacists.org/readlinks/helping-patients-receive-safe-and-effective-drug-therapy-through-therapeutic-substitutions>.

Pharmacists are reminded that they may already have excellent tools to help them in amending prescriptions to provide a therapeutically equivalent medication, as part of the software or drug information texts provided by their employer(s). These may include:

- **Drug Facts and Comparisons** (as part of Lexicomp packages): Drugs are divided into related therapeutic or pharmacological groups for easy comparison. <https://www.wolterskluwer CDI.com/facts-comparisons-online/databases/>
- **Compendium of Therapeutic Choices; RX/TX** (From CPhA): CTC provides guidelines for clinical decision making at the point of care by providing evidence based and practical information on hundreds of medical conditions. Divided into chapters based on condition, with choices of treatment modalities. Includes drug tables formatted for quick access to dose, adverse effects, drug interactions and relative costs. <https://www.pharmacists.ca/products-services/compendium-of-therapeutic-choices-2019-edition/>
- **RxVigilance (Vigilance Santé)**: Pharmacists may find some comparison tables available by typing the drug class (“antidepressants”, “ACE Inhibitors”, “beta-lactam antibiotics”, for example) in the search bar. Information supplied may not be as detailed as the previous two resources.

Pharmacists who are members of the New Brunswick Pharmacists Association have access to **RxFiles** (<https://www.rxfiles.ca/RxFiles/modules/druginfoindex/druginfo.aspx>), which provides easy-to-use Drug Comparison Charts.

Pharmacists who already have a subscription to **Canadian Pharmacists Letter** will know that there are some excellent resources available there. After logging in, on the main page, hover over “Browse” and click on “Charts.”

The Canadian Thoracic Society have forwarded some information to help guide prescribers in the face of shortages of inhaled medications, salbutamol in particular. The charts are available in French and English, and there is one for patients with asthma, and another for patients with COPD.

- https://cts-sct.ca/wp-content/uploads/2020/04/FR-FINAL_April-13-CTS-re-COPD-Salbutamol-Shortage_FR.pdf
- https://cts-sct.ca/wp-content/uploads/2020/04/FR-FINAL-13-avril_SCT-Strat%C3%A9gie-d%E2%80%99att%C3%A9nuation-pour-l%E2%80%99asthme.pdf
- https://cts-sct.ca/wp-content/uploads/2020/04/FINAL-April-13_CTS-re-Asthma-Salbutamol-Shortage.pdf
- https://cts-sct.ca/wp-content/uploads/2020/04/FINAL_April-13-CTS-re-COPD-Salbutamol-Shortage.pdf

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Published: May 29, 2020

Revised January 27, 2021

Lastly, **MedSask/USask** have some excellent resources available. While not all are freely available, see, for example:

- <https://medsask.usask.ca/documents/drug-shortages-pdfs/salbutamol-2020-04-16.pdf>
- https://medsask.usask.ca/documents/drug-shortages-pdfs/fluticasone_shortage.pdf
- **MedSask/USask** have released a new document to address therapeutic substitution during a shortages of H₂-receptor antagonists: https://www.pharmacists.ca/cpha-ca/assets/File/cpha-on-the-issues/MedSask_CPhA_H2RA_EN.pdf (June 2020)
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- See the **MedSask** COVID-19 FAQ page (<https://medsask.usask.ca/covid-19.php>) and look under “April 2” for more drug shortage resources.