Cancer Care Ontario's focus on take-home cancer drugs and community practice

Cancer Care Ontario is the provincial agency that advises the Ontario government on the cancer system. Cancer Care Ontario drives continuous improvement in disease prevention and screening, the delivery of care and the patient experience for chronic diseases. The Systemic Treatment Program is a clinical program within Cancer Care Ontario that aims to improve equitable access to high-quality cancer care for all patients in Ontario by setting standards and guidelines for all systemic cancer treatments.

The Systemic Treatment Program launched the Systemic Treatment Provincial Plan *Quality Person-Centred Systemic Treatment in Ontario 2014-2019* (the Plan) which sets out a path to improve the safety, quality and accessibility of systemic treatment (chemotherapy) in Ontario. The Plan has a specific focus on the verification of take-home cancer drug prescriptions and dispensing practices in community pharmacies.

Take-home cancer drugs are now commonly used as part of cancer treatment, and community pharmacists will see more cancer drug prescriptions reaching their pharmacies. While the use of take-home cancer drugs has many benefits from a patient perspective, not all take-home cancer drug prescriptions are clinically verified at the cancer centre before reaching the dispensing pharmacy. Community pharmacists may not be as well equipped to clinically verify these prescriptions as pharmacists with clinical experience in oncology.

A number of initiatives are in progress to increase the quality of prescriptions leaving the cancer clinics and help the community pharmacist to perform a thorough, high-quality independent check before the patient receives the medication. Cancer Care Ontario set a provincial goal of eliminating hand-written or verbal orders for oral chemotherapy by June 30, 2015 to ensure legibility and accuracy of the prescription. As of June 2015, hand-written or verbal take-home prescriptions were reduced from 30% to 10%. Efforts are ongoing to eliminate hand-written and verbal orders by the end of the 2015/16 fiscal year, in March 2016. Cancer Care Ontario has also defined the recommended components of a pre-printed cancer drug prescription, developed over 150 pre-printed orders for take-home cancer drugs, and is working to include these components in its computerized physician order entry (CPOE) system.

In further support of the Plan, a checklist was developed as a tool to assist with the clinical verification of take-home cancer drug prescriptions in community pharmacies. To validate this tool and complete final revisions, a feasibility study is being launched to obtain feedback on the tool and its integration into the dispensing process prior to a broader provincial implementation.



How to use the checklist tool

Pharmacists in the community have minimal to no access to patient medical records, thus this checklist is designed with the patient and prescription as the primary sources of information. Understandably, it is difficult to verify cancer drug prescriptions without further information sources; this checklist is a tool that describes the checks to facilitate clinical verification.

Cancer Care Ontario's online Drug Formulary is referenced at the bottom of the checklist as a source for cancer drug and regimen monographs to aid the community pharmacist in verifying the prescription. These documents describe the doses and schedules of drugs and regimens, as well as adverse effects, administration, and patient counselling points for cancer drugs. The Drug Formulary also contains symptom management information and patient drug information sheets. This checklist can also be used for documenting the verification of the prescription and can be filed with the prescription hardcopy.

Figure 1: Checklist Tool for Community Practice

	Clinical Verification of Cancer Drug Prescriptions	
Patient	 Verify patient using two identifiers present on Rx Confirm height and weight on Rx with patient Check for allergies Confirm diagnosis/indication with patient Identify if new or continuing treatment Check for toxicity or intolerance from previous cycle (if applicable) Identify barriers to adherence 	
Regimen	 For the regimen, verify correct: Indication Drugs & route Scheduling & interval Start date correct interval from previous treatment (if applicable) 	
Dose	 Verify correct dose for indication Verify correct calculated dose for patient using BSA and/or weight (if applicable) Check for modified dose (if applicable) Check for drug interactions 	
Patient Care	 Verify supportive care provided Identify what education has been provided and reinforce how and when to administer cycle schedule importance of adherence proper handling, storage and disposal side effects and management strategies Identify toxicities to monitor & plan follow-up 	
See Cancer Care Ontario's Drug Formulary website for drug and		

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The checklist has four sections:

(1) **Patient:** Important steps in verifying cancer drug prescriptions are included in addition to steps generally taken with all prescriptions (i.e. verify patient, check for allergies, and ask if this is new treatment, etc.) For cancer drugs, it is important to verify the diagnosis, confirm the patient's current height and weight (if applicable for dose calculation), and ask about previous adverse effects. Most of this information should be provided on the cancer drug prescription. If these elements are not present, the information should be obtained from the patient where possible.

The final checkpoint of this section is to identify barriers to correct adherence. Adherence to cancer treatment is essential for efficacy and safety. However, there are many barriers to adherence among cancer patients. These may include difficulty swallowing, fear of previouslyexperienced or potential adverse effects, or misunderstanding of directions for administration. It is important to ask the patient if they have any concerns that may result in non-adherence. These should be considered and addressed in patient education.

(2) **Regimen:** Where the regimen is identified on the prescription, the drugs, route, and dosing schedule

should be verified as appropriate to the regimen. If not present, the pharmacist should attempt to identify the regimen based on the indication and prescribed drugs, where possible. Information for regimens and individual cancer drugs can be found in Cancer Care Ontario's online Drug Formulary. The start date should be at the correct interval from the previous treatment, unless treatment has been delayed due to toxicity. Efforts should be made to verify as much information as possible with the patient. Some newer chemotherapy regimens may not be included in the Drug Formulary. If the pharmacist cannot find information in support of the prescribed drug combination, doses and/or schedule, a Drug Information service can find more up-to-date information.

Where deemed necessary, the pharmacist can contact the prescriber to verify the prescription.

(3) **Dose:** It should be verified that the dose is correct for the regimen and indication. While a regimen may be used for multiple indications, the drug dose is often indication-specific.

For doses based on body surface area or weight, the dose should be verified by recalculating. If the dose appears to have been adjusted, efforts should be made to confirm the reason with the patient or caregiver. Patients or caregivers may be able to explain that the dose was decreased due to previous adverse reactions, renal dysfunction, bloodwork changes, etc.

The cancer drugs and the patient's existing medication therapy should be checked for drug interactions. These may also be a reason for dose modifications.

If the dose does not appear to be correct, the pharmacist should contact the prescriber to verify.

(4) **Patient Care:** The final section includes verifying that appropriate supportive care is provided, identifying and providing patient education, and planning follow-up. Supportive care may include antiemetics, antibiotics, skin care, oral care, and/or granulocyte colony-stimulating factor, depending on the regimen used.

The patient may have received education from the cancer center regarding their therapy; open-ended questions should be used to determine what has already been communicated. The pharmacist should then reinforce the education that was already given and give further information on omitted topics.

Finally, follow-up should be planned to monitor for potential toxicities. The drug monographs in Cancer Care Ontario's Drug Formulary outline which side effects are the most common and when they may occur (immediate, early or delayed effects). Information on the management of specific side effects can also be found in the Drug Formulary, including printer-friendly patient information sheets.

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