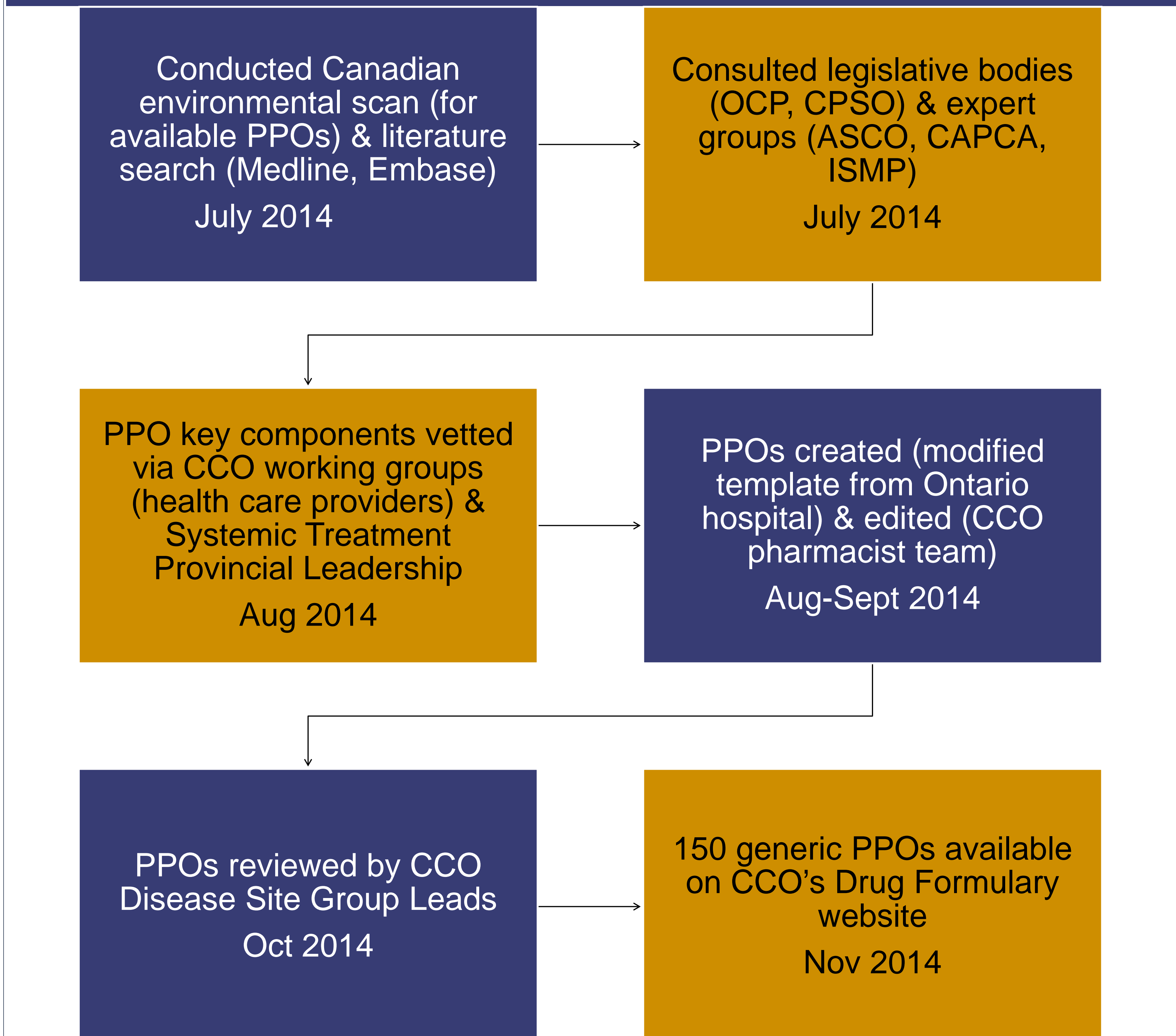


Objectives

- As the provincial advisor on cancer, Cancer Care Ontario (CCO) sets standards for regional systemic treatment facilities (RSTF) to improve the quality and safety of systemic treatment delivery across Ontario.
- CCO has set a provincial goal to eliminate hand-written and verbal take-home chemotherapy orders from RSTF by June 30, 2015.
- While computerized physician order entry (CPOE) remains the gold standard, pre-printed orders (PPOs) standardize prescribing and may improve safety where CPOE is not available.
- The objective of this project was to identify key components and develop standardized PPOs for take-home chemotherapy included in evidence-informed regimens.

Methods



Discussion

- PPO components considered essential for take-home chemotherapy were identified based on current practice, the literature and legislative requirements (Table 1). Hospital, patient and prescriber identifiers, chemotherapy protocol and dosing information are mandated by legislation (CPSO, OCP) and recommended by patient safety advocacy groups (ASCO, CAPCA, ISMP).
- Clinical parameter for prescription verification by an oncology health professional is recommended, but not current standard of practice in Ontario. This is important to consider for future quality and safety initiatives.
- Generic PPOs were developed based on key components and an existing template that considered health care human factors principles* (Figure 1). These were made available to RSTF to customize to their institution.

Table 1: PPO Key Components

Element	Sub-element	Reference
Hospital Identifier	Name	n/a
	Address	n/a
	Phone # of oncology clinic/unit	n/a
Patient Information	Patient's name, address, DOB, phone #	CAPCA, ASCO, ISMP
	Diagnosis/Indication	CAPCA, ASCO, ISMP
	Allergies	ASCO, ISMP
Prescriber Information	Name	ASCO, ISMP
	Signature	ISMP
	CPSO #	ISMP
	Office Phone # / fax #	ISMP
	Address (if different than hospital)	n/a
Document Identifier	Title of document (CCO regimen code)	n/a
	Date Rx generated	CAPCA, ASCO
	Page no (of total)	ASCO, ISMP
	Version**	ASCO, ISMP
	Cycle #	CAPCA, ASCO
Chemotherapy Protocol	Cycle days	ISMP
	Drug Name	CAPCA, ASCO, ISMP
	Dose, Route, Frequency	CAPCA, ASCO, ISMP
	Instructions for patients	CAPCA, ASCO, ISMP
	Quantity (specify for all strength required)	CAPCA, ASCO
	No Repeats	CAPCA, ASCO
Dose Modification	Indicate a change from previous dose	
	Reason	CAPCA, ISMP
Height, Weight, BSA	New Dose (as % of total dose)	CAPCA, ISMP
	Height, Weight, BSA (if applicable)	CAPCA, ASCO, ISMP
Supportive Care Medications	Drug Name	
	Dose	
	Instruction	ASCO, ISMP
	Indication	
	Quantity	
	Special Precaution if applicable	n/a
	Repeat	n/a
Drug Coverage	Other medication(s) if applicable	n/a
	LU Code	n/a
Clinical Parameter	EAP application status if applicable	n/a
	Check box along with statement indicating that lab results have been verified by a regulated health professional with oncology experience AND signature	CAPCA, ASCO
	Check box along with statement indicating that prescription has been verified by a nurse or pharmacist with oncology experience AND signature	Recommend prescription verification by Oncology Health Professional and a check mark to indicate if blood work has been assessed. Can be the same individual as the prescriber.
	Drug-specific lab parameters**	

Figure 1: Sample PPO

Hospital Information (including name, address, telephone number)	Patient information (including name, address, date of birth, phone number)
Clinic information (including clinic name and telephone number)	Patient Name _____
Allergies (also specify reaction) <input type="checkbox"/> None known	
CAPE (capecitabine)	Cycle #: _____; Cycles repeat every 21 days
Diagnosis: Breast Cancer	Height = _____ cm Weight = _____ kg
	Body Surface Area (BSA) = _____ m ²
Clinical Verification	
<input type="checkbox"/> Bloodwork and other clinical parameters have been verified by a regulated health professional	
Date	Print name Signature
<input type="checkbox"/> Prescription has been verified by a nurse or pharmacist	
Date	Print name Signature
Rx (Start Date/Day 1: _____)	
<input type="checkbox"/> capecitabine 1000 mg/m ² x BSA x _____%* = _____mg PO BID with meals on Days 1 to 14 or	
<input type="checkbox"/> capecitabine 1250 mg/m ² x BSA x _____%* = _____mg PO BID with meals on Days 1 to 14	
Mitte: _____ x 500 mg tablets and _____ x 150 mg tablets (_____ days supply)	
<input type="checkbox"/> LU Code _____ (see back page for details)	
*Dose modification for: <input type="checkbox"/> Age/performance status <input type="checkbox"/> Hepatic function <input type="checkbox"/> Renal function <input type="checkbox"/> Other: _____	
NO Repeats	
Supportive Care Rx:	
Date	Print name Physician Signature CPSO#

Conclusion and Next Steps

- Identification of key components and development of generic PPOs will help RSTF improve their CPOE systems and/or customize their PPOs to improve safe dispensing of take-home chemotherapy.
- Next steps are to survey prescribers, pharmacists and nurses for usability and satisfaction with PPOs.
- The eventual goal is to eliminate hand-written and verbal chemotherapy orders, ultimately improving patient safety.

Legend: ASCO: American Society of Clinical Oncology, BSA: body surface area, CAPCA: Canadian Association of Provincial Cancer Agencies, CPSO: College of Physicians and Surgeons of Ontario, DOB: Date of Birth, EAP: Exceptional Access Program, ISMP: Institute for Safe Medication Practices, LU: Limited Use, OCP: Ontario College of Pharmacists. Table 1: *Guidelines for developing ambulatory chemotherapy preprinted orders. Available from: <http://www.capca.ca/wp-content/uploads/PPO-Guidelines-FINAL-Jan-9-20111.pdf> **Denotes optional component