

Development of a provincial medication policy document in oncology practice

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INTRODUCTION

Safe medication practice standards are important preventive measures to avoid chemotherapy errors. Multidisciplinary collaboration and communication among medical oncologists, pharmacists and nurses are central to the provision of safe and effective chemotherapy.¹ Current chemotherapy practice and institutional guidelines should be regularly reviewed and updated by pharmacy, nursing, and medical oncology members of the Pharmacy and Therapeutics (P&T) Committee. Similarly, new policies and standards relating to the medication use system should be approved by all members of the P&T Committee before being implemented. Consequently, the pharmacy department plays a key role in ensuring the continuous review of drug-related policies and procedures for the entire institution.^{2,3}

The Alberta Cancer Board (ACB) is the provincial organization that provides outpatient cancer treatment to all patients in Alberta. The ACB has a critical responsibility to ensure that all Albertans have reasonable access to coordinated, high quality cancer services.⁴ The ACB consists of 2 tertiary cancer centres, the Cross Cancer Institute (CCI) and the Tom Baker Cancer Centre (TBCC). Both centres maintain their coordinated leadership roles in developing provincial cancer standards of practice and guidelines through a provincial tumor group structure. The CCI and TBCC each serve approximately half the population of the province with comparable numbers of patients seen in their outpatient clinics. In addition to the CCI and TBCC, the ACB has established a provincial network of services by collaborating with regional health authorities to set up several associate cancer clinics and community cancer centres (CCN) throughout Alberta which provide outpatient cancer services of secondary and primary level care, respectively. The CCI is the only ACB centre with inpatient beds. Chemotherapy administration is a component of care which may be delivered at any of the ACB centres and is growing as illustrated in Figure 1. Regardless of their level of specialization, all centres in the ACB network are required to follow the oncology standards of practice developed by the tertiary centres.

Initially, medication-related policies and procedures were developed independently by various P&T Committees at the provincial level as well as at both the CCI and TBCC. In 1995, the CCI and TBCC pharmacies amalgamated under 1 provincial director of pharmacy and the reorganization of the P&T Committees subsequently occurred. The 2 site committees were disbanded and their responsibilities were assumed by 1 provincial P&T Committee. One of the responsibilities of the P&T Committee includes the annual review of medication policies. The primary objectives of this article are to describe the development and composition of provincial ACB medication policies in an oncology setting and to highlight the need for multidisciplinary cooperation in the development and implementation of chemotherapy guidelines. Challenges faced in the various phases of the project and expected rewards will also be described.

Development of provincial medication policies

The first step in the development of provincial medication policies was to develop a framework for the organization and required content of the policies. This framework was developed through a review of national and international standards and guidelines. All existing medication policies of ACB cancer centres were collected and compared to the guidelines from various sources. These sources included the standard practices of the Canadian Society of Hospital Pharmacists (CSHP), of the Ameri-

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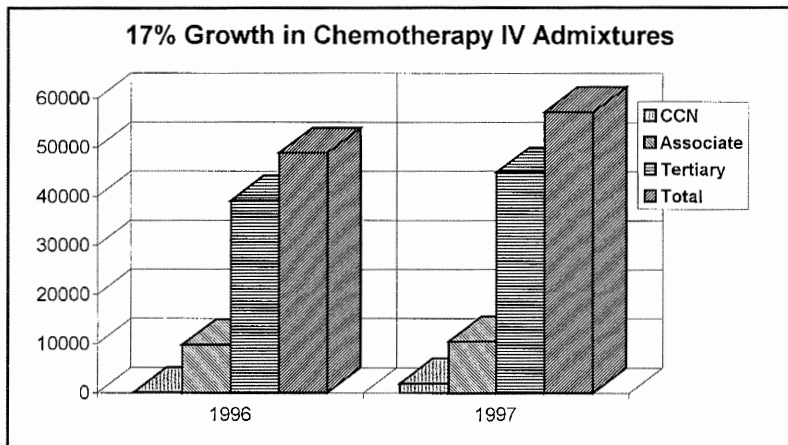


Figure 1. Outpatient Chemotherapy Admixtures

can Society of Health-Systems Pharmacists (ASHP), and of the Society of Hospital Pharmacists of Australia (SHPA) as well as pertinent notes taken from the conference on "Preventing Medication Errors in Oncology Practice" during the eighteenth Annual Pharmacy Symposium on Cancer Chemotherapy as presented by the Institute of Safe Medication Practices.⁵⁻¹⁰

Different issues covered by current policies were identified and the policies were classified into major sections to outline the main components of the policy document. The major sections, consisting of high standards for prescription writing, medication order review, drug preparation, distribution and administration, were defined and organized to illustrate the process of a medication use system.¹¹ Each section was further subdivided into major issues and tailored to specific aspects of chemotherapy delivery in oncology practice.

Once the original framework of the document was drafted, current policies were subjected to an extensive review process. The policies were revised, updated and combined, where applicable. The review process included comparing the content of existing policies to similar policies from the other ACB policy manuals as well as to the recommended content gathered from the literature. This information was utilized in the revision of the existing policies and creation of new policies where gaps were identified.

To determine new policies which needed to be developed, a thorough literature review was carried out using the MEDLINE (1986-97) database to search for pertinent articles. The key words used in the search were "medication system", "standards", "medication errors", "antineoplastic drugs", "chemotherapy" and "chemotherapy errors". The literature research included references extracted from national and international standards and 13 medication-related articles found in MEDLINE. The development of each new policy and the addition of new information to an existing policy

were carefully researched. The rationale and background information of each new policy was identified, documented and supported by literature sources.

The complete template of medication policies was drafted into a table of contents. The table of contents was created to indicate to the P&T Committee which medication policies were duplicated in more than one of the ACB, CCI or TBCC policies and procedures manuals, and to propose the standardization of these policies. The table of contents also included suggestions for new policies to be developed as determined from the literature review in order to cover the full range of

medication use system policies. The template was then submitted to the P&T Committee meeting in July 1997 for preliminary approval. The template received support from the P&T Committee and direction to proceed to draft the ACB medication policies was given.

Composition of the ACB Medication policy Document

The ACB medication policy document included not only the ACB policies and standards but also departmental medication-related procedures and samples of approved templates such as the Adverse Drug Reaction (ADR) Report, ADR Follow-up Forms, and the Patient Education Sheet. The document was organized into 9 sections: 1) Medication orders; 2) Processing of medication orders; 3) Dispensing and Control of medications; 4) Medication preparation; 5) Administration of medications; 6) Therapeutic drug monitoring; 7) Storage and disposal of medications; 8) Clinical pharmacy services; and 9) Pharmaceutical manufacturer's representatives. Each section was further subdivided into major subjects that represented specific aspects of chemotherapy delivery in oncology practice. An example of 1 section is provided in Appendix A. The organization of the document reflects the order of the medication use process: prescribing, order verification, dispensing, preparation, administration, therapy monitoring, patient counselling, and staff education.

Multidisciplinary considerations

The development and implementation of chemotherapy policies and guidelines requires multidisciplinary collaboration.^{11,18} To obtain multidisciplinary input and to minimize the possibility of major editing and revisions at the P&T Committee level, the ACB medication policies were circulated to the affected departments for review at the CCI and TBCC. At the time of writing, the project was in this final stage. Once all departmental

input is received and necessary revisions are made, the final document will be presented to the P&T Committee for approval. The P&T Committee is comprised of representatives from the departments of medicine, nursing and pharmacy facilitating the process of multidisciplinary collaboration. The completion and final approval of the policy document is expected to take several months. The policy document will be subject to annual review and approval by the P&T Committee.

Challenges

Developing provincial medication policies presented several challenges throughout the various phases and issues continue to arise as the final stages of approval draw near. The initial phase of developing the framework and classifying the existing policies into this system went smoothly through extensive work completed by a pharmacy student. Nevertheless, the extensive review process of the policies by this student presented some challenges. The student was very capable in describing what should be included in the policies based on the framework developed and literature information gathered. However, the actual revision of the existing policies was impractical for a student to complete due to the fact that students do not have the working knowledge and experience to apply the literature information to actual practice situations. Without having detailed background knowledge on the operations of each of the ACB centres, it was difficult to combine policies and retain the original intent for each specific site's cultures and operations.

To ensure that intent and content remained applicable, it was necessary for a pharmacist from each of the tertiary sites to review the policy changes. This presented the next challenge which was the extensive time required by pharmacists at each site to review the detailed policies and come to a consensus on the content of those policies which needed to be amalgamated. This challenge was made even more difficult by the fact that the 2 tertiary centres are geographically distant from each other and face to face meetings require travel and expense. This challenge has not yet been totally resolved. The steps which are being taken include reviewing policies in small sections rather than trying to complete the entire document at once and trying to meet when travel for other purposes is already required. Once pharmacy has reached an agreement on a particular policy, the next step is circulating it to other affected departments for their review and input. This step presents another challenge in that pharmacy is 1 of only a few departments of the ACB which have amalgamated. This translates to duplicate departments having to review policies, making consensus difficult. This challenge for the ACB is ongoing and is only resolved through continued discus-

sions between the departments of the 2 tertiary centres which makes any consensus-requiring process a lengthy one. Other organizations may be able to circumvent this if the entire organization is regionalized or amalgamated.

The final question which arose related to where to house the new policy document. To facilitate the implementation process and accessibility of these policies to all ACB centres, a decision was made to insert the provincial medication policy document in the *Alberta Cancer Board Policies and Procedures Manual* under the divider section entitled "Pharmaceutical Operations". Those policies that may remain site-specific would continue to reside in their site's respective Policy and Procedures Manuals. For example, since the CCI is the only ACB clinic with inpatient beds, medication policies that specifically address the use of medications during the provision of inpatient care will be retained in the *Cross Cancer Institute Policies and Procedures Manual* in the "Medications" section.

Rewards/Future considerations

Several benefits of this project are expected. The ACB Policies and Procedures Manual is distributed to all ACB tertiary, associate and community cancer centres in Alberta. The obvious benefit will be that as a provincial organization, all ACB centres will have access to a single set of medication policies and procedures. In addition, the review which was completed during the amalgamation of the policies resulted in additions to existing policies and creation of new policies to cover the full range of the medication use system. This should facilitate better and safer patient care. Lastly, the P&T Committee will have fewer policies, overall, to review on an annual basis. The expected benefits will surely outweigh the initial time required to review and amalgamate the various medication policies. ☐

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Appendix A.

Appendix A. Example of the Alberta Cancer Board Provincial Medication Policies

Template

TABLE OF CONTENTS

MEDICATION ORDERS	ACB*	CCI†	TBCC‡	
• Prescribing privileges (10A.1) § - Please refer to the CCI Policy and Procedure Manual and New Policy added	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Physicians' orders (10A.1, 7.1.1, 7.1.3) - Please refer to the CCI and TBCC Policy and Procedure Manuals	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>Cross Cancer Institute</u>				
• Physicians' orders for inpatients (10A.1) - Please refer to the CCI Policy and Procedure Manual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Prescribing vocabulary - New Policy added	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Drug abbreviations and symbols (7.2, 10A.1) - Please refer to the CCI and TBCC Policy and Procedure Manual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
• Standing orders (G-117) - Please refer to the TBCC Policy and Procedure Manuals	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
<u>Cross Cancer Institute</u>				
• Standing orders (10A.11) - Please refer to the CCI Policy and Procedure Manual	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
• Prewritten medication orders in the day care unit (G-114) - Please refer to the TBCC Policy and Procedure Manual	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
• Hold orders - New Policy added	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
• Automatic stop orders (10A.4, 7.1.4) - Please refer to the CCI and TBCC Policy and Procedure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
				<i>Manuals</i>
				• Discontinuation of medications (10A.13) - Please refer to the CCI Policy and Procedure Manual
				• Narcotic and controlled drugs (10A.6) - Please refer to the CCI Policy and Procedure Manual
				• Prescribing chemotherapy regimens - New Policy added
				• Prescribing nonstandard chemotherapy regimens - New Policy added
				<u>Cross Cancer Institute</u>
				• Medication orders for patient passes (10A.7) - Please refer to the CCI Policy and Procedure Manual

* ACB: Alberta Cancer Board

† CCI: Cross Cancer Institute

‡ TBCC: Tom Baker Cancer Centre

§ The numerical code written at the end of existing policy represents the policy reference number used in either ACB, CCI or TBCC Policies and Procedures Manuals.