Use of Patients’ Own Medications in Canadian Hospitals: A National Survey

Heather Lummis and Ingrid Sketris

ABSTRACT

Objective: Patients’ own medications are medications that patients have obtained in the community setting and have brought with them to the hospital on admission. How such medications are used in Canadian hospitals is not well understood. The objectives of the study were to determine current practices and policies related to patients’ own medications.

Methods: Surveys were sent by e-mail to 166 individual addresses for Canadian hospitals with at least 50 acute care beds.

Results: Eighty-six hospitals responded (response rate 52%) (but some hospitals did not answer all questions). Use of patients’ own medications was allowed only when necessary by 89% (76/85) of the hospitals, was actively encouraged by 8% (7/85), and was not allowed by 2% (2/85). The most common types of medications allowed were drugs not included in the hospital’s formulary and those not routinely stocked by the hospital, as well as prepackaged, investigational, and multidose medications. Most hospitals (72% [62/86]) had a policy on patients’ own medications, and 70% (57/82) required a physician’s order to use such medications. The perceived advantages of using patients’ own medications were cost savings (67% [48/72]) and decreased inventory (57% [41/72]). The main disadvantages cited were the potential for medication errors (51% [35/69]), loss of the medications in the hospital (32% [22/69]) and the time required to manage such medications (32% [22/69]).

Conclusions: Allowing the use of patients’ own medications was common in the Canadian hospitals that responded to this survey, although respondents did identify some concerns with the practice. To address these concerns, it is recommended that hospitals develop identification, storage, and documentation procedures for patients’ own medications. The costs and benefits of using these medications need further evaluation.

Key words: patients’ own medications, hospital, policy, evaluation, medication error

RÉSUMÉ

Objectif : Les propres médicaments des patients sont définis comme les médicaments qu’ils ont obtenus dans la communauté et qu’ils ont apportés lors de leur hospitalisation. L’utilisation de ces médicaments dans les hôpitaux canadiens demeure obscure. Les objectifs de cette étude sont de déterminer les pratiques et les politiques courantes relativement à l’emploi des propres médicaments des patients dans les hôpitaux.

Méthodes : Un sondage a été envoyé par courriel à 166 adresses électroniques individuelles d’hôpitaux canadiens d’au moins 50 lits de soins de courte durée.

Résultats : En tout, 86 hôpitaux ont répondu (taux de réponse de 52 %), bien que certains d’entre eux aient omis des questions. L’utilisation des propres médicaments des patients était permise uniquement lorsque cela était nécessaire par 89 % (76/85) des hôpitaux, était fortement encouragée par 8 % (7/85), et n’était pas permise par 2 % (2/85). Les propres médicaments des patients le plus souvent autorisés étaient ceux non inscrits au formulaire ou que l’hôpital ne tenait pas en stock, de même que les médicaments préemballés, les médicaments de recherche et les médicaments multisembles. La plupart des hôpitaux (72 %; 62/86) avaient une politique sur l’utilisation des propres médicaments des patients, et 70 % (57/82) exigeaient une ordonnance du médecin pour utiliser ces médicaments. Les avantages perçus de l’utilisation des propres médicaments des patients étaient les économies de coûts (67 %; 48/72) et la réduction des stocks (57 %; 41/72). Les principaux désavantages cités étaient le risque d’erreur de médication (51 %; 35/69) et de perte des médicaments dans l’hôpital (32 %; 22/69), ainsi que le temps nécessaire à la gestion de ces médicaments (32 %; 22/69).

Conclusions : L’autorisation d’utiliser les propres médicaments des patients dans les hôpitaux canadiens sondés est fréquente, quoique les répondants aient soulevé certaines inquiétudes relativement à cette pratique. Pour apaiser ces inquiétudes, on recommande que les hôpitaux mettent en place une procédure d’identification, d’entreposage et d’enregistrement des propres médicaments des patients. Les coûts et les avantages liés à l’utilisation de ces médicaments doivent être évalués plus avant.

Mots clés : propres médicaments des patients, hôpital, politique, évaluation, erreur de médication
INTRODUCTION

Patients’ own medications are medications that patients have obtained in the community setting and have brought with them to the hospital on admission. Patients may be allowed to use their own medications in some Canadian acute care institutions. This may be necessary to avoid interruptions in drug therapy when the medication is not stocked or is not included in the hospital’s drug formulary. The reported benefits of using patients’ own medications include continuation of familiar, established therapy; better compliance after discharge; less drug waste within the health care system; and potential cost savings to the hospital.1,8

There is concern that the use of patients’ own medications may contravene federal legislation, specifically the Canada Health Act,9 which stipulates that drugs are to be provided as part of hospital services without cost to the patient. In addition, the practice of verifying and using patients’ own medications can be time consuming, and errors may occur. Potential sources of errors include administering medications in the hospital that have been incorrectly dispensed in the community,10 and double-dosing if the patient continues to take his or her own medications while receiving drugs provided by the hospital pharmacy.11

In general, the use of medications in hospital is governed by national standards and policies that have been developed with a view to ensuring that best practices are followed, that consistent care is provided, and that patient harm is minimized. The 1993 Guidelines for Practice of the Canadian Society of Hospital Pharmacists (CSHP)12 described the safe use of patients’ own medications in Canadian hospitals. The guidelines state that patients who have brought in their own medications are to be encouraged to send those medications home or, if this is not possible, the medications must be identified, stored in a secure area, and returned to the patient at the time of discharge. If patients’ own medications are used, the following elements are mandatory: the hospital has policies and procedures for the use of patients’ own medications within the hospital, patients’ own medications must be verified before administration, and prescribers must write orders for the administration of patients’ own medications. Patients’ own medications that are not returned to the patient are to be destroyed according to local requirements.12

The frequency and nature of use of patients’ own medications in Canadian hospitals is not known. In a 1999 survey of the use of therapeutic interchanges in Canadian hospitals with more than 100 beds, Eurich and others13 found that 186 (88%) of the 211 hospitals surveyed had a therapeutic interchange program. Of these 186 hospitals, 156 (84%) allowed patients to use their own medications if they were taking nonformulary medications at the time of admission to hospital. In the same year, another survey of US hospitals with up to 200 beds revealed that 91% (140/154) of responding hospitals allowed the use of patients’ own medications.14 The practice of using patients’ own medications has been poorly studied in Canada, and little is known about the content of policies related to patients’ own medications. The objective of the survey reported here was to collect information on the content of institutional policies related to use of patients’ own medications, to determine how such policies have been developed and implemented, to identify any challenges (and possible solutions) to the development of such policies, and to gather opinions about the advantages and disadvantages of using patients’ own medications and the results of policy evaluations, if available.

METHODS

A 3-page survey (Appendix 1) was developed to allow hospital pharmacy directors to comment on their institutions’ policies related to patients’ own medications. Respondents were also asked to provide copies of the policies and evaluations of the policies, if available. A similar survey administered to small US hospitals15 was obtained for guidance in developing the Canadian survey. The survey was pilot-tested by 3 hospital pharmacy practitioners not involved in the project, and improvements were made on the basis of their feedback.

E-mail addresses for Canadian hospitals were obtained on June 26, 2004, from the website of the Hospital Pharmacy in Canada survey (http://www.lillyhospitalsurvey.ca), a survey of pharmacy directors of Canadian hospitals having at least 50 acute care beds. Electronic communication was chosen for this survey because of time and resource constraints. Ethics approval was waived by the local institutional research ethics board.

The survey was sent by e-mail to 178 separate e-mail addresses in August 2004. The first author’s pharmacy director provided a cover message inviting recipients to participate. Twelve addresses were subsequently excluded: for 11 the message was returned as undeliverable, and the 12th was the institution where the first author (H.L.) was employed; this left a potential sample size of 166. A follow-up message was sent by e-mail 4 weeks later to increase the response rate. Pharmacists in Nova Scotia were also contacted individually by e-mail in an effort to obtain more local data from the first author’s home.
province. The individual e-mails generated 5 more survey responses. The survey was presented in English only. Most surveys were not returned anonymously; either the e-mail address, fax number, or full address of the respondent was included in the return survey by most respondents.

Statistical Analysis

Responses were entered into a computerized database (Microsoft Excel 97), which was used to generate descriptive statistics.

RESULTS

Demographic Characteristics

In response to the 166 valid e-mail messages sent, 86 hospitals (52%) responded. Fifteen of these respondents also supplied their respective institution’s policies and evaluations. The surveys were completed by a pharmacist (98% [84/86]) or a nurse (2% [2/86]). The respondents held the position of director (62% [52/84]), manager or supervisor (29% [24/84]), staff (7% [6/84]) or other (2% [2/84]). On a provincial basis, the number of surveys returned was greatest for Ontario (32 surveys [37%]). Thirty-six percent (31/86) of the responses were from hospitals with 200 beds or fewer, and 45% (38/85) of hospitals reported that they used primarily a unit-dose drug distribution system (Table 1).

Practices Relating to Patients’ Own Medications

The use of patients’ own medications was allowed in 98% (83/85) of hospitals. For most hospitals (89% [76/85]), the use of patients’ own medications was permitted only when necessary, for example if the medication was not stocked. A minority of hospitals (8% [7/85]) actively encouraged the use of patients’ own medications (Table 2), and 2% (2/85) did not allow their use. Only 3 hospitals, 2 in Ontario and 1 in New Brunswick, had dedicated staff to handle patients’ own medications.

Respondents were asked to identify the types of patients’ own medications that could be used (by checking as many types as applicable from the list in the survey). In order of frequency, the categories of medications allowed as patients’ own medications were nonformulary and nonstocked drugs (83% [70/84]), prepackaged medications (e.g., oral contraceptives) (60% [50/84]), investigational or clinical trial medications (55% [46/84]), multidose medications (e.g., inhalers, eye drops) (48% [40/84]), complementary and alternative agents (36% [30/84]), compounded preparations (33% [28/84]), over-the-counter and nonprescription drugs (27% [23/84]), all medications including controlled substances (26% [22/84]), brand-name medications when only the generic is stocked (17% [14/84]), and all medications except controlled substances (13% [11/84]). In terms of when patients’ own medications could be used (more than one answer allowed), most of the hospitals allowed use of a patient’s own medication if the medication was not stocked by the pharmacy (93% [78/84]), if the supply of the drug was delayed (42% [35/84]), and/or at the patient’s preference or discretion (31% [26/84]).

Table 1. Characteristics of 86 Hospitals Responding to a Survey on Use of Patients’ Own Medications

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part of a multisite hospital, region, or authority (n = 84)</td>
<td>43 (51)</td>
</tr>
<tr>
<td>Teaching hospital (n = 85)</td>
<td>25 (29)</td>
</tr>
<tr>
<td>Size ≤ 200 beds</td>
<td>31 (36)</td>
</tr>
<tr>
<td>Unit-dose drug distribution system (n = 85)</td>
<td>38 (45)</td>
</tr>
<tr>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>Western provinces</td>
<td>22 (26)</td>
</tr>
<tr>
<td>Ontario</td>
<td>32 (37)</td>
</tr>
<tr>
<td>Quebec</td>
<td>14 (16)</td>
</tr>
<tr>
<td>Atlantic provinces</td>
<td>18 (21)</td>
</tr>
</tbody>
</table>

Table 2. Selected Characteristics of the 7 Hospitals that Actively Encouraged the Use of Patients’ Own Medications

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No. (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location</td>
<td></td>
</tr>
<tr>
<td>British Columbia</td>
<td>1 (14)</td>
</tr>
<tr>
<td>Ontario</td>
<td>2 (29)</td>
</tr>
<tr>
<td>New Brunswick</td>
<td>1 (14)</td>
</tr>
<tr>
<td>Nova Scotia</td>
<td>3 (43)</td>
</tr>
<tr>
<td>Size &gt; 500 beds</td>
<td>2 (29)</td>
</tr>
<tr>
<td>Policies on use of patients’ own medications</td>
<td></td>
</tr>
<tr>
<td>Type of medications allowed:</td>
<td></td>
</tr>
<tr>
<td>multidose medications</td>
<td>6 (86)</td>
</tr>
<tr>
<td>Staff who verify patients’ own medications: pharmacy</td>
<td>7 (100)</td>
</tr>
<tr>
<td>Policy on use of patients’ own medications available</td>
<td>6 (86)</td>
</tr>
<tr>
<td>Dedicated staff for patients’ own medications</td>
<td>1 (14)</td>
</tr>
<tr>
<td>Use of patients’ own medications has been evaluated</td>
<td>4 (57)</td>
</tr>
</tbody>
</table>
The most frequent method of dispensing and administering patients’ own medication was administration by the nurse from the original bottle or package (75% [63/84]), followed by repackaging and relabelling of the medication by the pharmacy (21% [18/84]), self-administration from the original bottle or package by the patient (19% [16/84]), and relabelling but not repackaging by the pharmacy (10% [8/84]). One respondent stated that the method depended on how the drug was supplied to the pharmacy, and some respondents reported the use of more than one method. If a prescription refill was needed while the patient was still in hospital, this was done by the community pharmacy (49% [41/83]), the hospital pharmacy (45% [37/83]), or through a request to the patient or family (8% [7/83]). A few hospitals followed methods not prespecified on the survey, stating that no refills were necessary because the prescription was filled as soon as the hospital pharmacy received its supply (2% [2/83]), that the method of refill depended on the situation (2% [2/83]), or that a health food store or complementary or alternative medicine practitioner would refill such prescriptions (1% [1/83]). As well, some respondents stated that the hospital pharmacy would refill the prescription if the patient did not have a drug plan, if a long stay in hospital was anticipated, if the patient could not use the formulary substitute, if the medication was investigational, or if the family could not bring in a new supply (1% [1/83] for each reason).

Policies Relating to Patients’ Own Medications

The majority of hospitals (72% [62/186]) had an approved policy on this topic, and the proportion was similar for single-site hospitals and those that were part of a region or authority. In 70% (57/82) of the hospitals, institutional policy required a written physician’s order (i.e., a specific indication in the patient’s chart) to use patients’ own medications; this percentage was slightly lower (63% [27/43]) among multisite hospitals. The pharmacy was most commonly the department solely responsible for the policy on patients’ own medications (57% [36/63]), but this duty was also frequently shared between pharmacy and nursing (27% [17/63]). In other hospitals, the policy was primarily developed by the pharmacy and therapeutics committee alone (5% [3/63]); by pharmacy, nursing, and the pharmacy and therapeutics committee (3% [2/63]); by the pharmacy, nursing, and risk management departments (3% [2/63]); and by pharmacy and the pharmacy and therapeutics committee (2% [1/63]). Stakeholders involved in development of the policy, besides pharmacy and nursing, included medical staff (72% [44/61]), hospital executives (33% [20/61], risk management staff (25% [15/61]), the legal department (13% [8/61]), the provincial government (8% [5/61]), hospital committees (7% [4/61]), the quality assurance department (3% [2/61], patient representatives (2% [1/61]), and the provincial pharmacy regulatory authority (2% [1/61]).

Pharmacy directors were asked about challenges to the development and implementation of policies related to patients’ own medications and any potential solutions, which were grouped into 6 themes (listed in Table 3).

Respondents reported the following perceived advantages of using patients’ own medications: cost savings (67% [48/72]), decreased inventory (57% [41/72]), reduced delays in therapy (21% [15/72]), continuity of care (19% [14/72]), and increased pharmacist involvement in patient care (11% [8/72]). Disadvantages were the potential for medication errors (51% [35/69]), the time required to process them (32% [22/69]), and the loss of medications brought from home (32% [22/69]). Other disadvantages cited were medications not being included in the pharmacy drug distribution system (19% [13/69]), lack of knowledge about when refills are needed (19% [13/69]), delays in therapy while awaiting verification (10% [7/69]), and patient dissatisfaction with using their own medications (9% [6/69]).

Evaluation of Policies Relating to Patients’ Own Medications

Most hospitals (79% [44/56]) had not evaluated their policy, and some did not know if an evaluation had occurred (5% [3/56]). For those who were aware of an evaluation (16% [9/56]), the purpose was to confirm cost savings (3 hospitals) and to update or make improvements to the policy (6 hospitals). Outcome measures included the number of medication incidents that represented errors of omission, the use of nonformulary medications, the number of times that a nonformulary medication had been obtained by the pharmacy for an inpatient, and the average cost avoided per patient admission when patients’ own medications were used. Cost savings in a Nova Scotia hospital with 200 beds or fewer were reported to be $28.03 per patient admission in 1996 and $38.07 in 1998.
Table 3. Main Challenges and Proposed Solutions in Development and Implementation of Policies Related to Patients’ Own Medications, as Identified by Survey Respondents (n = 26)

<table>
<thead>
<tr>
<th>General Issue</th>
<th>Specific Challenges</th>
<th>No. of Hospitals</th>
<th>Proposed Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance</td>
<td>Lack of compliance with policy by nursing and pharmacy staff (e.g., failing to verify patients’ own medications; orders specifying “use home meds”)</td>
<td>12</td>
<td>Provide education and distribute memoranda to reinforce existing policy</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Have pharmacy staff go to nursing unit to verify patients’ own medications</td>
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<td></td>
<td></td>
<td></td>
<td>Develop policy to require complete written prescriptions for use of medications brought from home</td>
</tr>
<tr>
<td>Legislation</td>
<td>Canada Health Act</td>
<td>11</td>
<td>Seek legal opinion</td>
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<tr>
<td></td>
<td>Provincial legislation</td>
<td></td>
<td>Allow voluntary use of patients’ own medications with patients’ consent</td>
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<tr>
<td></td>
<td>Private insurers</td>
<td></td>
<td>Allow use by short-stay patients and those with chronic conditions</td>
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<tr>
<td></td>
<td>Pharmacy regulatory authorities</td>
<td></td>
<td>Use only when the drug is not available from hospital pharmacy</td>
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<tr>
<td></td>
<td>(e.g., provincial college of pharmacists)</td>
<td></td>
<td>Modify regulations of the local pharmacy regulatory authority</td>
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<td></td>
<td></td>
<td></td>
<td>Replace medications on discharge</td>
</tr>
<tr>
<td>Process</td>
<td>Verification and storage of patients’ own medications</td>
<td>10</td>
<td>Use formulary system to communicate policy</td>
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<tr>
<td></td>
<td>Policy to be followed if pharmacy is closed</td>
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<td></td>
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<tr>
<td></td>
<td>Refills</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>How to develop, enforce, and communicate existing policy</td>
<td></td>
<td></td>
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<tr>
<td>Public and staff awareness</td>
<td>Answering questions about why patients’ own medications are used</td>
<td>9</td>
<td>Communicate with patients through hospital preadmission procedures</td>
</tr>
<tr>
<td></td>
<td>Public and staff acceptance of use of patients’ own medications</td>
<td></td>
<td>Offer formulary alternatives if the patient chooses not to use his or her own medications</td>
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<td></td>
<td>Changing culture so that patients’ own medications are brought to the hospital</td>
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<td>Provide patient education and written materials explaining the policy</td>
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<td></td>
<td></td>
<td></td>
<td>Ensure that patients are aware that participation is voluntary</td>
</tr>
<tr>
<td>Communication</td>
<td>With health providers</td>
<td>6</td>
<td>Offer in-services, distribute memoranda, and hold interdisciplinary meetings to disseminate and reinforce policy</td>
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<tr>
<td></td>
<td>Across multiple hospital sites</td>
<td></td>
<td>Form a new policy communication subcommittee of the hospital’s pharmacy and therapeutics committee</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Create a pharmacy-generated electronic worksheet to communicate issues related to use of patients’ own medications to nursing staff</td>
</tr>
<tr>
<td>Staff resources</td>
<td>Lack of pharmacist time to process patients’ own medications</td>
<td>4</td>
<td>Use pharmacy technicians to perform clerical and technical functions of patients’ own medications program</td>
</tr>
</tbody>
</table>

DISCUSSION

The survey reported here has provided the first snapshot of the use of patients’ own medications in Canadian health care institutions. Of the 86 hospitals that responded, most allowed the use of patients’ own medications, and a small minority actively encouraged their use. Two hospitals did not allow the use of any patients’ own medications. The primary objective for using these drugs was to maintain the patient’s therapy with a nonstocked or nonformulary drug. Cost savings were cited as the main advantage, followed by decreased inventory and reduced delays in therapy. The main disadvantages were the potential for medication errors, loss of medications, and the time involved to process these drugs. Many challenges to
the development and implementation of policies on patients’ own medications, along with potential solutions, were identified. Being informed about the challenges faced by other institutions should allow hospital managers to improve the success of their own policies.

The findings from this Canadian survey concur with the results of a similar survey conducted in the United States in 1999. In that study of small hospitals (up to 200 beds), 154 responses were received (51% response rate). In the Canadian survey, hospitals with up to 200 beds constituted 36% of respondents. A similar percentage of respondents allowed the use of patients’ own medications (91% in the United States and 98% in Canada), and the majority of use was for nonformulary medications (86% in the United States and 83% in Canada [for nonformulary or nonstocked drugs]). Other types of medications allowed by the US respondents were herbal and nutritional agents (67%) and investigational drugs (50%); the corresponding values from the Canadian survey were 36% for complementary and alternative agents and 55% for investigational and clinical trial drugs. In the US study, patients’ own medications were administered from their original containers by a nurse 80% of the time (75% for the Canadian survey).

The 2 most common problems identified by US hospitals were medication loss (57%) and errors (18%). In contrast, Canadian pharmacy directors mentioned potential medication errors (51%) more often than loss of medications (32%). This difference may be due to an increasing awareness of medication errors in recent years. In 2003, the Canadian Medication Incident Reporting and Prevention System received funding to improve the reporting of medication incidents and promote safe medication-use systems in Canada. As well, the Canadian Adverse Events Study was published in May 2004, just months before the survey was disseminated. Respondents from both countries documented that pharmacists were the health care professionals who identified the medications most of the time (60% in the US study, 64% in the Canadian study).

Pharmacy directors have institutional responsibilities to promote safe medication use and to employ an efficient drug procurement system. In the survey reported here, respondents voiced general concerns about the risks associated with using patients’ own medications, such as the potential for medication error. Despite these concerns, certain practices that might decrease the risk and that might help in compliance with CSHP guidelines were not universally adopted. These elements include having an approved hospital policy and requiring a physician’s order before a patient’s medication can be administered. Dua described the implementation of a “patients’ own drugs” scheme in a university hospital in the United Kingdom. That program used patients’ own medications for all medicines required by hospital patients, included assessments of medications for suitability, and provided formal training for nursing and pharmacy staff in the use of such drugs. Dua asserted that the program attenuated, rather than enhanced, risk management issues by training nursing staff to safely use patients’ own medications when the pharmacy was closed, educating patients about proper medication storage at home, reducing the risk of poor-quality drugs being administered, providing criteria for destroying expired or unusable medicines, and removing duplicate drugs from the patient’s possession just before discharge. The hospital determined that the program was cost-effective (i.e., saved more in drug costs than the cost of staff needed to run the program).

Cost savings from the use of patients’ own medications was an important feature for many of the Canadian hospitals that responded to our survey. One Nova Scotia hospital, which used patients’ own medications only when necessary, reported saving $30,000 annually. An Ontario hospital that actively encouraged the use of patients’ own medications stated that savings had been confirmed by formal evaluation; at that hospital, the process for using patients’ own medications had been in place for at least 10 years, but no further details about the program were given. Two hospitals that actively encouraged the use of patients’ own medications, one in New Brunswick and one in Nova Scotia, had conducted audits. The New Brunswick hospital, which used all of the patient’s personal medications where appropriate, has published its results. Pharmacy staff assess the medications of newly admitted patients for suitability of use. In 1995, the estimated cost avoidance was $32.70 per admission or $200,000 per year. The savings supported a staff of 2.5 FTE for the program, which has also allowed pharmacists to contribute to patient care. According to the survey reported here, the Nova Scotia hospital also encouraged the use of patients’ own medications, demonstrating per-patient cost savings of $28.03 in 1996 and $38.07 in 1998. Again, the rationale for using patients’ own medications was related to patient outcomes, through improved understanding of how to use their medications and potential reduction in hospital admissions because of drug-related problems. Notably, however, these audits were not formal analyses.

Limitations to this national survey included the nonrandomized nature of the sampling, which limits
and to determine cost-effectiveness. Only hospitals with e-mail addresses that had participated in the national Hospital Pharmacy in Canada survey were invited to participate in the survey reported here. Responses were not matched to the e-mail addresses to which the survey was sent; as such, data might have been provided by hospitals that received the electronic survey through forwarding from a pharmacy director on the original e-mail list (rather than directly from the survey authors). It is not known if the characteristics of nonrespondents differed from those of respondents. The overall response rate was moderate (52%), although within the typical range for mail surveys to professionals. Surveys were not returned anonymously, and it is therefore possible that respondents were not completely candid about their hospital’s policies or practices (to avoid criticism).

It is recommended that institutional policies be established to describe identification, storage, and documentation procedures for patients’ own medications and thus to address pharmacy directors’ concerns about safe and efficient use and procurement of these medications. Programs that encourage the use of patients’ own medications should be evaluated to identify the benefits and risks to patients and to the hospital, to determine the effect on human resources, and to determine cost-effectiveness.

References


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Appendix 1. Survey of Canadian Hospitals on Use of Patients’ Own Medications

This survey is gathering information on current practice and policy for the use of patients’ own medication (POM) in Canadian hospitals. Responses will be summarized into a policy document to inform decision makers in the Capital District Health Authority, Halifax, Nova Scotia. POM refers to the administration of a patient’s medication from home during the patient’s hospital stay. Pharmacy directors of 180 acute care hospitals have been contacted. Your participation is completely voluntary. Information will be summarized by hospital demographics, such as province, bed size, teaching, and drug distribution. Individual hospitals will not be identified in the report.

INSTRUCTIONS: The survey should be completed by a pharmacist or other health professional knowledgeable with your institution’s POM policy; it should take about 15 minutes. Please answer the questions in terms of what is the usual situation in your institution. If you have questions about the survey, please email heather.lummis@cdha.nshealth.ca or call Heather at 902-473-2922. Please fax or email your completed survey, your institution’s policy and evaluation (if available) to Heather Lummis, 902-473-3701, by September 1, 2004. Thank you for your participation!

A. YOUR INSTITUTION

1. Please answer questions about your institution:
   a) Affiliation: □ single-site hospital  □ multi-site hospital, region or authority
   b) Bed size (include all beds): □ ≤ 200 □ 201–500 □ > 500
   c) Province/territory: □ BC □ AB □ SK □ MB □ ON □ QC □ NB □ NS □ PE □ NL □ YT □ NT □ NU
   d) Teaching: □ teaching □ non-teaching
   e) Primary (≥ 75%) drug distribution system for ACUTE CARE BEDS:
      □ unit-dose □ traditional fill (# ___ days supply) □ Other: ________

2. Please answer questions about yourself:
   Your health background: □ Pharmacist □ Nurse □ Other: ________
   Your position: □ Director □ Manager/supervisor □ Staff □ Other: ________

3. Contact Information: (for future contact or receive the results of the survey)
   Name: _______________________________________________
   Address: _____________________________________________
   Telephone: ___________________________________________
   Email: ________________________________________________

B. POLICY CONTENT

1. Does your hospital allow the use of patients’ own medication (POM) during their admission?
   □ Yes, actively encouraged (go to Question 3)
   □ Yes, only when necessary (Continue)
   □ No (Answer Question 2 only)

2. What usually happens to medications brought in by patients?
   □ Sent home with family or friend
   □ Stored in hospital pharmacy until discharge
   □ Stored on nursing unit until discharge
   □ Other: ________

3. What TYPES of medication are allowed for patients’ own medications (POM) (check all that apply)?
   □ All medications, but not controlled substances
   □ All medications, including controlled substances
   □ Clinical trial/investigational
   □ Nonformulary/non-stocked
   □ Complementary/alternative
   □ Compounded preparations
   □ Multidose preparations (eg. inhalers, eye drops)
   □ Over-the-counter, nonprescription
   □ Prepacked or cycle medication (eg. birth control pills)
   □ Branded medications, when the pharmacy only supplies generic
   □ Other: ____________________________

4. WHEN is the use of POM allowed (check all that apply)?
   □ Anytime, no restrictions
   □ At patient’s preference or discretion
   □ When medication is not stocked by the pharmacy
   □ When supply from the pharmacy is delayed
   □ Other: ____________________________

5. Which health provider usually VERIFIES the medications before use?
   □ Pharmacist/technician
   □ Nurse
   □ Physician
   □ Other: ____________________________

6. Are PHYSICIAN ORDERS necessary for using POM?
   □ Yes □ No

7. Does your pharmacy have DEDICATED STAFF to allow patients to use their own medications?
   □ Yes, (please specify all staff in total full-time equivalents (FTE): ________)
   □ No

8. How are POM dispensed and administered?
   □ Pharmacy repackages and relabels
   □ Nurse administers from original bottles or package
   □ Patient self-administers from original bottles or package
   □ Other: ____________________________

9. Who usually REFILLS/RESUPPLIES the POM?
   □ Hospital pharmacy
   □ Community pharmacy
   □ Other: ____________________________

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10. Are there any ADVANTAGES to the use of POM in your hospital? □ Yes □ No □ Don't know
   If yes, please explain (eg. increased pharmacist involvement, cost savings):

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

11. Are there any DISADVANTAGES to the use of POM in your hospital? □ Yes □ No □ Don't know
   If yes, please explain (eg. loss of POM, medication errors):

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

If your institution has a written policy, please answer the following questions:

C. POLICY DEVELOPMENT

1. WHY was the policy developed (check all that apply)?
   □ Patient safety □ Prevent loss of POM
   □ Drug cost savings □ Don't know
   □ Other: ________________________

2. Which DEPARTMENT developed or is primarily responsible for the policy (check all that apply)?
   □ Pharmacy □ Nursing □ Risk management
   □ Other: ________________________

3. Which STAKEHOLDERS were consulted (check all that apply)?
   □ Pharmacy    □ Nursing
   □ Physicians   □ Risk management
   □ Quality assurance □ Legal
   □ Hospital executive □ Patient representative/liaison
   □ Public □ Provincial government
   □ Private industry □ Don't know
   □ Other: ________________________

4. Please list the MAIN CHALLENGES in DEVELOPING the policy (such as issues with private insurers or the Canada Health Act) and how these were overcome:

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
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<tbody>
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D. POLICY IMPLEMENTATION

1. Please list the MAIN CHALLENGES in IMPLEMENTING the policy, if any, and how these were overcome:

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<thead>
<tr>
<th>Challenge</th>
<th>Solution</th>
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E. POLICY EVALUATION

1. Has an EVALUATION of the policy been performed? □ Yes □ No □ Don't know
   If yes, please summarize main findings (attach report if possible):

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

2. Has the use of POM saved hospital drug costs? □ Yes □ No □ Don't know
   Please feel free to add any additional comments you think would be helpful:

   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

Thank you!