CLINICAL REVIEW

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Pharmacists' perspectives on providing chronic disease management services in the community — Part 1: Current practice environment

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We were interested in exploring Canadian pharmacists' opinions on the enablers and challenges to providing services related to chronic disease management and the development of a practice model to support such services.

Les auteurs sont intéressés à sonder l'opinion des pharmaciens du Canada sur les facteurs favorables et les enjeux de la prestation de services liés à la prise en charge des maladies chroniques et à l'élaboration d'un modèle de pratiques qui appuie la prestation de ces services.

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Abstract

Background: Several practice models have been developed to support pharmacists in providing chronic disease management. However, most of these models have not been readily accepted by pharmacists, which has led to low uptake and short-term change.

Methods: Pharmacists were recruited to participate in focus groups held in Alberta and British Columbia. Qualitative methodologies involving a phenomenological approach with content analysis were used to gather and analyze information.

Results: In total, 36 pharmacists participated in 8 focus groups. Analysis of their discussions revealed 4 main themes: the current practice environment and the need for education about, remuneration for and a plan for the implementation of chronic disease management services. Participants cited several challenges to the provision of this type of care, as experienced in the current practice environment: time constraints; relationships with physicians, patients and employers; limited access to clinical information; and absence of a model for chronic disease management in pharmacy practice. However, these perceptions were not universal, and pharmacists with experience in this area described some of these commonly cited "challenges" (e.g., relationships with physicians) as enablers in their own practices. In addition, staff pharmacists, regional managers and owners often had differing opinions about the key challenges and the role of remuneration.

Conclusion: Some of the perceived challenges to providing chronic disease management described by staff pharmacists were not consistently supported by employers or those with experience in this practice area. This observation suggests that the greatest challenge to developing a successful model of chronic disease management for pharmacists lies in pharmacists' own perceptions about their relationships with other health care providers and their own role as health care professionals. These issues must be addressed if the practice of pharmacy is to move forward. *Can Pharm J* 2009;142:234-239.

Introduction

After decades of effort, pharmacists are gaining recognition as health care professionals. In its influential report, the Commission on the Future of Health Care in Canada (chaired by Roy Romanow) envisioned a health care system in which pharmacists, as members of health care teams, would optimize medication therapy and act

as a drug information resource. In so doing, they would become, in essence, the "drug experts" that they often advocate themselves to be.[1] The services associated with these roles, including chronic disease management services, have the potential to improve patient outcomes and the use of health care resources.[2-5]

However, with progress come new challenges. Legislative changes in provinces such as Alberta and Ontario are pushing pharmacists to adopt new practice models for services that are unrelated to dispensing. Unfortunately, no readily available model of pharmacy practice has proven sustainable. In other parts of the world, pharmacies and government agencies attempting to increase pharmacists' scope of practice have had initial success, but the longer-term results have been disappointing.[6-8] In many cases, pharmacists have been unable or unwilling to incorporate new activities into their already busy practices and change has proven only temporary.

What can we in Canada learn from these experiences? The autonomy of a profession is tied to its ability to control its own remuneration, to influence policy decisions and to make independent judgments.[9] If pharmacists are to gain control of their own profession, they must move from a practice that relies on the prescriptive decisions of physicians and the technical aspects of dispensing to one that emphasizes their contribution to the health care system. To better understand Canadian pharmacists' views on practice change, we approached pharmacists directly, using qualitative research methods to ask their opinions on providing CDM services and on receiving payment for such services.

The purpose of this report is to describe the methods and results of those discussions. In this paper, we discuss the factors that pharmacists perceived as potential enablers and challenges to providing CDM in their current practice environments. A subsequent paper will examine the development and implementation of CDM services.[10]

Methods

We recruited key stakeholders from all facets of pharmacy practice: staff pharmacists, pharmacy managers and owners from community setting; pharmacists from the hospital and primary care settings; and regional managers from large-chain retailers. Participants were recruited in both Alberta and British Columbia. All participants from outside the community practice setting had previous community experience. For this project, ethical and privacy considerations meant that we were limited to convenience sampling. A recruitment notice explaining the project was placed in provincial newsletters produced by the Alberta Pharmacists' Association and the British Columbia Pharmacy Association. This approach was intended to allow participation by any pharmacist in either province who had an interest in discussing new models for chronic disease management. We also contacted pharmacists affiliated with the Centre for Community Pharmacy Research and Interdisciplinary Strategies (c/COMPRIS) in Alberta and the Community Pharmacy Research Network (part of the Collaboration for Outcomes Research and Evaluation [CORE]) in British Columbia to seek their participation. To further facilitate participation, both face-to-face and telephone focus groups were held in Alberta.

Given the potential for diversity of thoughts and opinions among the stakeholder groups recruited (staff pharmacists, pharmacy managers and owners, regional managers), each focus group was composed of individuals with similar background and experience.[11] All focus group sessions were conducted by an experienced interviewer. The discussions were recorded electronically and transcribed in full. We continued running focus groups until novel information was no longer being obtained and saturation had been achieved. The study methods were approved by the appropriate research ethics boards in both Alberta and British Columbia. Each participant received a $50 honorarium.

Two of the researchers (MR and KAG) analyzed the qualitative data, employing a phenomenologi-

Key points

- Few studies have evaluated pharmacists' opinions on the enablers and challenges for a shift in practice toward chronic disease management (CDM), including alternative forms of remuneration.
- Pharmacists identified their relationships with physicians, patients and employers as the greatest challenge to practice change, but this view was not shared by pharmacists already providing CDM services.
- When considering a change in practice, pharmacists must address their own misperceptions about their ability to provide new services (e.g., services in CDM) and their role as health care professionals.

BOX 1 Terms

Chronic disease management (CDM) involves the early identification of individuals with chronic diseases (e.g., diabetes mellitus, asthma, arthritis) and the provision of quality health care for those conditions. The **current practice environment** encompasses both the positive and negative aspects of pharmacy practice and their impact on the provision of CDM (e.g., human resources, management, physical setting and workflow). **Enablers** are aspects of pharmacy practice that afford pharmacists the opportunity to provide CDM services. **Challenges** are aspects of pharmacy practice that are perceived to hinder the ability of pharmacists to provide CDM services.

cal approach with qualitative content analysis. This approach required an iterative process, whereby the researchers first examined the transcripts individually, using the focus group questions as signposts, to identify recurring topics, which were designated as major themes. We then combined and reassessed these analyses to further refine the themes, to ensure consistency and to identify quotations that could be used to exemplify the themes. The transcripts were then examined once more to identify quotations and ideas that contradicted the major themes. This process, called reflexivity,[12] demanded that researchers confront their own biases and predispositions but ultimately yielded a richer analysis of the material.

After this process was complete, the remaining members of the research team more closely examined the major themes identified and their connection to the research question, adding another layer of analytic investigation. This form of triangulation allowed the research team to discuss the focus group material from a variety of perspectives, which also strengthened and enriched the final analysis.

Results

Of the 36 participants, 14 were identified as staff pharmacists, 14 as managers or owners and 8 as regional managers from large-chain community pharmacies (Table 1). From the transcripts of the 8 focus groups, we identified 4 major themes: the current practice environment and the need for education about, remuneration for, and a plan for the implementation of CDM services. The first of these themes, the most widely discussed of the 4, is discussed in detail herein; the latter 3 themes will be explored in a subsequent paper.[10]

Although some aspects of the current practice environment enable the provision of CDM by pharmacists, many other aspects were perceived to present challenges. Specifically, participants who commented on their own practices focused on 3 main components: the perception of the pharmacist as a health care professional, access to information and the current model for pharmacist involvement in CDM.

Pharmacist as a health care professional

All of the focus groups discussed current and potential roles of the pharmacist in relation to physicians, patients and employers, identifying distinct challenges in perceived relationships with each of these groups. The participants discussed only one specific group of other health care professionals, that being physicians, even though several of the pharmacists came from clinical settings where direct contact with health care professionals other than physicians would be common. Although those practising in primary care or hospital environments often described the relationship with physicians as an enabler of practice change, several community pharmacists described a more limited relationship with physicians:

> "I can discuss with the physician right next door to our store … where I feel our niche is [in terms of the diabetes services we can provide to their patients] and for some reason, the next time that they see a newly diagnosed patient with diabetes, it slips their mind." (Pharmacy owner)

Participants' particular focus on relationships with physicians probably reflected the power attributed to the physician's position as leader of the health care team. In the eyes of pharmacists, physicians may act as gatekeepers, controlling patients' access to pharmacy services that are unrelated to dispensing.

Participants also described their beliefs about patients' perceptions of the role of pharmacists, although these discussions were generally limited to regional managers and owners and focused on patients' desire for services:

> "I think there is need [for chronic disease management] … Demand … has to be clarified because I think a lot of patients don't necessarily understand that they have

TABLE 1 Province of practice and job description for focus group participants

		Province; no. of participants		
Stakeholder group	**No. of focus groups**	**Alberta**	**British Columbia**	**Total**
Staff pharmacists	3	8	6	14
Managers and owners	3	6	8	14
Regional managers	2	4	4	8
Total	8	18	18	36

a need for more comprehensive medicine management, or better management of their disease." (Pharmacy owner)

Many of the regional managers felt that without the appropriate "demand" from patients, CDM would not be sustainable. However, as one regional manager pointed out, this relationship is dynamic and evolving:

"We customize [the medication review], we spend way more time than I think [the patients] ever expected, and from all the feedback we've received, it's been a fantastic experience for them, just having somebody review [their medications]." (Regional manager)

This perception on the part of managers that patients drive "demand" for new services may underestimate the role of the pharmacists in their employ and their ability to advertise new services to the public.

Unlike regional managers and owners, staff pharmacists often described their attempts to do more for their patients as having altruistic motivations, and they were concerned that their managers did not support this expanding role:

"I don't get paid for it, but I want to do it because I care about that [patient], and I [want to] make a difference in that life … [But my] pharmacy doesn't recognize it. In fact, they might even look upon it in an unfavourable manner because in the end, it's taking away from their time." (Staff pharmacist)

However, pharmacy owners and regional managers regularly expressed support for CDM services, even describing successful programs in their respective pharmacies. This represents an interesting contradiction in understanding between staff pharmacists and management in relation to the expanding roles of pharmacists. Both parties expressed an independent interest in offering CDM to patients, but they did not seem to communicate this interest effectively to one another. As a result, in the eyes of staff pharmacists, managers acted as a barrier to providing CDM.

Access to information

Many community-based participants felt that they had limited access to the information required to provide CDM. In contrast, this topic was left largely unaddressed by hospital or primary care pharmacists, who seemed to have ready access to such resources. The concerns of the community pharmacists centred on access to general, disease-specific information and patient-specific clinical information. For example, several community-based participants cited difficulty accessing current guidelines for CDM:

"There is no central body that provides guidelines to community pharmacists, for the management of disease … [So] we're relying on product-based educators, to bring us guidelines … and that, as you can tell by the tone of my voice, is something I'm quite upset about." (Pharmacy owner)

In addition, some participants felt that available guidelines failed to acknowledge the potential contribution of pharmacists. This inability to access information represented a major stumbling block to community pharmacists; they felt that without this information they would be unable to provide effective care to their patients.

No established model for chronic disease management

All of the focus groups identified a perceived lack of time outside of current dispensing responsibilities as a barrier to providing CDM services. Specifically, there was concern that the current model for practice is not flexible enough to simply incorporate this type of service:

"The way that it's put by corporate, though, is that you have to fit it into your already hugely busy day. And that really intimidates a lot of pharmacists … from the second you walk into the dispensary, you're running as fast as you can, [talking] as fast as you can, [and filling] prescriptions [as fast as you can]…" (Staff pharmacist)

In support of this observation, pharmacy owners and regional managers said they would want to review a business model for CDM services before committing their support for proposed changes:

"At the end of the day, the challenge [is] that you have to show profit or else you can't pay your bills and move forward … Right now the model is still being formulated … [and the proposed] reimbursement for professional services isn't enough to justify spending labour towards this activity because it doesn't pay …" (Regional manager)

Points clés

• Peu d'études se sont penchées sur l'opinion des pharmaciens concernant les facteurs favorables et les enjeux liés à la prise en charge des maladies chroniques, y compris les autres formes de rémunération.

• Les pharmaciens ont décrit les relations qu'ils entretiennent avec les médecins, les patients et les employeurs comme étant le plus grand défi au changement dans l'exercice de la profession, mais cette perspective n'est pas partagée par les pharmaciens qui offrent déjà des services de prise en charge des maladies chroniques.

• Lorsqu'il est question de changer leur façon d'exercer la profession, les pharmaciens doivent d'abord modifier leur fausse perception concernant leur capacité à offrir de nouveaux services (comme la prise en charge des maladies chroniques) et leur rôle en tant que professionnels de la santé.

Moreover, participants at all levels of community practice identified the current dispensing model, the typical layout of pharmacies and the lack of documentation systems as impediments to the provision of CDM services. As one regional manager pointed out, "pharmacies are really set up for the traditional drug dispensing model."

Discussion

Using focus group methodology, we asked pharmacists for their thoughts and opinions on both providing and receiving payment for CDM. Participants included staff pharmacists from the community, hospital and primary care settings, pharmacy managers and owners, and regional pharmacy managers. When asked to describe enablers and challenges to providing CDM, participants focused on the current practice environment. Specifically, participants discussed how they were perceived by others, their access to clinical information and the absence of a service model for CDM.

Overall, pharmacists' perceptions varied among the 3 stakeholder groups, especially with respect to their relationships with others. These difficulties have been reported elsewhere,[13,14] and the degree to which they were felt was not equal for all participants. For example, staff pharmacists practising in the community setting felt that poor physician and employer expectations hampered their ability to provide CDM. In contrast, pharmacists experienced in this type of care, most of whom worked in the primary care or hospital setting, described these relationships as enabling CDM in their practices. Furthermore, despite the concern of some staff pharmacists, most regional managers favoured a move toward the provision of such services, provided there was sufficient support in place to meet business needs and provided there was appropriate "demand" from patients. In addition to the difficulties described above, pharmacists in the community also cited poor access to disease-specific information, whereas those currently providing CDM were familiar with the guidelines for the most common conditions (e.g., asthma, diabetes), including open-access clinical practice guidelines in British Columbia (**www.health.gov.bc.ca/gpac/index.html**) and pharmacist-specific guidelines (**www.cpjournal.ca**).

Physicians' attitudes toward pharmacists (as perceived by participants) and pharmacists' own understanding of these attitudes were consistent with the literature.[15-17] The same cannot be said for perceptions about pharmacists' relationships with patients. Many pharmacists focused on the public's or patients' "demand" for pharmacy services, rather than their needs. In doing so, participants may have been demonstrating what has been termed the "pharmacist's natural attitude," a tendency to provide product-centric services (e.g., counselling and education about specific products and about medication adherence) rather than services that meet patients' needs.[18] In addition, by focusing on the perceptions of others, participants may have been demonstrating a lack of confidence in their own role as health care professionals. Although pharmacy as a whole may be shifting toward achieving meaningful relationships with patients, a failure to account for the complexities of this relationship may result in frustration for pharmacists and confusion for patients.[19]

In considering the results of this study, it is important to understand some of its limitations. Because of ethical and privacy restrictions related to recruitment,[20] we, like other BC researchers, could use only a convenience sample, which probably led to selection bias. The use of this sampling strategy probably limits the generalizability of our results to a select group of motivated pharmacists. Many of the challenges discussed by these participants are likely to be even greater for other pharmacists. Although this sampling method was not ideal for our study, there are circumstances where convenience sampling can be appropriate,[21] for example, when the topic has not been well studied in the past and where specific questions and areas of inquiry are not well established, as was the case for the study question examined here. Furthermore, this sampling technique can be used in cases where the resources available to the researcher limit the amount of data that can be collected.

Conclusions

This study showed that a perceived barrier to providing CDM for one pharmacist may be an enabler for another. As a result, one of the greatest barriers to practice change may be pharmacists' concerns and their perceptions of those around them, including patients, physicians and employers. Although all stakeholders will need to address this barrier, it is pivotal that individual pharmacists understand their role in CDM and strive to overcome challenges to providing this type of care. Stated another way, it may well be that pharmacists themselves represent the greatest barrier to a shift in practice toward chronic disease management. ■

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References

1. Commission on the Future of Health Care in Canada; Romanow R (chair). *Building on values: the future of health care in Canada*. Saskatoon (SK): The Commission; 2002.

2. Roughead E, Semple S, Vitry A. Pharmaceutical care services: a systematic review of published studies, 1990 to 2003, examining effectiveness in improving patient outcomes. *Int J Pharm Pract* 2005;13:53-70.

3. Beney J, Bero L, Bond CM. Expanding the roles of outpatient pharmacists: effects on health services utilisation, costs, and patient outcomes. *Cochrane Database Syst Rev* 2000;(3): CD000336.

4. Morrison A, Wertheimer A. Evaluation of studies investigating the effectiveness of pharmacists' clinical services. *Am J Health Syst Pharm* 2001;58:569-77.

5. Kaboli P, Hoth A, McClimon B, Schnipper J. Clinical pharmacists and inpatient medical care: a systematic review. *Arch Intern Med* 2006;166:955-64.

6. Chan P, Grindrod KA, Bougher D, et al. A systematic review of remuneration systems for clinical pharmacy care services. *Can Pharm J* 2008;141(2):102-12.

7. Roberts AS, Benrimoj SI, Chen TF, et al. Understanding practice change in community pharmacy: a qualitative study in Australia. *Res Soc Adm Pharm* 2005;1:546-64.

8. Kroger E, Moisan J, Gregoire JP. Understanding Quebec pharmacists' behavior. *Ann Pharmacother* 2000;34:309-16.

9. Elston M. The politics of professional power: medicine in a changing health service. In: Gabe J, Calnan M, editors. *The sociology of the health service*. London (UK): Routledge; 1991.

10. Rosenthal M, Grindrod KA, Bougher D, et al. Pharmacist perspectives on providing chronic disease management services in the community — part 2: development and implementation. *Can Pharm J* 2009;142(6): Forthcoming.

11. Krueger RA. *Focus groups: a practical guide for applied research*. Thousand Oaks (CA): Sage Publications; 1994.

12. Schwandt T. *Dictionary of qualitative inquiry*. 2nd ed. Thousand Oaks (CA): Sage Publications; 2001.

13. Bell HM, McElnay JC, Hughes CM, Woods A. A qualitative investigation of the attitudes and opinions of community pharmacists to pharmaceutical care. *J Soc Admin Pharm* 1998;15:284-95.

14. Mottram DR, Jogia P, West P. The community pharmacists' attitudes toward the extended role. *J Soc Admin Pharm* 1995;12:12-7.

15. Hughes C, McCann S. Perceived interprofessional barriers between community pharmacists and general practitioners: a qualitative assessment. *Br J Gen Pract* 2003;53:600-6.

16. Edmunds J, Calnan M. The reprofessionalisation of community pharmacy? An exploration of attitudes to extended roles for community pharmacists amongst pharmacists and general practitioners in the United Kingdom. *Soc Sci Med* 2001;53:943-55.

17. Adamcik B, Ransford H, Oppenheimer P, et al. New clinical roles for pharmacists: a study of role expansion. *Soc Sci Med* 1986;23:1184-200.

18. de Oliveira DR, Shoemaker SJ. Achieving patient centeredness in pharmacy practice: openness and the pharmacist's natural attitude. *J Am Pharm Assoc* 2006;46:56-64.

19. Austin Z, Gregory P, Martin J. Characterizing the professional relationship of community pharmacists. *Res Soc Adm Pharm* 2006;2:533-46.

20. Harris MA, Levy AR, Teschke K. Personal privacy and public health: impacts of privacy legislation on health research in Canada. *Can J Public Health* 2008;99:293-6.

21. Riffe D, Lacy S, Fico FG. *Analyzing media messages: using quantitative content analysis in research*. Mahwah (NJ): Lawrence Erlbaum Associates; 2005.