Characteristics of pharmacists who enrolled in the pilot ADAPT Education Program: Implications for practice change

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Introduction

Research has shown that patient-centred pharmacist interventions can be effective in a wide range of practice settings and disease states.¹⁻⁶ In recent years, several Canadian jurisdictions have begun to pay for pharmacist-led clinical services such as medication reviews, minor ailment management and smoking cessation counselling.⁷ Unfortunately, it has been widely reported that uptake of these services is often unimpressive, even when remuneration is available.^{8,9} Several barriers to practice change have been previously identified, including pharmacists' time constraints, patient apathy, limited support from physicians and pharmacy managers, disruption of workflow, inadequate reimbursement and even the culture of the pharmacy profession.^{10,11} Consequently, progress towards realizing pharmacists' full potential within the health system continues to be very slow.¹⁰

However, some pharmacists do embrace change and successfully implement new interventions, despite the systemic barriers that exist.¹² These individuals take on risks and new responsibilities to defy the cultural norms set by their colleagues. Unfortunately, little is known about these early-adopters and what makes them succeed. A detailed evaluation of the participants in the pilot of the ADAPT (ADapting pharmacists' skills and Approaches to maximize Patient's drug Therapy effectiveness) Education Program may provide some insight.

This paper describes the ADAPT pilot participants' demographics, characteristics, preparedness, motivation and reasons for participating. The goal

of this paper is to better understand the pharmacists who were willing to engage with this novel, time-intensive education program. This information can provide valuable insight into the types of pharmacists striving to change their practice.

What is ADAPT?

The ADAPT education program was developed to address pharmacists' need to incorporate patient care skills into practice. ADAPT is based on research describing the knowledge, skills and attitudes pharmacists require to optimize medication outcomes and collaborate with other health providers.¹³⁻¹⁵ ADAPT incorporates best practices in online and hands-on training, enabling pharmacists to integrate new skills into practice.^{13,16-18} The program consists of 7 web-based modules (addressing skills such as patient interviewing, collaboration, documentation and decision-making) moderated by experienced pharmacists and uses teaching modalities such as lectures, videos, practice-based activities, patient cases and self/peer assessments. As part of the pilot, a final face-to-face workshop further enhanced the transfer of skills into practice. A full description of ADAPT is available elsewhere.¹⁹ The ADAPT pilot began in summer 2010 and concluded in February 2011.

Recruitment and evaluation of pilot participants

The ADAPT pilot was open to all Canadian pharmacists and was advertised through e-mails sent to Canadian Pharmacists Association and Canadian

Society of Hospital Pharmacists members and through listserv postings to members of the Canadian Primary Care Pharmacists Specialty Network. Those interested completed a self-assessment that provided feedback regarding suitability for the program and obtained consent to participate in the evaluation. It was explained during this process that participation in ADAPT would require regular application of skills within participants' practice sites, significant time commitment (e.g., 4–5 hours/week) and appropriate space (e.g., private counselling area). Program tuition was waived for pilot participants.

Information collected from the self-assessment process was used to select individuals perceived to be most likely to succeed in the program (e.g., those with the most time, space and motivation to complete the course) and also to ensure a balanced representation from various regions and practice settings. Of the 271 pharmacists who completed the self-assessment and registered for the pilot, 90 were selected anonymously and offered admission.

The selected pilot participants were evaluated using a mixed-methods assessment. The descriptive quantitative data from the self-assessment and registration process (i.e., demographics, participation suitability) were considered together with qualitative data from the orientation module discussion board, in which participants introduced themselves. The qualitative analysis began with trying to understand motivation for participation. The research associate read discussion board posts and created syntheses of themes. The primary investigator and research assistant read discussion board posts and syntheses, adding as needed. Summaries were circulated to investigators and discussed at team teleconferences. The study was approved by the Bruyère Continuing Care Research Ethics Board.

Results

Eighty-six of the 90 pharmacists (95.6%) who were offered admission chose to participate in the ADAPT pilot. Learner demographics are outlined in Table 1. The self-assessment component's preparedness and motivation results are outlined in Table 2.

Seventy-one of the 86 participants (82.6%) introduced themselves and described their motivations for participating by posting to the orientation module discussion board. The postings revealed several themes. The first was that the majority of participants were busy, adventurous, lifelong learners. Many had earned additional professional certifications (e.g., Certified Diabetes Educator). In their personal lives, most participated in a variety of time-consuming and adventurous extracurricular

TABLE 1 Pharmacist demographics

	<i>n</i> = 86 <i>n</i> (%)
Age	Average 40 years (range 24–62)
Gender	
Female	63 (73)
Male	23 (27)
Province of practice*	
Alberta	16 (19)
British Columbia	10 (12)
Eastern Canada*	10 (12)
Manitoba	8 (9)
Ontario	26 (30)
Saskatchewan	16 (19)
Practice setting	
Community pharmacy	40 (47)
Community pharmacy + ≥1 other practices	16 (19)
Hospital	10 (12)
Other combination excluding community pharmacy	7 (8)
Ambulatory care clinic	6 (7)
Family practice team	5 (6)
Other	2 (2)
Education background	
Baccalaureate only	66 (77)
PharmD	4 (5)
Other certificates, degrees, residency	16 (19)
Professional membership	
CPhA	45 (52)
CSHP	23 (27)
PC-PSN	11 (13)
CPhA and CSHP	9 (12)
None/blank response	7 (8)

* Maritime provinces and Quebec were combined.

activities (e.g., travel, sports, drama) despite having young families.

We have 2 boys and are getting ready to start hockey season... and I am currently in training to run a half marathon.

Learners were also future-oriented and highly motivated to embrace change. Many wanted to improve their professional skills to provide better patient care and prepare themselves for changes in the profession.

I like to be ahead of the “wave” and since I am looking forward to our expanded role... I am looking for every possible opportunity to get better prepared.

Learners were also highly motivated to improve their skills, but varied in the degree to which they

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TABLE 2 Pharmacist preparedness and motivation

Element	n = 86 n (%)
Time commitment (hours/week able to commit to ADAPT)	
<4 hours/week	1 (1.2)
4–5 hours/week	63 (73)
5 or more hours/week	22 (26)
Time for patient interaction (hours/week able to commit to patient interactions)	
1–2 hours	16 (19)
>2 hours/week	10 (12)
Space for patient interaction	
Private consultation area	48 (56)
Office	27 (32)
Semi-private consultation area	11 (13)
Relationship with prescriber	
Established relationship with prescriber	58 (67)
Early stages of establishing relationship with prescriber	26 (30)
No relationship with prescriber	2 (2)
Motivation to improve skills	
Highly motivated	82 (95)
Somewhat motivated	4 (5)
Motivation for time commitment	All learners stated that they were willing to put in extra time to improve their skills.

could articulate their learning needs. Some stated specific skills they wished to improve, but many others had very general goals.

Finally, learners came to the pilot with varied previous experiences with online learning. The majority looked forward to the upcoming peer interactions within ADAPT, but varied in their degree of engagement in the early discussion.

I am comfortable with the online environment, but this is my very first post on a discussion board!

Discussion

These data suggest that the ADAPT participants were a highly selected volunteer group who may not represent most pharmacists practising in Canada. Compared with a 2009 national pharmacist survey performed by the Canadian Institute for Health Information, ADAPT pharmacists were slightly younger (average age 40.0 vs 43.6) and included a higher proportion of women (73.3% vs 59.2%). ADAPT pharmacists had more education than typical practising pharmacists,²⁰ with almost one-quarter (23.3%) of ADAPT pharmacists having training beyond a baccalaureate degree, compared with 5.8% of Canadian pharmacists.²⁰ In addition,

46.5% of ADAPT pharmacists reported practising exclusively in community pharmacies, compared with 75.5% of Canadian pharmacists.²⁰ This difference is attributed to 26.7% of ADAPT pharmacists who reported practising in a “combination” of practice settings (compared with 2.5% in Canada).²⁰ Canadian pharmacists have also been previously described in the literature as being risk averse, afraid of change, lacking confidence and “paralyzed in the face of ambiguity.”^{11,21} This is a stark contrast to ADAPT participants, who were adventurous risk takers, hungry for change and keenly interested in acting on that desire for change by taking a leap of faith in a new online educational program.

In his book “Diffusion of Innovations,” Rogers describes “early adopters” as being younger, more often seen as opinion leaders and more educated than their peers.²² ADAPT participants, who were younger and more educated than the typical Canadian pharmacist, bear a striking resemblance to this description. Consequently, we believe that this paper provides a detailed description of a group of early adopters (of a novel education program) who have not previously been well characterized within the pharmacy profession.

ADAPT was successful in engaging these early adopters of educational initiatives; however, future research must focus on how we can similarly engage early adopters of practice change innovations. Leaders within the profession have suggested that pharmacy practice implementation research and knowledge translation initiatives shift away from recruiting “typical pharmacists” and begin focusing on the “early adopters” of practice innovations, in an effort to better understand how some pharmacists are able to change when so many others do not succeed over the long term.²³ Assuming this is a direction that practice change researchers choose to follow, the characteristics of the ADAPT participants described in this paper will assist in the identification and recruitment of early adopters into future practice change initiatives.

Conclusion

The pilot cohort of ADAPT represents a group of pharmacists who recognize the need for change in pharmacy practice, are eager to take on new responsibilities, are motivated to engage in ongoing education and see the need to improve patient care. This study describes the characteristics of these early adopters. Future implementation research and knowledge translation efforts should be directed towards this group and their needs studied more closely, to facilitate successful pharmacy practice change. ■

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