



ANDREA L. MURPHY

There are many novel aspects to the Bloom Program, including the investment of time and resources needed to complete the application's 9 components. We aimed to determine what value the application process offered pharmacies preparing to offer the Bloom Program as well as identify opportunities to improve it.

Il y a beaucoup d'éléments nouveaux concernant le programme Bloom, notamment au sujet du temps et des ressources qu'il faut investir pour remplir les neuf parties de la demande d'inscription. Nous souhaitons déterminer quel avantage le processus de demande d'inscription apportait aux pharmacies qui s'apprentent à offrir le programme Bloom, et trouver des moyens d'améliorer ce processus.

Pharmacists' experiences with the Bloom Program application process

Andrea L. Murphy, BScPharm, ACPR, PharmD^{ID}; Lisa M. Jacobs, MSW, RSW, CE; David M. Gardner, BScPharm, PharmD, MSc

ABSTRACT



Background: The Bloom Program, which began as a demonstration project, is an ongoing community pharmacy-based mental illness and addictions program funded by the government of Nova Scotia. To be eligible to offer the Bloom Program, interested pharmacists were required to complete a 9-part application on behalf of their pharmacies. A process evaluation was conducted to inform future program implementation changes of program components, including the application process.

Methods: Qualitative interviews from 24 pharmacists were inductively analyzed to determine the challenges and opportunities in the program's application process.

Results: Key and impactful components of the application process included training, providing

a mental health and addictions resource centre within the pharmacy and completing outreach activities with local mental health and addictions services and support organizations. The training content and format for the program was highly valued. Community outreach to local mental health and addictions resources, and other health care resources in the community, was particularly valuable in supporting patient navigation of the health care system and extending the pharmacists' networks. Components of the application process were challenging for many pharmacists but were beneficial personally and professionally. Dedicated resources (e.g., time and staffing) are required for the efficient completion of the application process.

Conclusion: Pharmacists viewed the Bloom Program application process as intensive yet necessary and relevant for preparing to deliver the Program. The demonstration project process evaluation was essential for elucidating the strengths of the application process and, importantly, identifying areas for improvement. *Can Pharm J (Ott)* 2021;154:42-51.

Introduction

The Bloom Program, formally referred to as the Mental Health and Addictions Community Pharmacy Partnership Program (bloomprogram.ca¹) is a community pharmacy-based program that increases and enhances mental health and addictions services for Nova Scotians. Funded under the Nova Scotia Mental Health and Addictions strategy, Together We Can,² the

Bloom Program demonstration project period was between September 2014 to the end of December 2016. Bloom Program pharmacists worked closely with people living with mental illness and addictions to provide comprehensive consultation and follow-up care to improve and/or resolve medication management issues specific to mental health and addictions and related physical health concerns.^{1,3,4} Pharmacy teams

KNOWLEDGE INTO PRACTICE



- There is limited information available regarding implementation challenges with community pharmacy-based interventions. Conducting process evaluations of implemented interventions, such as the Bloom Program, and reporting on these findings can provide useful directions for program revisions and for sharing with the pharmacy community to decrease knowledge gaps.
- The Bloom Program application process was valuable in preparing pharmacists to deliver the program. Although some activities (e.g., community outreach) were challenging, they provided personal and professional benefits to pharmacists.
- Delivering community pharmacy services requires preparatory steps and using an application process such as that of the Bloom Program-facilitated preparedness. Lessons learned can help others designing and implementing community pharmacy services.

MISE EN PRATIQUE DES CONNAISSANCES



- Nous disposons de peu d'information concernant les défis que présente la mise en œuvre des interventions des pharmaciens en milieu communautaire. La réalisation d'évaluations des procédures utilisées dans les interventions mises en œuvre, notamment dans le cadre du programme Bloom, et la production de rapports sur les résultats obtenus peuvent fournir des indications utiles pour la révision des programmes et l'échange de renseignements avec la communauté pharmaceutique afin de combler les lacunes dans les connaissances.
- Le processus de demande d'inscription au programme Bloom permettait de préparer les pharmaciens à offrir le programme. Même si certaines activités (p. ex., les activités de sensibilisation communautaire) comportaient des défis, elles ont procuré des avantages tant personnels que professionnels aux pharmaciens.
- La prestation de services de pharmacie en milieu communautaire nécessite la réalisation de certaines étapes préparatoires et la mise en place d'un processus de demande d'inscription, comme celui du programme Bloom, qui facilite la préparation. Les leçons retenues pourront aider d'autres personnes à concevoir et à mettre en œuvre des services de pharmacie en milieu communautaire.

also helped patients navigate the mental health and addictions system to access other services, supports and resources. Pharmacists collaborated with family physicians, psychiatrists and other health care providers to address medication and other health issues.^{1,3-5}

Patients were enrolled in the Bloom Program via several mechanisms including, but not limited to, self-referral, referral from another person, pharmacist invitation and physician recommendation. Once enrolled in the program, the default duration of participation was 6 months, with the expectation of direct patient care encounters between pharmacists and patients occurring 1 or more times per month. Pharmacists and patients determined when and how they would arrange their visits, for example, by appointment and/or on demand. Encounters were documented in patient charts using Bloom Program-specific forms maintained at each pharmacy. Pharmacies were paid a fixed monthly fee for each enrolled patient receiving direct patient care for up to 6 months. Adjustments to the enrollment duration (e.g., early discharge, extension) were possible, depending on the patient's clinical need and preferences.¹ Given the demonstration nature of the program, the number of pharmacies able to participate was limited to fewer than 30, and the number of patients per pharmacy was limited to 20, with exception requests reviewed by a Bloom Program administrator and steering committee. More information on the Bloom Program can be viewed at the program's website.¹

As part of the Bloom Program eligibility requirements during the demonstration period, each Bloom pharmacy was required to complete a comprehensive 9-part application process (Box 1 and Appendix 1, available in the online version of the article). Supporting documentation was required for each activity, and this information was submitted to the Bloom Program administrators for review. Completion of the activities within the application process supported the Bloom Program's quality assurance measures by ensuring that pharmacies made the necessary preparations to deliver the Bloom Program. The application components and process were developed based on 1) the tacit knowledge of the project leads of the Nova Scotia community pharmacy context⁶⁻¹⁰; 2) an intimate understanding of pharmacists' scope of practice and professional training in mental health and addictions patient care; 3) the aims of the project, especially related to navigation and resource support and collaboration among members of the patient's circle of care; 4) Bloom Program Steering Committee feedback; and 5) theoretical foundations of the Bloom Program, which includes the Behaviour Change Wheel.¹¹⁻¹⁴ The activities in the application were structured to optimize the capabilities, opportunities and motivations¹⁴ of pharmacists seeking to deliver the Bloom Program.

Process and outcomes³ evaluations were conducted as part of the demonstration project's evaluation. The primary purpose of the process evaluation was to identify the key challenges and opportunities that pharmacists experienced in delivering the program during its demonstration period. The process

BOX 1 Summary of the 9-step Bloom Program pharmacy application process

1. Conduct local environmental scan of mental health and addictions services, organizations and resources
2. Demonstrate links with local mental health and addictions services and advocacy organizations
3. Provide a publicly accessible mental health and addictions resource centre within the pharmacy
4. Inform local health providers about the Bloom Program at your pharmacy
5. Inform the public that the Bloom Program is available at your pharmacy
6. Maintain an in-pharmacy health professional library to support patient care activities in the Bloom Program
7. Lead Bloom Program pharmacist completes a comprehensive set of readings and videos and participates in a full-day, group, live training program
8. Lead Bloom Program pharmacist trains other pharmacy staff (pharmacists, technicians/assistants, front store staff)
9. Lead Bloom Program pharmacist establishes policies and procedures within their respective pharmacies related to the Bloom Program

evaluation was used to identify which aspects of the program were important to its success and how to improve the program's implementation and operations. Here we report the key strengths and challenges identified in the process evaluation regarding the application process that lead Bloom Program pharmacists completed to qualify for offering the Bloom Program, as well as our lessons learned.

Methods

Approach

The overall evaluation framework for the Bloom Program used a utilization-focused approach. In this type of evaluation, processes are judged by their utility. The evaluator focuses attention on how the primary intended user can apply the findings and experiences.¹⁵ This approach supports the use of different types of evaluation methods within an overall participatory paradigm, rather than being limited to a prescribed content, method or theory.¹⁶ A mixed-methods analytical structure was used in the evaluation for both process and outcomes. Depending on the component of the program under examination, quantitative or qualitative methods, or both, were used. For the evaluation of the application process, qualitative methods were used.

Ethics

The Bloom Program was reviewed by Dalhousie University Research Ethics board and was determined to be a program evaluation; thus, a formal ethics review was not provided. A

privacy impact assessment was completed and approved by the Government of Nova Scotia in accordance with provincial privacy legislation.

Data sources and analysis

The primary evaluation data source regarding the application process was interviews with lead Bloom Program pharmacists that were conducted using a semistructured interview guide (available upon request). Twenty interviews were conducted in March and April of 2016. The evaluator (L.M.J.) also conducted 4 additional interviews in December 2016 with pharmacists who withdrew from the Bloom Program early ($n = 3$) or who were not able to be interviewed earlier ($n = 1$). The lead Bloom Program pharmacists were the primary contacts at their respective pharmacies and were responsible for leading the application process, implementation and operations. Interviews ranged from 30 to 45 minutes in length. For triangulation and validation purposes, the findings from the analysis of the interview data informed a 1-day Bloom Program workshop with pharmacists on February 7, 2017. Pharmacists and other Bloom Program stakeholders, including community members, pharmacy regulators and educators, as well as representatives of the Department of Health and Wellness and the Nova Scotia Health Authority, came together to identify potential pharmacy- and system-level solutions to some of the challenges they were experiencing. Participatory Action Research methods were used at the workshop.¹⁷ Stakeholders validated the findings from the analysis of the interviews and identified patient recruitment and workflow as their priority issues to address. The application process was identified and discussed briefly but not selected for a detailed examination during the workshop. As such, the pharmacist interviews serve as the primary data source for this analysis.

Interviews were coded manually using an exploratory, inductive method designed to allow key themes and concepts to develop during the analysis. After the initial coding for themes and contexts, a second review was undertaken to identify any subthemes. Themes and subthemes were compared and contrasted across the different data sources (e.g., key informants) to further formulate the themes that are reported. The evaluator (L.M.J.) used a shared interpretation approach to data analysis, and the process was iterative, with L.M.J. conducting and first analyzing the pharmacist interview data, then meeting multiple times with A.L.M. and D.M.G. to discuss the interviews, interpretations and findings. A.L.M. and D.M.G. provided historical project information and development context, including their own observations and insights.

Results

General feedback regarding the application process was obtained, as well as the identification of key overarching themes, which included training, providing a mental health and addictions resource centre within the pharmacy and

TABLE 1 Sample supporting quotes from pharmacists' themes regarding strengths and challenges for the key components of the Bloom Program application process

Theme	Supporting quotes
Training	<p>The training day is fantastic. . . . I like that it was interprofessional, with other peers and to hear other people's perspectives. I think some of the role-plays that we saw, it just helped. It was a new concept, so the training day helped put it all together. There was the one part where they had a standardized patient or an actor come in. . . . It just kind of hit home because I saw that as being a very, very real experience that a pharmacist really could make such a difference in and how they handled that. I don't think doing it remotely or online would be the right way to go with it. I think, you know, having the experts there and some of the psychiatrists and the people with the lived experience . . . all that is really key for the people who are going to be delivering the program. Certainly, you can read as much as you want, but I think those sessions were essential to preparing to deliver the program.</p> <p>I really felt naked after that day [training day], and I had to look at why I was so sad.</p>
Mental Health and Addictions Resource Centre	<p>[The resource centre] is kind of an explicit sign, a differentiation, that it's a Bloom pharmacy . . . it can be a way of stimulating discussions and showing that you're interested in mental health and addictions.</p> <p>[It's] a very good conversation starter and people—even if they don't borrow something—I think they appreciate that this is something that you're trying to provide for them and the community.</p> <p>I think it's good for pharmacies to offer . . . resources to a patient versus saying, "Here, you should take this drug." It's just showing a bit more global appreciation of their current problems and trying to find alternative solutions.</p>
Community outreach	<p>The best part of the 9-step process was the environmental scan, and it was the thing I cursed the most! It sort of created, or almost forced, essentially, some dialogue with groups that I wouldn't have otherwise talked to; groups I wouldn't have, honestly, been aware of. I have to say that actually going out, talking to all our local resources and calling them or visiting them definitely helped more than I thought it would. I mean, it's one thing to just write down what's available, but when you actually go in and speak to them and have a look around and, ask them the real questions about what's going on, that was very helpful for me.</p> <p>It created a relationship, especially with Mental Health and Addictions services and I still have that network in place. . . . [T]hat opened up a pretty wide line of communication between the pharmacy and the resources out in the community.</p> <p>Finding out the resources available in the community was painful for me personally—it just pushed me outside my comfort zone. It was very good once the connections were made. I feel like we're still reaping benefits from that. I'm a little bit introverted, so it's hard for me to reach out and take that step.</p> <p>[I]t's something we want to do, but . . . there's nobody else to work, or it costs us quite a bit of money to be able to bring somebody in to cover me so I can go do that.</p>

conducting the environmental scan and demonstrating links with local mental health and addictions services and support groups. The latter 2 are collectively grouped and referred to as community outreach for ease of reporting. Sample supporting quotes for each key area are provided (Table 1).

General feedback

Most pharmacists interviewed found the application process to be a valuable time investment because the activities were directly relevant to Bloom Program delivery. The process helped

pharmacists feel more knowledgeable and prepared to deliver the Bloom Program. The value of the application process was often referenced in the context of stating that the process was intimidating and labour intensive, taking pharmacists from 2 to 7 days, often spread out over several weeks or months, to complete. This time commitment was challenging, especially for those pharmacists working in smaller pharmacies with minimal to no scheduled pharmacist overlap for which little or no time was afforded to complete the application during work hours. One pharmacist wondered whether such a rigorous application

BOX 2 Key questions identified by pharmacists prior to operationalizing the Bloom Program

- How much pharmacist time will it take?
- What will program uptake be like in the community?
- How will patients respond?
- How cooperative will physicians be?
- How well will it work in our pharmacy?
- Do I have the skills and knowledge to deliver the program?
- How much will it cost me to deliver the program?

process might deter some pharmacies from applying, but several others said that it was an effective and important way to “filter out” pharmacies that were not able or not prepared to fully deliver the Bloom Program as intended. Pharmacists stated:

I believe that to be considered a Bloom Pharmacy or a pharmacy with services of the sort that we're offering now, the application is more than fair.

I don't think that this [the Bloom Program] is something that people should just be given the opportunity to do. They need to go through something because you don't want them tainting a patient's experience with the Bloom Program, you know. You don't want that influence in there if they're just in it for the money, right.

Many pharmacists reported having several questions (Box 2) before they started delivering the Bloom Program, and some said that they felt apprehensive because they did not know what to expect. The training session successfully answered most questions.

Considerations moving forward. Information resources can be developed for pharmacists that describe the benefits to pharmacies of providing the Bloom Program and to patients for participating in the program. These can be updated regularly by seeking input from pharmacists as their experience delivering the Bloom Program grows.

Training strengths and challenges

Overall, there was positive feedback about the live training sessions. Pharmacists said that it answered many of their questions about the Bloom Program and helped them prepare for and feel more confident about delivering it. Pharmacists identified specific aspects of the training that they felt were valuable, including hearing multiple perspectives from different health care providers on mental illness and addictions, having access to expert knowledge and hearing directly from people who live with mental illness and enactments of specific Bloom Program components, such as how to enroll a patient. The live, in-person, group training format was considered important.

The pretraining reading materials produced mixed feedback. Most pharmacists made no comments about these readings; however, a few said they found the readings somewhat disconnected, whereas others noted that they were very helpful for orienting them to contemporary mental health and addictions issues and that they were useful “refreshers.” One pharmacist said that participating in the training was unexpectedly difficult because of their personal experiences with mental illness and addictions.

Considerations moving forward. Training content could be challenging for people with personal experiences (e.g., themselves, friends, family) of mental illness and addictions. As such, training should be developed and delivered using a trauma-informed lens, and pharmacists should be notified in advance of the possibility of training content triggering some uncomfortable memories or historical trauma. Lead pharmacists should also consider this when training pharmacy team members at their pharmacies. In-person, group training involving multiple perspectives remains highly valued over other forms of delivery. Selected readings should be reviewed on an annual basis to ensure that they are timely and relevant to the Bloom Program.

Mental Health and Addictions Resource Centre strengths and challenges

Most pharmacists said that the resource library brings attention to the Bloom Program and the role pharmacists can play in supporting people living with mental health and addiction problems. A few also said that they felt it contributes to reducing stigma.

Some pharmacists found the resource centre to be a practical challenge, with difficulties finding the appropriate display and space for the public resources (Figure 1). A few pharmacists reported that the public resources were not accessed, whereas others said they observed some public interest. Some resources such as a book on a nonpharmacological approach to treating insomnia¹⁸ was often cited as a useful resource that pharmacists were able to show and recommend to patients. Several pharmacists said that sometimes people did not return the resources, but they were not concerned by this.

Considerations moving forward. The Mental Health and Addictions Resource Centre helped to advertise the pharmacy as a safe space for people with mental health and addiction problems and may also serve as a means to help reduce stigma. The anti-stigma impact of the resource centre can occur through multiple mechanisms,¹⁹ including serving as a space and opportunity for increasing knowledge and mental health literacy. It also demonstrates an advocacy-related effort with potential for awareness raising, information dissemination and education regarding mental health conditions and addictions. In addition, the physical presence of the resource library can facilitate social contact among those interested in the materials.¹⁹ From a resource perspective, if there is a concern for loss of

FIGURE 1 Examples of Mental Health and Addictions Resource Centres in Bloom Program pharmacies

books or more expensive items, it is recommended to have one resource labeled “store copy” on display and other copies held within the dispensary. Affording a pharmacy assistant or front store staff time to maintain displays, track turnover and replenish and expand content is needed to ensure the resource centre stays current and meets local community needs. In addition to displaying pamphlets from local organizations collected during outreach activities, program administrators can recommend print and online resources to be included for public access and can also contact local libraries requesting that specific resources be available to the public.

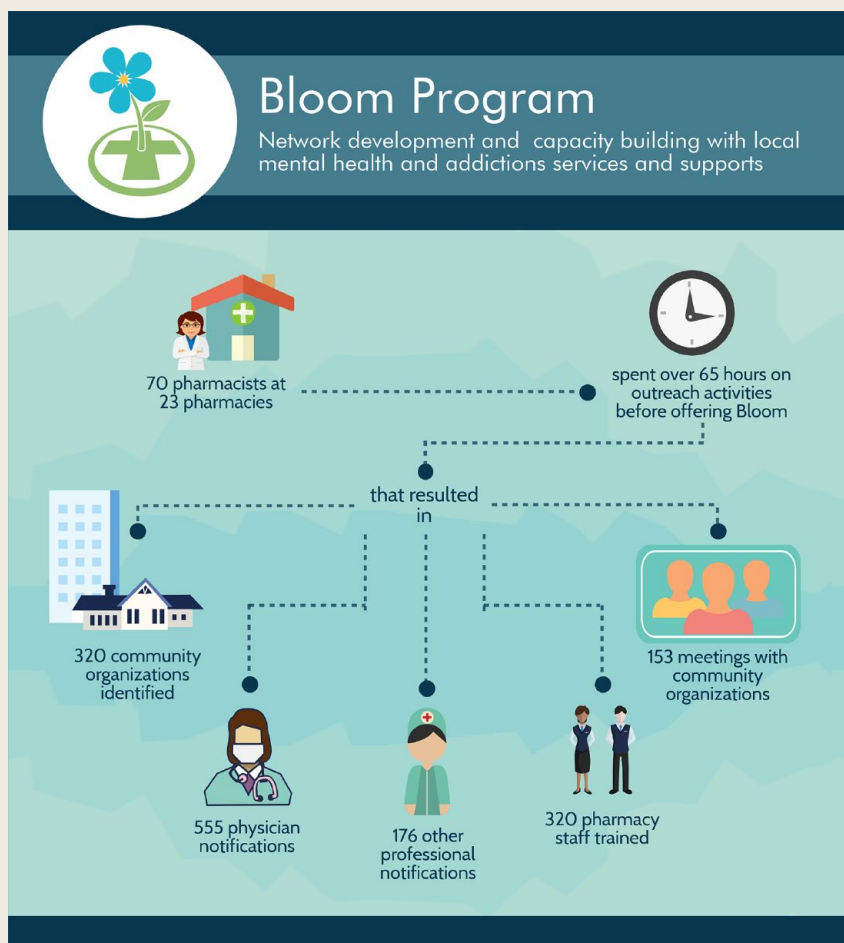
Community outreach strengths and challenges

Conducting the community outreach was the most challenging aspect of the application process, but it also held the most value. Some pharmacists found it daunting to directly speak with, in person or by phone, people providing mental health and addictions services, support and resources, but all were unified in their recognition of the value of these activities. Community outreach enabled the development of useful connections with relevant organizations and confidence in supporting patient navigation and access to a range of mental health and addiction resources, which was the precise intent of the activity. Many pharmacists said they used the outreach activities to introduce and promote the Bloom Program, and one pharmacist said that her outreach resulted in an invitation to become part of a local network of mental health and addictions services and supports. Figure 2 quantifies the results of the outreach efforts of pharmacies participating in the Bloom Program demonstration project.

Some pharmacies conducted more extensive community outreach than others. On one end of the spectrum, pharmacists identified and met in person with every mental health and addictions service and support in their local community. On the other end, another pharmacist preferred to rely on contacts previously made during their participation in a community pharmacy mental health project that predated the Bloom Program. The level of effort was influenced by multiple factors, including the time available for the lead Bloom Program pharmacist to complete the outreach activities. Outreach activities were particularly difficult for smaller pharmacies that had limited dispensary staff coverage. Where the lead pharmacist was also a pharmacy owner, the outreach was often conducted outside of their scheduled dispensary hours.

A few pharmacists said that they did not feel they had enough time to complete the community outreach activities at a level that they thought was sufficient. Several postulated that their limited outreach may have been a contributing factor in not having external patient referrals and challenges with patient recruitment. A few pharmacists working in rural communities said they conducted their outreach by phone because site visits required significant travel time to communities where these resources were located.

Considerations moving forward. The environmental scan and outreach activities should be maintained as part of the application process for the Bloom Program. Pharmacists must be practical in outreach methods, given constraints on their time during usual business hours and travel distances in rural areas. In-person meetings are recommended with

FIGURE 2 Number and type of community outreach connections made by Bloom Program pharmacists

organizations whose services and resources are closely aligned with the needs of patients enrolling in the program.

Pharmacy owners and/or managers should consider providing their lead Bloom Program pharmacists with sufficient time during business hours to conduct outreach and other aspects of the application. This will help expedite the completion of the application process, thereby maximizing the return on the pharmacy's investment in preparing to offer the Bloom Program. To help with this, Bloom Program administrators can provide clear guidance on what is a reasonable expectation regarding the quantity and quality of outreach activities.

Discussion

The Bloom Program is a unique, pharmacy-based mental health and addictions program.³⁻⁵ As with many pharmacy programs, there are challenges in implementation. Our evaluation findings demonstrate that the application process achieved its purpose of ensuring Bloom Program quality assurance and increasing the capabilities, opportunities and motivations of participating pharmacists. Training, community outreach and the Mental Health and Addictions Resource Centre were key components to the application process for the Bloom Program. Opportunities for

improvement were identified with solutions for improvement proposed, and these can be explored for implementation as the Bloom Program expands and evolves in Nova Scotia.

Education and training are part of the preparatory steps for most community pharmacy services prior to program implementation in community pharmacies.²⁰⁻²³ Unlike many published reports regarding education and training designed to prepare pharmacists for program delivery, the Bloom Program demonstration project training focused less on the therapeutic management of mental illness and addictions conditions and more on operationalizing other key components of the program, including enrollment, time management, documentation, priority setting and longitudinal patient-centred care, care team communications, safety in the pharmacy environment and working with organizations in communities and other health care professionals. The format of the training day required both pedagogical and practical considerations. It was structured to include face-to-face delivery with simulated patients, attendance and contributions of those with lived experience of mental illness and addictions, as well as ample time for discussion. These key components were valued, based on the findings from pharmacist interviews. Technology enables online or e-learning for

many pharmacy programs and has evidence for selected learning outcomes such as increasing knowledge and being an acceptable mode of education; however, as compared with face-to-face learning,²⁴⁻²⁶ it is not necessarily suitable or appropriate for all training objectives. Face-to-face modalities are more suitable for programs with a significant degree of complexity that benefit from sharing perspectives and experiences from invited guests and that require the identification and sharing of opportunities and challenges that vary from one community pharmacy context to another. The use of novel educational interventions, such as simulated patient encounters, followed by expert-informed, facilitated group discussions, supports the efficient identification of pervasive issues and challenges and offers the opportunity for self-discovery and individualized strategies and solutions to be applied within each participant's unique pharmacy environment. Simulated and standardized patients have been used in other pharmacy-related training programs for mental health and non-mental health conditions, demonstrating positive effects on learning and assessments for pharmacists and pharmacy students.^{22,27,28} Boukouvalas et al.²⁹ also reported on the participation of people with a lived experience of mental illness as simulated patients. The inclusion of people with lived experience of mental illness and addictions during training also prioritizes the patient experience and has demonstrated improved knowledge, attitudes and a decrease in stigmatization.^{30,31}

The community outreach components of the application, which included completing an environmental scan and developing links with local mental health and addictions resources, were particularly important for pharmacists. Other researchers have reported that pharmacists have little confidence in their knowledge surrounding existing referral pathways in helping people with mental illness and addictions to access appropriate supports,³² as previous work in Nova Scotia has also shown.⁶⁻¹⁰

Based on the findings of the Bloom Program process evaluation, pharmacists experienced an increase in knowledge and awareness and, for some, an expansion of their professional network. Future work in this area can be broadened to capture the impact of outreach on program-related outcomes (e.g., number of referrals and referral sources, awareness of pharmacist-directed patient care activities in mental health and addictions) and on pharmacist outcomes from a personal and professional perspective. Conducting social network analyses may also be beneficial for determining future modifications to the Bloom Program application process, as some network connections and organizations may result in more opportunities for efficiencies and productivity in the work of pharmacists.

Examining the impact on the overall reputation of pharmacists and pharmacy teams would also be beneficial from the perspectives of the public, other health care professionals, non-governmental mental health organizations and policy-makers. Similar to the findings of the present analysis, research by Hattigh et al. on a mental health medication management program in Australia demonstrated that pharmacy staff perceived

that participating in the program improved the professional image of pharmacists and pharmacy.³³

Limitations

The importance of these process evaluation findings cannot be overstated given the lack of availability of lessons learned from the published literature on implemented programs that are similar in nature. However, because this was a demonstration project, little was available to inform aspects of the application process, and similar work had not been previously done in Nova Scotia. Therefore, this evaluation had several limitations that likely affected the findings. Analyzing data from pharmacist interviews collected at one point in time and prior to the end of the Bloom Program demonstration project does not allow for the richest understanding of the impact of the application process on pharmacists over time nor whether the application process affected Bloom Program delivery. The demonstration project was not designed with 1 or more control groups to examine the impact of adjusting components of the application process and whether adjustments would have had impacts on pharmacists or how they delivered the program. This could serve as a future research area. The Participatory Action Research methods used at the Bloom Program workshop gave us the opportunity to triangulate and validate interview findings and to further explore some issues; however, time constraints meant we focused only on pharmacist-identified priority issues at that time. As a result, the application process received a more descriptive, rather than analytical, treatment during the workshop as compared with other process evaluation measures and outcomes. We were also not able to hear from all of the pharmacists who continued delivering the Bloom Program or from other pharmacy staff who may have been involved in some aspect of delivering the Bloom Program. Their insights are not reflected in this article.

Conclusion

Pharmacists completed what they felt was a critical, well-developed and relevant application process that prepared them and their pharmacy for implementing and offering the Bloom Program. Live training, which involved several simulated patient scenarios with group debriefs, was an important early step in the application process. Conducting outreach with local mental health and addictions services and supports in the community was viewed as both challenging and of particular value in supporting future patient navigation of the health care system. The process evaluation of the Bloom Program 9-step application demonstrated support for continuation of the application's components. Key improvements as the program expands in Nova Scotia include developing resources that explain the benefits of offering the program, ensuring that the live training day is delivered using a trauma-informed lens, offering more specific guidance and resources for each pharmacy's mental health and addictions library and encouraging in-person meetings for outreach activities, when feasible. ■

From the College of Pharmacy (Murphy, Gardner) and the Department of Psychiatry (Murphy, Gardner), Dalhousie University; and Contact Consulting (Jacobs), Halifax, NS. Contact andrea.murphy@dal.ca.

Acknowledgments: We thank Vanessa Sherwood and Jennifer Dixon for their work on the Bloom Program administration and initial program evaluation framework, respectively. Thank you to the Bloom Program Steering Committee members and the Evaluation Subgroup Committee for their guidance and feedback throughout the program. Thank you to all the pharmacists and pharmacy team members in Nova Scotia who served their communities as Bloom Program pharmacies.

Author Contributions: A. Murphy and D. Gardner conceived the idea for the Bloom Program. The Bloom Program had a Steering Committee and an Evaluation Sub-Group Committee of the Steering Committee. A. Murphy and D. Gardner were part of these committees. L. Jacobs was hired as an independent evaluator for the Bloom Program. Data collection was led by Vanessa Sherwood, Jennifer Dixon and L. Jacobs. L. Jacobs conducted qualitative analysis and interpretation in an iterative fashion in consultation with A. Murphy and D. Gardner. L. Jacobs drafted a process evaluation report with findings of which A. Murphy adapted for use in portions of the article that were drafted and sent to D. Gardner and L. Jacobs. All authors reviewed the evolving manuscript versions to provide critical feedback, and all authors approved the final version.

Declaration of Conflicting Interests: The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

Funding: Funding for the Bloom Program was received through the Mental Health and Addictions Strategy of Nova Scotia through the Department of Health and Wellness of Nova Scotia. The funding agency was not involved in the design, interpretation or writing of the manuscript.

ORCID iD: Andrea L. Murphy  <https://orcid.org/0000-0001-5093-6681>

References

1. The Bloom Program. Available: <http://bloomprogram.ca/> (accessed May 24, 2019).
2. Together we can: the plan to improve mental health and addictions care for Nova Scotians. Department of Health and Wellness, Government of Nova Scotia, Halifax, NS. Available: <https://novascotia.ca/dhw/mental-health/reports/Mental-Health-and-Addictions-Strategy-Together-We-Can.pdf> (accessed May 24, 2019).
3. Murphy AL, Gardner DM, Jacobs LM. Patient care activities by community pharmacists in a capitation funding model mental health and addictions program. *BMC Psychiatry* 2018;18:192.
4. Murphy AL, Gardner DM, Jacobs LM. The patient experience in a community pharmacy mental illness and addictions program. *Can Pharm J (Ott)* 2019;152:186-192.
5. Haslam L, Gardner DM, Murphy AL. A retrospective analysis of patient care activities in a community pharmacy mental illness and addictions program. *Res Social Adm Pharm* 2020;16(4):522-8.
6. Murphy AL, Szumilas M, Rowe D, et al. Pharmacy students' experience in community pharmacy mental health services provision. *Can Pharm J (Ott)* 2014;147:55-65.
7. Murphy AL, Gardner DM, Kutcher SP, Martin-Misener R. A theory-informed approach to mental health care capacity building for pharmacists. *Int J Ment Health Syst* 2014;8:46.
8. Black E, Murphy AL, Gardner DM. Community pharmacist services for people with mental illnesses: preferences, satisfaction and stigma. *Psychiatr Serv* 2009;60:1123-1127.
9. Murphy AL, Phelan H, Haslam S, Martin-Misener R, Kutcher SP, Gardner DM. Community pharmacists' experiences in mental illness and addictions care: a qualitative study. *Subst Abuse Treat Prev Policy* 2016;11:6.
10. Murphy AL, Martin-Misener R, Kutcher SP, O'Reilly CL, Chen TF, Gardner DM. From personal crisis care to convenience shopping: an interpretive description of the experiences of people with mental illness and addictions in community pharmacies. *BMC Health Serv Res* 2016;16:569.
11. Abraham C, Michie S. A taxonomy of behavior change techniques used in interventions. *Health Psychol* 2008;27:379-87.
12. Atkins L, Francis J, Islam R, et al. A guide to using the theoretical domains framework of behaviour change to investigate implementation problems. *Implement Sci* 2017;12:77.
13. Cane J, O'Connor D, Michie S. Validation of the theoretical domains framework for use in behaviour change and implementation research. *Implement Sci* 2012;7:37.
14. Michie S, Atkins L, West R. *The Behaviour Change Wheel: a guide to designing interventions*. 1st ed. London: Silverback; 2014.
15. Patton MQ. *Utilization-focused evaluation*. 4th ed. Thousand Oaks (CA): Sage; 2008.
16. Ramirez R, Brodhead D. *Utilization focused evaluation: a primer for evaluators*. Penang (Malaysia): Southbound; 2013.
17. Chevalier JM, Buckles DJ. *SAS²: A Guide to Collaborative Inquiry and Social Engagement*. New Delhi, India: SAGE; 2008.
18. Davidson JR. *Sink into sleep: a step-by-step workbook for reversing insomnia*. New York: Demos Health; 2013.
19. Stuart H. Reducing the stigma of mental illness. *Glob Ment Health (Camb)* 2016;3:e17-9.
20. Saini B, Smith L, Armour C, Krass I. An educational intervention to train community pharmacists in providing specialized asthma care. *Am J Pharm Educ* 2006;70:118.
21. Sadler S, Rodgers S, Howard R, Morris CJ, Avery AJ, PINCER Triallists. Training pharmacists to deliver a complex information technology intervention (PINCER) using the principles of educational outreach and root cause analysis. *Int J Pharm Pract* 2014;22:47-58.
22. Bajorek BV, Lemay KS, Magin PJ, Roberts C, Krass I, Armour CL. Preparing pharmacists to deliver a targeted service in hypertension management: evaluation of an interprofessional training program. *BMC Med Educ* 2015;15:157.
23. Svarstad BL, Kotchen JM, Shireman TI, et al. The Team Education and Adherence Monitoring (TEAM) trial: pharmacy interventions to improve hypertension control in blacks. *Circ Cardiovasc Qual Outcomes* 2009;2:264-71.
24. Taylor R, Jung J, Loewen P, Spencer C, Dossa A, de Lemos J. Online versus live delivery of education to pharmacists in a large multicentre health region: a non-inferiority assessment of learning outcomes. *Can J Hosp Pharm* 2013;66:233-40.

25. Nesterowicz K, Librowski T, Edelbring S. Validating e-learning in continuing pharmacy education: user acceptance and knowledge change. *BMC Med Educ* 2014;14:33.
26. Salter SM, Karia A, Sanfilippo FM, Clifford RM. Effectiveness of E-learning in pharmacy education. *Am J Pharm Educ* 2014;78:83.
27. El-Den S, Chen TF, Moles RJ, O'Reilly C. Assessing mental health first aid skills using simulated patients. *Am J Pharm Educ* 2018;82:6222.
28. Smithson J, Bellingan M, Glass B, Mills J. Standardized patients and pharmacy education: an integrative literature review. *Curr Pharm Teach Learn* 2015;7:851-63.
29. Boukouvalas EA, El-Den S, Chen TF, et al. Confidence and attitudes of pharmacy students towards suicidal crises: patient simulation using people with a lived experience. *Soc Psychiatry Psychiatr Epidemiol* 2018;53:1185-95.
30. Patten SB, Remillard A, Phillips L, et al. Effectiveness of contact-based education for reducing mental illness-related stigma in pharmacy students. *BMC Med Educ* 2012;12:120.
31. O'Reilly CL, Bell JS, Chen TF. Consumer-led mental health education for pharmacy students. *Am J Pharm Educ* 2010;74:167.
32. Kirschbaum M, Peterson G, Bridgman H. Mental health first aid training needs of Australian community pharmacists. *Curr Pharm Teach Learn* 2016;8:279-88.
33. Hattingh HL, Kelly F, Fowler J, Wheeler AJ. Implementation of a mental health medication management intervention in Australian community pharmacies: facilitators and challenges. *Res Social Adm Pharm* 2017;13:969-79.