Guidelines for pharmacists integrating into primary care teams

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Introduction

Health systems are moving toward a more interprofessional approach to primary care. This team-based paradigm has had a significant impact on the role of pharmacists within primary health care systems. Within the past decade, nondispensing clinical pharmacists have been integrated into many Primary Care Trusts in the United Kingdom,^{1,2} primary care teams in North America³⁻⁵ and similar practice settings around the world.^{6,7} Pharmacists bring value to these teams by improving medication use through individual patient assessments and population-based interventions, providing education and drug information to other team members and implementing system-level practice enhancements.³

Pharmacists commonly encounter barriers to integrating into these primary care teams. For example, many experience a lack of role clarity, and other team members' expectations regarding the pharmacists' responsibilities are frequently unclear.^{4,8-11} In addition, patients often do not understand the role of the pharmacist in this setting.^{9,10,12} Pharmacists are also typically unfamiliar with the roles of other team members,¹³ creating difficulties in collaborating successfully.¹⁴⁻¹⁶ During the early stages, pharmacists often depend on other team members to assist in their integration, creating additional work for nurses and physicians.¹⁷ Other frequently reported barriers include physician resistance, lack of pharmacist assertiveness, inadequate pharmacist support, lack of space and inadequate pharmacist training.^{9-11,13,14,17-21}

Many of these barriers to pharmacist integration can be minimized or avoided if

pharmacists are prepared. Unfortunately, recent evidence suggests that pharmacists often continue to make the same mistakes and struggle to integrate into these teams, despite the fact that these barriers are well documented in the literature.²² The purpose of these guidelines is to provide recommendations that will assist pharmacists to successfully integrate into existing primary care teams.

Methods

A literature search was performed in OVID Books, MEDLINE, Embase and International Pharmaceutical Abstracts to identify publications related to the experiences of pharmacists in primary care teams. Additional studies were identified from bibliographical reviews of pertinent articles. Relevant articles from the search were selected for detailed review if they contained qualitative or quantitative data related to pharmacists' experiences integrating into primary care teams. Articles were excluded if they were not available in the English language. Two authors (DJ, DD) independently reviewed the relevant articles from the search and made lists of authors' conclusions about how pharmacists could have integrated better or about barriers that were experienced by pharmacists who had integrated into an existing team. These two authors met to come to agreement on the final list and to arrange the list into common themes or categories. The two authors then worked collaboratively, by meeting on several occasions, and using the final list to create an initial set of draft recommendations. The draft recommendations were circulated to the other authors (BF, RTT, LD) and to a network

of Canadian pharmacists with experience practising in primary care (i.e., Canadian Pharmacists Association/Canadian Society of Hospital Pharmacists Primary Care Pharmacists Specialty Network—PC-PSN) to assess if any of the recommendations needed to be revised or excluded. The authors incorporated the suggestions received during this review process to create the final version of recommendations, which was approved by unanimous consensus of all authors.

The strength of each of the final recommendations was assessed using a modified GRADE (Grading of Recommendations Assessment Development and Evaluation) approach, which is a transparent and commonly used process for grading the strength of recommendations in guidelines.²³ The individuals from the PC-PSN who provided comments on the draft recommendations, along with a purposeful sample of primary care pharmacist experts, were asked to use a grid (adapted from GRADE, Appendix 1, available at www.cpjournal.ca) to rate the strength of each recommendation based on their personal opinion regarding its likely value. The mean score of responses was used to assign a strength rating to each recommendation. Respondents were also encouraged to provide written comments to explain the rationale for their ratings. Representative quotes were chosen for inclusion in the results by the lead author, which were approved by all authors.

Results

A total of 459 articles were identified in the literature search, and 103 relevant articles were selected for detailed review. Eleven draft recommendations were developed based on evidence from the literature, which were reviewed by 18 members of the PC-PSN who provided 97 comments that were forwarded to authors for consideration. All authors unanimously approved a list of 10 final recommendations. Thirty-three individuals were invited to participate in the GRADE rating process of the 10 final recommendations, and 27 responded by completing the rating tool. Scores and all reviewer comments are available in Appendix 2 (available at www.cpjournal.ca).

Recommendations

In addition to the 10 recommendations that were unanimously approved by all 5 authors,

an overarching theme regarding the importance of pharmacist assertiveness was identified. Pharmacists who successfully integrated into existing primary care teams were often described as being assertive and confident. Conversely, pharmacists who struggled were often shy and introverted. Consequently, it appears that the personality traits of individual pharmacists have a significant influence on successful integration into a team, which will ultimately have an impact on the usefulness of the following recommendations (see Box 1 for summary of recommendations).

Recommendation 1: Determine the needs and priorities of the team and its patients

Strength of recommendation: mean score = 1.8 (definitely do it)

Every team has unique provider needs and patient populations; therefore, pharmacists should invest time and energy learning about the team they are joining. Determining the specific medication-related needs of the team and patient population will make it easier to provide pharmacist services that add value. This is also an important step necessary to develop a pharmacist's job description (see recommendation 2). Examples of some specific information that might be relevant to collect:

- What are the most common chronic diseases within the population?
- What are the teams' key medication-related struggles and where would pharmacist assistance be needed the most?
- Have registries or indicators been previously created or identified that suggest there should be a focus on improving management of a specific disease or patient group?
- Is there a frail elderly population?
- What existing programs and services are being offered and would any of them benefit from pharmacist support?
- How are the local community pharmacists involved with the team?

It is impossible to obtain enthusiasm and buy-in . . . if what you are doing is not perceived as important or of value to the rest of the team.—Pharmacist reviewer

Collecting this information could be as simple as obtaining a profile of the practice site that

outlines the patient demographics, physical layout and members of the team.^{4,24-27} Some teams may have this information readily available and community or government reports may also provide information about the local patient population. It can also be useful to talk to the clinic manager, lead physicians, nursing staff or other team members to collect this information. A team meeting using the “Medication Use Processes Matrix” to identify who contributes to various medication management processes within the team and which processes are in need of improvement would be useful.^{28,29}

Recommendation 2: Develop a pharmacist job description

Strength of recommendation: mean score = 1.6 (definitely do it)

This is the next logical step after determining the needs and priorities of the team, and it will serve to guide the pharmacist in what activities to focus on. Clearly defined roles and responsibilities enhance collaboration and reduce misunderstandings regarding responsibilities and authority.^{28,30,31}

A job description would certainly help a pharmacist who is joining a team for the first time, to understand his/her role and know where to start in terms of services to offer.—Pharmacist reviewer

If a pharmacist job description does not already exist, the pharmacist must lead its development by working collaboratively with the team to create one. The document should find a balance between the skills and expertise of the individual pharmacist and needs and priorities of the team and its patients. The job description should cover topics such as pharmacist services provided (and time allocated to each service), process for patient referrals and communication regarding patient assessments, hours of service, location of service, reporting structure and pharmacist continuing education needs. If a job description already exists, the pharmacist should review it to ensure that it is meeting the current needs of the team, since it may be out of date or may not have been developed collaboratively.

This is extremely important, as many existing pharmacist job descriptions are vague and were created for other practice settings.—Pharmacist reviewer

A useful first step is to start with an existing template from another team or pharmacist colleague. It can be helpful to offer an initial “menu” of services that the pharmacist can provide for the team to assist with this process. However, take care not to offer a list of services that appear inflexible, as it is important to be open to meeting the unique needs of the team. Templates and examples can be accessed by requesting them from individual colleagues, practice networks (e.g., PC-PSN, Ontario Family Health Team listserv) or primary care pharmacy initiatives (www.impactteam.info). The key is to actively involve the team in developing and individualizing a job description that will optimally use the pharmacists’ expertise. This can be accomplished by meeting regularly with administrative leadership and other team members.

The job description is generally developed at the beginning of the integration but should be reviewed and amended regularly (on an indefinite basis) after there is a deeper understanding of how the pharmacist can best meet the needs of the practice and as the roles of all team members evolve naturally over time.

Recommendation 3: Educate the team about the pharmacist role

Strength of recommendation: mean score = 1.9 (definitely do it)

A clear and detailed pharmacist job description is useless if team members are not aware of it. Consequently, it is important to educate the team about the pharmacists’ role. Considering most teams are constantly changing composition, this step should be addressed on an ongoing basis.

This is key to integrating. Everyone must be on the same page about what the pharmacist can do.—Pharmacist reviewer

Scheduling face-to-face meetings with individual team members is a common strategy to achieve this goal.⁴ This can be a very effective way to introduce pharmacist services, explain the logistical details of the role (e.g., office location, hours of work, referral procedures) and determine individual team members’ expectations and preferences regarding collaboration.

Some pharmacists provide group education sessions, which are held during team education days, and use case studies or patient stories

BOX 1 Tips on successfully integrating into an existing primary care team**Pharmacists should:**

- Determine the needs and priorities of the team and its patients
- Develop a pharmacist job description
- Educate the team about the pharmacist role
- Educate themselves about other team members' roles
- Ensure clinic infrastructure supports the pharmacist role
- Be highly visible and accessible to the team
- Ensure their skills are strong and up to date
- Provide proactive care and take responsibility for patient outcomes
- Regularly seek feedback from the team
- Develop and maintain professional relationships with other team members

Pharmacists shouldn't:

- Start providing services without finding out about the practice and its patients
- Wait for other team members to decide what their role should be
- Work without a job description that the entire team has agreed on
- Work without understanding what other team members do
- Passively accept having inadequate space or resources to do their job
- Sit in their office waiting for the team to request assistance or send referrals
- Work from home (or another work site) waiting for other team members to refer patients
- Avoid complex patients or services that require expanded training, knowledge or skills
- Avoid getting to know other team members

to illustrate successes. It can also be useful to create posters that remind team members and patients about the pharmacists' role. The key is to develop a plan to regularly educate the team regarding how they can best use the pharmacists' services.^{9,15,18,25,32,33}

The large majority . . . do not understand the skill set of a pharmacist and cannot imagine for themselves how your skills may be best applied.—Pharmacist reviewer

Recommendation 4: Educate yourself about the roles of the other team members

Strength of recommendation: mean score = 1.5 (definitely do it/probably do it)

It is equally important for the pharmacist to understand the roles and expertise of other team members. Scheduling face-to-face meetings with individual team members (discussed in the previous section) is a very effective strategy to achieve this goal. The pharmacist can also arrange to shadow other team members or read about their scopes of practice by accessing professional association websites (Box 2) to better understand how they contribute to patient care.

If you are not aware of what other people are capable of doing, how will you collaborate?—Pharmacist reviewer

Recommendation 5: Ensure clinic infrastructure supports the pharmacist role

Strength of recommendation: mean score = 1.7 (definitely do it)

Most teams will be unsure how to support the role of a pharmacist. Consequently, it is important for the pharmacist to ensure that the proper supports are in place. Some examples of these supports are private office space (for patient consultations), computer, Internet, telephone and other basic office supplies.

Having access to clinical and drug information resources (e.g., e-Therapeutics, drug information, natural medicines database, RxFiles, UpToDate, TRIP Database, etc.) provides pharmacists with the tools necessary to efficiently gather information to make evidence-based decisions and answer drug information questions. Access to patient records and existing team communication and documentation systems is also a necessity. The pharmacist must be able independently access and document in the patient record.

Not providing a pharmacist access to these tools would be like sending a carpenter to work without a hammer and saw!—Pharmacist reviewer

Team members will also need to be educated regarding how to refer patients for a pharmacist

BOX 2 List of professional organizations in Canadian health care

Canadian Association of Occupational Therapists: www.caot.ca
 Canadian Association of Social Workers: www.casw-acts.ca
 Canadian Association of Speech-Language Pathologists and Audiologists: www.caslpa.ca
 College of Family Physicians of Canada: www.cfpc.ca
 Canadian Medical Association: www.cma.ca
 Canadian Nurses Association: www.cna-nurses.ca
 Canadian Physiotherapy Association: www.thesehands.ca
 Canadian Psychological Association: www.cpa.ca
 Dietitians of Canada: www.dietitians.ca
 Canadian Association of Physician Assistants: www.caopa.net
 Canadian Association of Naturopathic Doctors: www.cand.ca
 Canadian Chiropractic Association: www.chiropracticcanada.ca
 Canadian Dental Association: www.cda-adc.ca
 Registered Massage Therapists of Ontario: www.rmtao.com
 Canadian Society of Chinese Medicine and Acupuncture: www.tcmcanada.org
 Canadian Association of Optometrists: <http://opto.ca>
 Canadian Association of Midwives: www.canadianmidwives.org/useful-links.html

consultation. A simple protocol should be developed that is similar to existing team procedures for referring patients to other consultants.^{25,27,34-36} It may be useful to create a pharmacist referral form to facilitate the process (samples available at www.impactteam.info). Access to administrative support for booking patient appointments or sending faxes is also very useful and will ensure efficient use of pharmacist time.

The team needs you as a clinician, not an admin person.—Pharmacist reviewer

Recommendation 6: Be highly visible and accessible

Strength of recommendation: mean score = 1.7 (definitely do it)

Establishing a consistent and visible presence on the team is an important factor in several studies that describe successful pharmacist integration into primary care teams.^{11,18,28,37,38} Having a workstation that is visible and located close to the other team members is very useful. If this is not possible, many pharmacists describe the effectiveness of “strategic loitering,” where they regularly spend a few minutes every couple hours around busy areas of the clinic, such as the nursing station, to increase their visibility and to create opportunity for communication. In addition, ensuring a consistent pattern of availability and scheduling regular shifts each

week will assist in establishing a presence on the team.

MDs have worked for decades “making do” . . . without regular (pharmacist) visibility they revert to old habits, resulting in less collaboration and lower-quality care.— Pharmacist reviewer

Some pharmacists attempt to increase their visibility with signage (in physician offices and waiting rooms) or reminder cards.⁴ It can also be helpful to send the team regular e-mails or short letters reminding them about your role. Many pharmacists create drug information newsletters to educate the team about safe medication use and remind them about the pharmacists’ presence on the team.

I don’t believe that signage and posters alone are enough . . . pharmacists must be present and visible to contribute to patient care.— Pharmacist reviewer

Finally, it is advisable to attend team meetings and patient care rounds to facilitate relationship development, awareness of the pharmacists’ role¹⁵ and pharmacist awareness of others’ roles. Attending these meetings demonstrates commitment and provides an opportunity for pharmacists to increase their confidence,

BOX 3 Useful resources

- IMPACT Toolkit and Resources: www.impactteam.info/resourceDownloads.php
- The Patient Centered Medical Home: Integrating Comprehensive Medication Management to Optimize Patient outcomes: www.accp.com/docs/positions/misc/CMM%20Resource%20Guide.pdf
- Family Health Team Implementation Checklist: www.health.gov.on.ca/en/pro/programs/fht/docs/fht_implement.pdf
- Ontario Ministry of Health Information for Family Health Teams: www.health.gov.on.ca/en/pro/programs/fht/fht_guides.aspx
- Ontario Pharmacist Association Family Health Team Resource Kit: www.impactteam.info/documents/fht_toolkit.pdf
- Pharmacy Coalition on Primary Care: Role of the Pharmacist in Primary Health Care: http://napra.ca/Content_Files/Files/Saskatchewan/Publications/PCPC_Submission-final.pdf
- Primary Health Care Pharmacist Competencies: www.biomedcentral.com/content/supplementary/1471-2296-13-27-s1.pdf
- Interprofessional Care: A Blueprint for Action in Ontario: www.healthforceontario.ca/UserFiles/file/PolymakersResearchers/ipc-blueprint-july-2007-en.pdf
- Core Principles & Values of Effective Team-Based Health Care: www.accp.com/docs/positions/misc/IOM_TeamBased_Care_Principles_Values.pdf
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- Pharmacy Specialty Networks: www.cshp.ca/cshpNetwork/psn/index_e.asp
- Farrell B, Dolovich D, Austin Z, Sellors C. Implementing a mentorship program for pharmacists integrating into family practice: practical experience from the IMPACT project team. *Can Pharm J (Ott)* 2010;143:28-36.
- ADAPT Patient Care Skills Development: www.pharmacists.ca/adapt

demonstrate their value and gain the trust of the team.^{19,33,39-41}

Recommendation 7: Ensure your skills are strong

Strength of recommendation: mean score = 1.8 (definitely do it)

Practising within a primary care team requires unique skills and expertise that will challenge even experienced pharmacists. Most will need a strategic professional development plan. It is common for pharmacists new to this role to require additional training in areas such as conducting medication assessments, collaboration, interviewing and assessing patients, developing care plans, documentation and making evidence-based decisions.^{8,18,19,25,39,40,42,43}

Communication and collaboration skills are critical. Don't sweat the therapeutics—you need to know how to approach a problem. There will always be clinical uncertainty and that's OK.—Pharmacist reviewer

Pharmacists should identify their personal learning needs (based on self-evaluation of existing skills and anticipated patient populations) and consider registering in a professional development program that will ensure their skills are strong.⁴⁴ For example, the Canadian Pharmacists Association offers a patient care skills development course called ADAPT (www.pharmacists.ca/adapt).

It can also be valuable to identify a mentor who can serve as a role model and provide support and

guidance.^{11,28,37,41,43} Professional organizations (Canadian Pharmacists Association, Canadian Society of Hospital Pharmacists, provincial pharmacist associations) can also be valuable sources of educational programming, advocacy and practice support.

You must be able to provide competent care in order to build a place on your team. The stronger your skills, the easier this will be.—Pharmacist reviewer

Recommendation 8: Provide proactive care and take responsibility for patient outcomes

Strength of recommendation: mean score = 1.7 (definitely do it)

Research suggests that pharmacists who integrate into primary care teams take 2 differing approaches to the role.⁴⁵ Some focus on responding to physician requests for drug information or patient support, providing “reactive care.” These pharmacists spend the bulk of their time waiting for and answering questions from providers and do not participate actively in patient-related decision making. Others take active responsibility for patient outcomes by seeking opportunities to improve patient care, providing “proactive care.” They do not wait for patient referrals or physician questions; rather, they identify patients who need assistance, educate other team members to provide better medication-related care, and initiate system-level interventions to improve medication management. Since the latter “proactive” role has been correlated with higher levels of interprofessional collaboration and more successful pharmacist integration,⁴⁵ this is the approach that should be followed.

There are many ways a pharmacist can proactively seek out opportunities to improve patient care. It is possible to identify high-risk patients and have them automatically flagged for a pharmacist assessment. These high-risk groups may vary depending on the clinic population, but some examples are recent hospital admissions, newly diagnosed chronic diseases, recent specialist physician appointments, patients taking multiple medications, patients taking BEERS or STOPP drugs,^{46–48} or patients recently initiated on anticoagulants or insulin. The options are endless, but the key is to have these patients automatically meet with the pharmacist, without waiting for a referral from another provider.

Patient self-administered screening tools have also been created and validated to identify patients at risk for drug therapy problems who need to meet with a pharmacist.⁴⁹

The pharmacist cannot assume that other team members can effectively and consistently identify medication concerns and refer those patients.—Pharmacist reviewer

It can also be useful to screen the charts of patients who are scheduled for an appointment with another provider, looking for drug therapy problems that may require pharmacist intervention (e.g., polypharmacy, dangerous combinations, poorly controlled chronic disease, excessive doses, duplications, etc.).^{27,32,50} Some pharmacists also target patients who are waiting in an examination room to meet with another provider and will pop into the room to quickly update the patients’ medication list and check for any concerns about their medications.²¹

Pharmacists can also proactively support the team by creating educational materials or presentations to keep the team up to date on medication management. In addition, pharmacists can initiate system-level enhancements that improve medication management within the team. Examples of these practice enhancements can be viewed at www.impactteam.info/practiceEnhancements.php.

For a more detailed discussion and additional examples of how to provide proactive care and take responsibility for patient outcomes, go to www.usask.ca/pharmacy-nutrition/primarycare.

Not only is this a central tenet of pharmaceutical care, but it demonstrates to your colleagues your commitment to care.—Pharmacist reviewer

Recommendation 9: Regularly seek feedback from the team

Strength of recommendation: mean score = 1.1 (probably do it)

Receiving feedback from team members regarding strengths, weaknesses and suggestions to optimise the pharmacists’ role is valuable. This can be achieved by implementing formal surveys or by informal discussions with team members and administrators. Patient satisfaction can also be obtained through surveys^{51–54} or informal

interviews. Survey or discussion questions do not need to be complex. Simply asking, “What should I be doing differently? What should I keep doing?” can provide valuable information about changes that are needed and strengths that should be expanded.

This demonstrates approachability, commitment to quality and helps to identify blind spots.—Pharmacist reviewer

Recommendation 10: Develop and maintain professional relationships

Strength of recommendation: mean score = 1.9 (definitely do it)

To successfully integrate into a team, it is imperative to develop strong professional relationships. This can be accomplished in many ways, including attending team meetings, social events and team-building activities.⁴ Regularly scheduled one-on-one meetings with physicians and other team members can also be used to establish rapport and discuss ways to improve patient care.^{4,18,27,55} Open communication, being approachable and respecting the expertise of others further helps facilitate relationship building.^{11,55,56} Simply discussing the results of patient assessments with other team members verbally (rather than relying on written notes) can also be useful for relationship building. Consultations with patients involving more than one team member can be used to establish credibility and develop an appreciation of the work of colleagues. It is also useful to volunteer for interprofessional committees or working groups and attend team retreats to enable interprofessional dialogue.¹⁵

The relationship with other members of the team is probably one of the biggest factors that will dictate the success of the pharmacist . . . but it takes a lot of time and patience.—Pharmacist reviewer

Discussion

These guidelines provide 10 evidence-based recommendations that summarize what pharmacists should (and should not) do to successfully integrate into existing primary care teams. We suggest that pharmacists who are considering a practice in a primary care team follow these recommendations. This includes pharmacists who are joining teams

that have previous experience with the role, since prior pharmacist integration attempts may not have been completely successful. These recommendations may also be useful for pharmacists who are currently practising in a primary care team, especially if some of the recommendations were not addressed during the initial integration process.

A panel of 18 external expert reviewers approved 10 of the initial 11 draft recommendations, and each of the final recommendations received consistently high strength ratings from the 27 external raters. In addition, it is apparent from the comments of the 27 strength raters (Appendix 2, available at www.cpjournal.ca) that their overwhelming support for the 10 recommendations was based on previous personal experience with successful integrations into primary care teams, as opposed to expert opinion or conjecture. Consequently, we believe that the recommendations in these guidelines are credible and that the level of rigour used to create them was adequate.

It is important to recognize that the integration process does not happen overnight, and pharmacists should be patient, be persistent and have realistic expectations. One GRADE reviewer commented that “pharmacists need several months (often 9 to 12 in my experience) before they become efficient in their new role . . . and it is even more challenging if someone only works 1 to 2 days per week in the clinic.”

The importance of individual pharmacist assertiveness and confidence cannot be overstated and is a key factor for successful pharmacist integration.⁵⁷ This is not particularly surprising, since many teams have only a single pharmacist in the clinic, and most teams have little or no experience with integrating this new role. Consequently, an ability to take the initiative to assertively implement all 10 of these recommendations is vital, and pharmacists who already possess these personality traits may be better suited than others for this practice setting. Pharmacists who are less assertive and confident may need to make a concerted effort to overcome these personality traits to successfully integrate into a primary care team. This also highlights the importance of identifying a mentor and joining a practice support network to assist in this challenging integration process. Additional useful resources can be found in Box 3.

The primary limitation of these guidelines is the sole use of the CSHP-CPhA Primary Care Pharmacists Specialty Network (PC-PSN) for feedback on the recommendations and for the strength rating process. Opinions of physicians, nurses, allied health professionals and patients were not sought, although presumably these viewpoints are represented in the literature used to develop the recommendations.

By gaining an understanding of the team and its patients, clearly defining and understanding roles and responsibilities, developing interprofessional relationships, taking responsibility for patient outcomes and continuously learning and improving on professional skills, pharmacists can make a significant impact on the care of patients and become an invaluable member of the primary care team. ■

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