Establishing a clinical pharmacy service requires planning and the involvement of many stakeholders. How quickly the plan can be implemented and what barriers, if any, are encountered will be influenced by the readiness of the pharmacy team and the clinical team on the care unit to transition to a model of care that includes the provision of clinical services by a pharmacist. This section provides guidance on the various ‘building blocks’ to establish a clinical pharmacy service, such as how to select the clinical area, garner support from leadership, and enlist the support of other healthcare professionals, secure resources.

**Identifying the Opportunity**

Generate ideas for new clinical programs.

- Review relevant standards including Accreditation Canada required organizational practices, CSHP 2015, Blueprint for Pharmacy.

- Consider ideas such as narcotic safety, anticoagulation safety, infection control, medication reconciliation, prevention of medication errors.

- Collect baseline data. Note gaps between current institutional practice and national benchmarks that have been established by Accreditation Canada. For example, there may be gaps in services as patients move through the healthcare system, and it may be possible for pharmacists to provide seamless care and close those gaps.
• Consider trends in patient volume and acuity, patient and healthcare provider satisfaction, and/or the quantity, distribution, and types of roles for healthcare providers.¹

• Note gaps in the medication-use process or vulnerability to medication errors that could be addressed or prevented by establishing a role for a clinical pharmacist in a clinical pharmacy program.²

• Formulate strategies to meet identified needs, such as brainstorming, reviewing the literature to identify effective approaches, and seeking input from stakeholders or others who have been involved in similar projects.¹

• Identify factors related to patients, healthcare providers, the organization, and the healthcare system that might contribute to unmet health needs.¹

### Performing a Needs Assessment

A needs assessment should be done to determine where the program might have the greatest impact; it can also help to develop a clear and compelling case for the clinical program.

When conducting the needs assessment it is important to consider the following:

• The needs assessment is especially important when the workplace does not include pharmacists in direct patient care activities, blurring the opportunity to implement a clinical pharmacy program.

• The needs assessment must be site-specific.
• If the organization has previously conducted a needs assessment, how relevant is it to this issue and whether its recommendations have been implemented.¹

• The needs assessment should include collecting necessary information to document existing health service use or coverage, such as previously reported medication errors or suboptimal outcomes, to inform future decision-making and estimate potential impact.¹,²

• Shadowing and site visits may be useful for understanding the department’s workflow and the potential scope of the proposed clinical pharmacy program.²

• Approval of the local research ethics board might be required to collect and analyze any data.¹ (The assessment might be seen as a form of research.)

• The strategies to collect and analyze data should be refined to minimize bias.¹

• The needs assessment questions may be incorporated into the measurement of outcomes for the clinical program (see “Evaluation and Performance Measures” section).¹

• How the pharmacist will manage his or her other responsibilities, while remaining visible and accessible to the healthcare team as part of the proposed service.³
Selecting Appropriate Patients

If possible, focus on a specific patient population. Doing so may be helpful in achieving the following benefits:

- facilitating the development of targeted interventions that are designed to meet specific health needs;\(^1\)
- improving clarity of the role both for pharmacists and for other healthcare professionals;\(^1\) and
- attracting the attention of program leaders. Establishing a successful clinical pharmacy program on one ward will attract the attention of program leaders from other wards and a demand for expanded clinical pharmacy services. A diluted clinical program that tries to troubleshoot for all patients rarely leads to increased demand for clinical pharmacy service since clinical leaders do not see the potential impact of comprehensive clinical services.

Consider areas where there is potential for the pharmacist to be actively involved in collaborative care (rather than performing a specific activity in isolation). The goal should be to provide a dedicated clinical pharmacy service that is “available, accessible and visible.”\(^2\)

Consider starting the program in areas of the hospital where the visibility and involvement of pharmacists is well established and valued.

Consult with other sites to see if a clinical pharmacy program has been implemented for a similar group of patients. If so, review the framework for the program, note successes and challenges with implementation, and consider any differences between the two sites.
Consider spending a day shadowing staff at the other site to understand how the clinical pharmacy program was integrated with the rest of the pharmacy department and the ward/service involved.  

**Developing and Fostering Key Relationships**

Build upon the existing positive perceptions of nurses, physicians, and other members of the healthcare team regarding the value of clinical pharmacists to patient care. If regular opportunities for interprofessional interaction are not already well established, you may need to create other venues to increase pharmacists’ contact with physicians and other healthcare professionals; for example, participating in medical rounds, initiating informal in-service sessions on medication education for nurses, or organizing “safety huddles.”

Clearly identify the stakeholders’ expectations (e.g., activities that physicians are comfortable having pharmacists do; methods of documenting pharmacists’ activities).

Consider that stakeholders may have different views, understanding, and expectations of pharmacists and the proposed clinical program and may also differ in their commitment to change and in their influence.

Encourage communication between clinical leaders with and without comprehensive clinical pharmacy services in their practice areas and these leaders can help inform decision-makers about the potential impact of clinical pharmacy services.
Garnering Commitment from Senior Leaders.

- Develop a strong rationale and justification for the proposed clinical pharmacy program.\(^5\)

- Couch ideas for improvement in terms of “medication safety” to help garner the support of the hospital’s administrators.

- Recognize the hospital’s organizational structure (hierarchy), and seek the support of all relevant personnel. Start with the medical director of the relevant department and the director of the pharmacy department.

- Present a realistic timeline for implementation of the clinical program.

- Establish a collaborative practice model for the pharmacy department that is linked to the vision and mission of both the pharmacy department and the institution as a whole.\(^4-6\)

- Prepare a business plan; such a document will likely be needed to secure support from senior management (see “Success Stories and Helpful References” section, below).

- If a new protocol is established, involve the Pharmacy and Therapeutics Committee.

Forming a Team

A team for the clinical program should be created that is responsible for the following activities:

- plan and monitor implementation

- direct evaluation of the program and
Early and on-going communication is key.

- facilitate communications with key stakeholders

At the outset, the team should determine the following:

- the strategic plan (vision, goals, and outcomes) of the clinical program

- how decisions will be made and documented and how to ensure transparency of decision-making heeding the following advice:
  - Approaches with appropriate involvement of stakeholders and decisions reached by consensus are more likely to be accepted and are more likely to be of higher quality.
  - The authority for decision-making may depend on the significance of the impact of the decision.
  - All decisions should be clearly documented in minutes and/or reports.

- who the key stakeholders are (e.g., physicians, nurses, pharmacists, dieticians, occupational therapists, physiotherapists, clinical staff, administrators, patients and their families or advocates) and how to involve them

- how communication with stakeholders will occur
  - Plan to communicate clearly and formally, in a positive way, with stakeholders about the project.
  - Involve at least one member from each profession represented within the hospital (preferably a person who is influential within his or her own profession). Ask these “champions” to introduce and advocate for the
program with others in their respective professions.

- how the position will be funded and to whom the new clinical pharmacist will be reporting
  - Early and on-going communication between program leaders is key to clarify how non-pharmacy programs can have a say in day-to-day activities of the pharmacist.

### Engaging Stakeholders

Engage stakeholders early in the process to promote the following benefits of the proposed program:\(^1\)

- commitment, support, and resources for planned change
- clarity about and shared vision of the clinical pharmacist’s role
- awareness and understanding of the clinical pharmacist’s role
- acceptance of the clinical pharmacist’s role
- early identification and resolution of concerns or barriers

Engage both formal and informal mentors.\(^{1-3}\)

Consider a formal presentation to managers about the documented benefits.\(^3\)

### Developing the Proposed Role of the Pharmacist

Define the proposed role of the pharmacist and the scope of the pharmacist’s activities within the clinical program, including development of a job description.\(^3\)
Assess the appropriateness of the clinical program; the elements of the program should be within the scope of practice of a licensed pharmacist.

Limit the scope of the clinical program to priority cases, especially if support for the program is not well defined.

Determine the training requirements for staff. Consider who will be responsible for educating staff members and disseminating information. In a smaller hospital, this might be a pharmacist; in larger centres, this might be a clinical coordinator or director.4-6

Write policies and procedures to support the practice model (e.g., collaborative practice agreements, pharmaceutical care policies).4-6

Utilize regulated technicians for dispensary work and to free up the pharmacist for clinical work.

Assess the team’s and the organization’s readiness for change.1

Collaborate with mentors and pharmacists working in similar roles at other sites to understand their role, tasks, and responsibilities.3

Survey the site’s clinical staff about how best to utilize the services of a pharmacist.3 Use a collaborative practice agreement as a guide and training tool, if appropriate (see Resources section).

**Prioritizing Key Aspects of the Program**

Begin with only a few key aspects and introduce additional aspects slowly.

When prioritizing aspects, consider the following:

- strategic fit with organizational goals1
- alignment with established practice standards1
• existing organizational education or research commitments

• burden of illness

• clinical impact and the quality of supporting evidence

• resource implications

• feasibility and sustainability

• size of the institution, as the priorities of a 500-bed hospital will differ from those of a 100-bed hospital.

Consider additional factors for large tertiary care sites relative to smaller sites since implementing a clinical program at larger sites may involve:

• impacts on more stakeholders

• increased difficulty in achieving consensus

• increased requirement for time and resources to promote acceptance and integration of the proposed practice changes

Smaller hospitals may have limited hours and may offer fewer services. Collaborative management may still be possible, but on a different scale (e.g., 5 days per week, but with protocols for after-hour service). The amount of time dedicated to clinical practice and the variation in clinical services offered will be determined by the resources available.

Collaborate with stakeholders in planning for the clinical program.
Addressing Commonly Faced Barriers and Developing Methods of Overcoming Them

The extent and type of barriers encountered while implementing a clinical pharmacy service will likely depend on the experience the other healthcare team has in working with a pharmacist who provides clinical services and the readiness of the pharmacy department to shift resources from the operations of the dispensary to support the clinical service, if needed. Frame concerns and barriers within a holistic perspective of patient care, rather than defining only the barriers that might prevent pharmacists from achieving their full scope of practice.

Address the issue of resistance from physicians and other healthcare professionals.

- Clearly define roles and expectations, and revisit them frequently at team meetings.¹

- Offer regular and effective communication about roles, role differences, role changes, and evaluation to other team members.¹

- Emphasize that pharmacists are collaborating with other team members, that they are not usurping anyone’s authority, and that they are trying to improve the quality of patient care through their expertise and their support of the team.

- Emphasize maintenance of skills.⁷

Show an openness to accept critiques and a willingness to receive feedback from physicians and other healthcare professionals.⁷ Do not overextend the clinical services; limit it to priority cases, especially if support for the program is not well defined. Ensure a highly-functioning interprofessional team.¹
Recruit individuals with good interpersonal skills.¹

Address underlying issues related to the team’s functioning before establishing new roles.¹

Deal with “change fatigue” or competition with other initiatives.¹

Dispel the perception that implementing the clinical program will be too complex.¹

Address the difficulty in defining the role of the pharmacist within the clinical program.³

### Developing a Post-implementation Plan

Hold regular follow-up meetings with stakeholders. Feedback from stakeholders will be important in assessing potential improvements.

Establish an educational or orientation program to train new pharmacists about their specific roles. Identify specific areas of expertise that new pharmacists should bring to the program and ways in which pharmacists without that experience could obtain targeted training.²

Consider different avenues for hiring the pharmacist, including reassignment of an existing staff member, reassignment of a specialist, or hiring of a pharmacy resident.² Consider each candidate’s work ethic and interpersonal skills.²

Use an ongoing documentation system where the new clinical pharmacist keeps track of work and clinical interventions. A report that summarizes the work performed should be provided to those who have
approved the new position, in order to justify the funds committed, and set the stage for future clinical pharmacy program proposals.

**Identifying Resources for Implementation**

**Human Resources:**

- Identify the resources required to support the pharmacist’s time spent on the unit and for back-up in dispensary (e.g., 1 full-time equivalent [FTE] for every 30–50 beds in acute care, 1 FTE for every 150 beds in residential care). This will entail identifying the number of pharmacists, required coverage in dispensary, the activities the pharmacist is expected to perform, and the number of beds in the facility. Also consider the financial implications of having pharmacy technicians more involved in the dispensary to free up pharmacists to work on the care unit.

- Presence on the ward will be needed to ensure that pharmacists are visible and involved.

- Establish an educational method or orientation session to train new pharmacists on the team for these specific roles.

- Identify the funding required for training and education of pharmacists.

- Determine the level of education and experience required to meet the needs of the patient and program (e.g., PharmD, residency)

- Consider financing the new program through cost savings accrued from established or similar programs at other sites, if that is an option.
Other resources:

- Ensure access to appropriate information resources, such as guidelines, protocols, drug information texts, and references, in the hospital and in the community. Ensure access to patient-specific data and records of consultations, if needed.

Putting it all Together - Building the Business Case:

Build a business case to help secure support and resources for the program; the case for a clinical pharmacy service begins with identifying its value. (2) (See business case examples and templates in “Success Stories and Helpful References” section.) The business case should provide sufficient information for the reader to understand the costs and benefits of the pharmacy program. To do so, it should include the following information:

- appropriate supporting literature and evidence (background information, results of the needs assessment, etc.)

- outcomes that are relevant for management, emphasizing the projected return on investment,\(^1,2\) and identifying the priorities of the institution and department, as well as existing gaps

- potential outcomes in terms of patient care if the clinical program is not implemented\(^1\)

- the implementation plan

The plan should answer the following questions:

- What primary issues face the institution and the pharmacy department?
- How does it fit with the pharmacy’s business plan to provide clinical pharmacy services?

- What objectives or results are to be achieved by the pharmacist program?

- What are the benefits that underlie the objectives?

- What metrics and targets will be used to define success?

- What methods should be used to collect, analyze, report, and act upon the data?

- What are the mechanisms (i.e., processes, programs, and services) by which the objectives will be met?

- What are the requirements for the management model, staffing, skill mix, scheduling, and training?

- How will pharmacy staff interact with medical staff and staff in other disciplines?

- What resources are required to support the program?
Success Stories and Helpful References

Appendix A: VCH Guidelines

Appendix B: Business case template (generic for all programs) [VCH]

Appendix C: Business case template (generic for all programs) [AHS]

Appendix D: Sample business case for clinical pharmacist in neuroscience and rehabilitation [Horizon Health Network]

Appendix E: Collaborative Practice Agreement