Establishing a Pharmacy Practice in Ambulatory Care Clinics: We Need More than a Significant *p* Value

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Interdisciplinary teams represent an established model of care in many settings, including ambulatory clinics. Pharmacists can be valuable members of these teams, providing expertise to help optimize drug therapy. To establish their role, or to introduce additional services, pharmacists often use evidence from clinical trials, economic analyses, and satisfaction surveys as justification. However, evidence that pharmacists have a significant impact on health outcomes, processes of care, or stakeholder satisfaction is not enough to fully characterize what a pharmacist does in a particular setting.

A growing number of studies have demonstrated the important contributions of pharmacists in ambulatory care settings.1 If information on a particular study protocol is available, pharmacists practising in other settings may be able to integrate the essential components into their practice. However, this process has some limitations. First, clinical trial protocols, by design, involve activities to address a specific component of patient care. Even the most transparently reported protocol will describe only a small portion of the broad spectrum of pharmacists' activities and responsibilities in a given setting. Second, it is often difficult to find a thorough description of the pharmacist's activities in a study article. In a recent systematic review,² my colleagues and I had to contact the authors of all included reports to obtain full descriptions of the pharmacist's role within their studies. Therefore, pharmacists who are interested in fully characterizing their roles and responsibilities when establishing a practice within an ambulatory care team will need to look beyond clinical trials.

Once a clinical service has been implemented, proving value, especially in the first few months to years, can be a difficult yet critical task. In an ambulatory setting, this time horizon is certainly too short to demonstrate an impact on clinical outcomes, such as hospital admission or mortality rates or the incidence or progression of comorbidities. Pharmacists involved in the early stages of program planning, implementation, or execution should focus on process-of-care indicators for benchmarking and measuring current patterns of practice. In this issue of *CJHP*, Lindblad and Howorko³ provide a good example of this approach by describing their experiences in a regional stroke prevention clinic, using a chart review



to illustrate pharmacists' activities and interventions in this setting (see page 431). As reported in a previous issue of CJHP, Bungard and colleagues used resources such as clinical practice recommendations and indicators for best practice to help illustrate the benefit of pharmacists' activities in their survey of anticoagulation clinics.⁴ These initiatives not only offer information to support continuing pharmacist involvement but also identify areas of need. For example, Bungard and colleagues found that, although many anticoagulation clinics were providing guideline-recommended services, their success was limited by available resources.⁴ As in the movie Field of Dreams, "if you build it, they will come": pharmacists established ambulatory clinics, and the patients came, well beyond expected capacity! The survey identified a need for clerical support to help with activities such as scheduling appointments and sending correspondence to referring clinicians, tasks that might not be captured or defined in clinical trial protocols.

Establishing a new clinical service can be an exciting and challenging goal. As with any long-term plan, interested pharmacists need to start with a clear vision of the end result. To help develop this vision and to clearly articulate the activities in which ambulatory care pharmacists might become involved, I encourage interested readers to start by examining 4 documents. First, the description by Lindblad and Howorko³ of the early



stages of their pharmacist practice in a stroke prevention clinic (as mentioned above; see page 431 of this issue) is a good starting point. Second, the article by Bungard and colleagues provided a good overview of the various pharmacist activities in ambulatory anticoagulant management services.⁴ Descriptive studies like these help us all to better understand the scope and depth of pharmacy services in ambulatory settings; as such, they can be used to support proposals for future services. Third, the American College of Clinical Pharmacy (ACCP) recently produced a white paper to help clinical pharmacists and administrators develop business practice models for pharmacy services in ambulatory settings.5 The report includes a comprehensive list of issues to be addressed and resources needed when building a clinical practice in this setting. Finally, Epplen and others6 have described the systematic process, involving many of the essential components of the ACCP business model framework, that was used to establish an ambulatory clinical pharmacy service in their hospital. These articles should allow you to start down the road toward solidifying pharmacists' role on the ambulatory care team.

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ON THE FRONT COVER

Achillea millefolium

Achillea millefolium, commonly known as yarrow, is native to the northern hemisphere. Ken Wou took this photograph in Kamloops, British Columbia, in November 2007, using a Canon Digital Rebel XT.



The flowers, leaves, and stems of yarrow contain, among other compounds, a variety of alkaloids. One of these, achilleine, can decrease clotting times, whereas others have antipyretic and hypotensive effects. Yarrow and its extracts have been reported to have anti-inflammatory, diuretic, antibacterial, astringent, stimulant, tonic, and mild aromatic properties.

Yarrow has been used to treat fever, the common cold, allergic rhinitis, amenorrhea, and numerous gastrointestinal disorders. The leaves have been chewed for treating toothaches and applied topically to treat bleeding hemorrhoids or wounds; colds and influenza have been treated with a yarrow rub applied to the chest. In a study of the antibacterial effect of a mouth rinse made from yarrow, juniper, and nettle, there was no benefit in terms of inhibition of plaque or gingivitis (*J Clin Periodontol* 1998;25[5]:399-403).

Ingestion of large amounts of yarrow has caused sedation and diuresis, and topical administration has resulted in dermatitis. There have been no reports of drug interactions. Yarrow is believed to be an abortifacient and can affect the menstrual cycle; it should therefore not be used in pregnancy.

In 2009, *CJHP* will start a new cover series, featuring rural hospitals and their pharmacy departments. The journal would be pleased to consider photographs taken by CSHP members for use in this series. If you would like to submit a photograph, please send an electronic copy (minimum resolution 300 dpi) to Sonya Heggart at sheggart@cshp.ca.

