Keeping up with the evidence: Resources used by a busy pharmacist

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COMBINING EVIDENCE, CLINICAL EXPERIENCE and patient preference is key to the practice of evidence-based medicine (EBM).¹ While clinical experience and patient preference are informed by the clinician and patient, the remaining factor in the equation is the evidence. The evidence informs us of the available treatment options and what the risks and benefits are for those options. These risks and benefits are important pieces that need to be communicated with patients to allow for shared informed decision-making.² Hence, keeping up with the evidence is essential in providing accurate information to patients.

A survey of pharmacists demonstrated that more than 90% perceive that EBM improves patient care; however, the survey also identified many barriers for pharmacists being able to implement an EBM practice.³ The 3 most common barriers were time, patient overload and limited access to different EBM sources.³ Time and volume of prescriptions are issues specific to the work environment and are difficult to address within an article; however, access to EBM resources can be examined. Over the past few years, different tools and resources have become available to aid clinicians in keeping up with the evidence. To my knowledge, there is no published succinct list of available resources. Therefore, listed below are resources that I have encountered and use regularly in my practice to remain up to date. There are 3 types of resources that I use in my practice:

1. Notifications of recently published articles

Strengths:

- Remain informed of recently published articles.

Limitations:

- Only abstracts are presented; therefore, the full article may only be available for a fee.
- Requires critical appraisal and assessment of the quality of evidence by the reader. (Note: when using these resources, look for well-done systematic reviews, meta-analyses or randomized controlled trials and be leery of opinion reviews or commentaries that are more subject to author biases.)

2. Narrative resources

Strengths:

- Health professionals review the evidence and provide their interpretation.

Limitations:

- While the resources listed below are health professionals who are well versed in critical appraisal and strive to bring forth an objective, evidence-informed perspective, there is potential for their personal biases to be present, and their review may not be a full systematic review of all the available evidence. It is still essential to think critically about the information presented.

3. Safety notifications

Strengths:

- Receive notifications about the most recent safety concerns and adverse drug reactions with medications.

Limitations:

- Some resources listed are American; therefore, you may receive notifications

about medications and devices not available in Canada.

Note: This is not an exhaustive list of resources but provides a starting point for pharmacists who want to remain informed about new literature and drug safety concerns.

1. Notifications of recently published articles:

- **Evidence Alerts (DynaMed Plus and McMaster University's Health Information Research Unit):** Receive a weekly e-mail notification containing links to abstracts of recently published articles relevant to your practice. Articles are selected from more than 120 clinical journals and are reviewed by specialists, family physicians or other health professionals, who comment on and rank the significance of the article. Notifications can be customized by medical conditions and impact rating of the article. Available from: <http://plus.mcmaster.ca/EvidenceAlerts/Registration.aspx>.
- **QxRead:** A smartphone application that provides abstracts of recently published articles from journals (e.g., the *New England Journal of Medicine*, *JAMA Internal Medicine*). The application is searchable and customizable. Available from: www.qxmd.com/apps/read-by-qxmd-app.

2. Narrative resources:

- **Tools for Practice (Alberta's College of Family Physicians):** Receive a biweekly e-mail with a short summary of the evidence for a clinical question commonly encountered in medical practice. (Note: This resource will not always be pharmacy related; sometimes the posts are related to diagnosis.) Available from: <https://www.acfp.ca/tools-for-practice/>.
- **Therapeutics Initiative (University of British Columbia):** Receive a notification when new letters are published that systematically review the evidence for drug-therapy issues. Available from: www.ti.ubc.ca/TherapeuticsLetter.
- **Academic Detailing Services:** Pharmacists review the literature on pharmacotherapy topics and provide one-on-one or small-

group, in-person continuing education to clinicians. Some current academic detailing programs in Canada include:

- **British Columbia's Provincial Academic Detailing Service:** documents are publically accessible online. Available from: www.bcpad.ca.
- **Saskatchewan's RxFiles:** some documents require paid subscription. Available from: www.rxfiles.ca/rxfiles/.
- **Dalhousie's Academic Detailing Service in Nova Scotia:** documents are publically accessible online. Available from: <http://medicine.dal.ca/departments/core-units/cpd/programs/academic-detailing-service.html>.
- **Therapeutics Education Collaboration:** A pharmacist and a physician provide their perspective on the pharmacotherapy evidence on a weekly podcast. New podcasts are available free for a limited time; old podcasts and premium podcasts require an annual subscription fee. Available from: <https://therapeuticseducation.org/>.

3. Medication Safety Warnings:

- **MedEffect eNotice:** This Health Canada site sends out notices about drug advisories and recalls by e-mail or RSS feed. Available from: www.hc-sc.gc.ca/dhpm/medeff/subscribe-abonnement/index-eng.php.
- **FDA Med Watch:** Receive notifications of new safety warnings for medications and devices. Available from: www.fda.gov/Safety/MedWatch/.
- **ISMP QuarterWatch:** Compiles and reviews the information on adverse events from the Food and Drug Administration in a quarterly letter. Available from: <https://www.ismp.org/quarterwatch/>.

This list was designed to inform pharmacists about some of the available resources to assist them in keeping up with newly published literature and safety warnings. It is important to look at the literature critically and apply it appropriately. Always take into consideration the patient's desires and personal clinical experience when applying the evidence. ■

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