Keeping Up with the Medical Literature: How to Set Up a System

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The best way to keep up with the medical literature is to set up a system that delivers valid, relevant information while filtering out extraneous information. Useful information is patient-oriented, practical, and innovative. Good information systems are available that are inexpensive and easy to use. (*Am Fam Physician.* 2009;79(1):25-26. Copyright © 2009 American Academy of Family Physicians.)

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This is one article in a six-part series about putting evidence into practice.

Think back for a moment: how did you first learn that estrogen therapy increased, rather than decreased, heart disease risk in postmenopausal women? Did you read the research study in *JAMA?* See a synopsis of the article in *Journal Watch?* Hear about it at a medical meeting?

Chances are good that it wasn't any of these sources. Charles Gibson, Katie Couric, or Brian Williams probably told you. A patient may have brought in an Internet printout, or you may have heard it on the radio.

How to Keep Up?

As information changes around us at a dizzying pace, how are we to keep up with it all? As recently as 10 years ago, the difficult part was gaining access to information. Now we are awash in more information than we can handle—certainly more information than we need. The best way to keep up is to set up a system that delivers the information we need without the information we don't need. We want information that is valid and relevant to our practice. It should be inexpensive and easy to use.[1]

News Versus Information

Relevant information is that which we can use to make decisions. News, on the other hand, is anything we didn't know yesterday.

Our system has to provide us with information—not just news—that we can use. Although news is usually interesting, most of us simply don't have time to search through a mound of information, separating the useful from the useless.

Lightening the Load

The best information is a POEM—patient-oriented evidence that matters. POEMs must meet the following three criteria:

- The information must focus on outcomes that patients care about. We are in the business of helping people live longer and better lives.
- The intervention must be feasible. There is no sense in reading about a drug, test, or procedure that is not available or is too costly.
- The information, if true, must require us to change our practice. It may be gratifying to learn that what we currently do is correct, but this is not the kind of information we are looking for.[2]

Signal Versus Noise

Much of the new research is preliminary or exploratory, and it is not ready for widespread use. But hidden in all of this noise is valid research that should change the way we practice medicine.[3] Our system should separate this signal from the noise and not waste our time with information that is not relevant to our practice.

Sources

Do you like to read a newsletter? Browse the Internet? Read e-mail? Do you like your information in small bites or do you like to digest a pile of new information once a month?

The first step is to figure out your preferred method of receiving information. Systems that provide you with the information with little effort on your part are more likely to be successful. Most physicians use several different tools as part of their system.

Table 1. Selected Resources for Keeping Up with the Medical Literature

Source	*Description*	*Cost*	*Notes*
American College of Physicians Journal Club (http://www.acpjc.org)	One-page summaries of about 30 valid research papers. Published biweekly in *Annals of Internal Medicine*	$260 per year	Articles are rated for relevance by a national network of primary care physicians
American Family Physician (http://www.aafp.org/afp)	Twice-monthly print and online publication	Free to qualified primary care physicians	Several sources of clinical information whose evidence is graded
Bandolier (http://www.medicine.ox.ac.uk/bandolier)	Monthly online newsletter	Free online	British newsletter that is also available in print
Daily POEMs Alerts (http://www.essentialevidenceplus.com/product/features_dailyip.cfm)	Daily e-mail summary of a single valid research article	$79 per year, which includes a subscription to Essential Evidence Plus	Coordinated with Essential Evidence Plus
Evidence-Based Practice newsletter (http://www.ebponline.net)	Evidence-based answers to common clinical questions in primary care. Produced by the Family Physicians Inquiries Network (http://www.fpin.org)	$99 or more per year	Questions are derived from sentinel practices. Their relevance is graded, and the evidence for the answer is systematically reviewed, analyzed, and rated
Evidence Updates from the BMJ Evidence Centre (http://plus.mcmaster.ca/evidenceupdates)	Weekly e-mail updates of article titles linked to Medline abstracts	Free	Validated evidence considered to be relevant and newsworthy
Journal Watch (http://www.jwatch.org)	Biweekly print or online newsletter	$129 per year for print version; $79 per year for online version	Annotated reviews of clinically important studies from a broad array of medical journals

How to Evaluate

The next step in the process of developing a system is to evaluate the relevance of the information. A quick look at samples is helpful. Finding out how the service selects relevant information will keep you from getting bogged down in news that isn't helpful.

The information service should also indicate how it evaluates the validity of the information. Does it label the information with levels of evidence? Does it use formal validity checks? Publication in a well-known journal is not an indicator of quality. The earlier studies showing a benefit to estrogen therapy were published in *JAMA* and the *New England Journal of Medicine*.[4-6]

Beware Trojan Horses

Just as the Greeks were said to have sneaked into the city of Troy in the belly of a wooden horse, so too can information from commercial sources be slipped into otherwise good-quality sources. Free information sources may provide information from pharmaceutical companies. Although the information may be valid and relevant, it may not have gone through the necessary quality checks.

Developing a System

The goal of having an information system is to help you feel confident in your clinical practice. Your system should deliver relevant and valid information as it becomes available, filtering out unnecessary information. *Table 1* lists examples of information sources; choose the ones that will work for you.

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