A Plan for Professional Reading

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... the student-practitioner requires at least three things with which to stimulate and maintain his education, a notebook, a library, and a quinquennial braindusting.

-Sir William Osler, 1905¹

Frustrated with the task of "keeping up" with the literature? You are not alone - this is a universal concern among faculty and trainees with whom I work. While there is no magical solution to this problem, here some observations and a framework to get you started. Please note that although most of the literature addresses the information needs of clinicians, this plan is relevant for scientists as well.

SOME OBSERVATIONS

First, the good news: as physicians and scientists, we are intensely curious about almost everything. The bad news: we cannot read every article of interest. A recent analysis found that a primary care practitioner would need to spend almost 630 hours per month to "keep up" with the relevant published literature². We need to develop realistic expectations about the amount of reading we can do.

Second, let's conceptualize "reading" as "knowledge acquisition" in whatever format it is available. This includes traditional journals, monographs, and textbooks; virtual versions of the same; and summary /reviews, like Up-To-Date.

Third, "reading" is not a homogenous activity. We read for a variety of reasons: to get information regarding a specific patient, to address a specific teaching or research problem; to maintain our fund of knowledge in our area of expertise; or to learn a new subject. Each involves a different approach.

Fourth –please read this aloud three times -- receiving a journal does not obligate you to read it. We accumulate many journals along the way: some we have carefully chosen (and pay for); some are included with memberships in professional organizations; and some are sent to us free -- just because! Planning to read them all would be analogous to planning to watch every program that comes into your home courtesy of your cable TV provider. As my colleague Mark Wilson, M.D. puts it, "don't let the postman determine what you will read."

Fifth, if something earth-shattering is discovered in your field, you will most likely read about it in the newspaper the next day. Enough said.

A FRAMEWORK

Our challenge is to define our individual needs, efficiently filter the daily tidal wave of information, review the resulting information at the appropriate level of detail, and retain what we need to in a simple system that allows rapid retrieval.

The first step, defining your needs, is critical, since all else flows from this decision³. The following is one way of thinking about your information needs.

"Just in time"

This is information you need to solve an immediate problem, and in the clinical arena these problems are referred to as "clinical questions" – that is, specific questions that arise in the care of a specific patient. This concept can be extended to the research and teaching setting as well.

Record these questions immediately as they arise – so carry a small notebook or index card or PDA in your pocket. Just in time learning should be done as soon as possible – preferably the same day. I recommend doing this even if you have many other important things on your plate. Answers to most specific questions can be found fairly quickly – or at least you can get started quickly, and you will derive enormous satisfaction in dealing with them right away. You must resist the feeling that all possible relevant information should be reviewed- in other words, perfection is not helpful.

Identify sources that you will routinely use, and learn effective ways to search them. On-line sources offer speed and comprehensiveness – as a place to start, Alper has collected a large number of useful links for clinicians at http://www.myhg.com/public/a/l/alper/.

Ely et al describe a system for organizing clinical questions and their answers using an Excel spreadsheet, which allows him to search, sort and summarize the information he has gathered⁴.

"Refurbishing"

In addition to keeping up with new information as it appears, consider doing periodic (e.g. at least once a quarter) in-depth reviews of a segment of your current knowledge base⁵. As a personal example, I was recently asked to give a talk on postmenopausal bleeding. This is a "bread and butter" topic for a practicing gynecologist, and I was tempted to base the talk on my prior knowledge and experience. Instead, I (thankfully) decided to review the recent literature. Although the basic principles had not changed, the review reminded me of details I had forgotten, and, as a bonus, I found some new studies that not only made the talk better, but also improved the care I provide to my patients.

Select topics for refurbishing based on an objective method; otherwise, you are likely to select only topics that are of interest, and you may fail to include the ones you see most often. For example, ask your billing office to send you a list of your top 10 CPT code diagnoses; or, for a couple of weeks keep a list of daily diagnoses and procedures.

"Someday, Maybe:"

This is information that interests you, but it not directly related to any current research, teaching topic or area of clinical practice.

Usually: Resist thorough reading. Scan abstracts only. File quickly in a separate file labeled: "things I might be interested in pursuing someday" – or something like that. On a Post-It™ jot down the reason the article caught your eye, and stick to the front. Periodically, look through this file – purge or elevate to a new learning project. .

But sometimes: reading outside your field of interest can be enormously valuable – in fact, incorporation of ideas from other fields is a common way that new advances are made. The trick is to be parsimonious.

"Keeping up"

Getting the new information you need to stay current in your field is the type of reading that can quickly pile up (literally) if not actively managed³. First, you should filter your reading for this purpose to high quality articles as defined by the principles of evidence based medicine. Then, don't read (most of) these articles in detail. Instead, skim the abstract so that you are aware of the general drift of the article, then either (for most) file in a system that allows rapid retrieval later when you need it, or, (for the few you want to read in detail) add to a "grab and go" folder that available to take with you to activities that are likely to involve waiting time (the dentist's office, an airplane trip, etc.)

To find the information you need to keep up, you will naturally begin with the journals that regularly show up in your office. Increasingly, many journals also now include a limited number of abstracts of relevant high quality articles found in other journals. Rather than relying solely on the journals you personally receive, consider using one or more online "push" services. There are three approaches.

The first is to sign up to receive the table of contents of individual journals. You may want to choose from among both subscription based journals (like the Lancet) and free offerings such as the CDC on-line journal Emerging Infectious Diseases (http://www.cdc.gov/ncidod/eid/index.htm).

Second, you can subscribe to a service that sends you citations based on specific key words you have submitted. A link to the on-line abstract will be provided, and from the linked page you can usually directly download the citation into your reference manager programs (Endnote, Reference Manager, etc). If available, a link to the full text may be included. Free key word based services are offered by JAMA (http://jama.ama-assn.org/cgi/alerts) and Science (http://jama.ama-assn.org/cgi/alerts) and Science (http://www.sciencemag.org/help/citetrack/). This kind of "push" is best for relatively narrow areas of interest. For example, I currently use this type of "push" for two areas I write about: menopausal hormone therapy, for which I use the keyword phrase "women's health initiative;" and PMDD or PMS, using those terms directly.

Third, a more comprehensive type of "push" surveillance is illustrated by two free services aimed at generalist clinicians, <code>bmjupdates</code>, from a partnership of the Cochrane Collaboration and McMaster University (http://bmjupdates.mcmaster.ca/index.asp) and InfoPOEMS (http://www.infopoems.com/). Each reviews are large number of journals, and "pushes" summaries of highly rated articles to subscribers.

Friedland et al describe a similar approach to finding evidence based information on the Internet at http://books.mcgraw-hill.com/medical/lange/ebmbook/ch06.html.

FINDING TIME TO READ

In a previous article (AP&S Dec 2004 p2-3) I describe a method of writing productivity, supported by experimental evidence, which involves working in regular brief sessions rather than occasional long

sessions ("binges"). The same approach should work for reading to keep up and to refurbish, and so I recommend reading in several 15 to 30 minute sessions over the course of the week. To repeat, "just in time" questions should be answered (briefly) in *real* time.

Occasionally you may spend an entire day – or more – just reading. In fact, this may be the best way to become immersed in a new research problem or clinical topic, or to get up to date on an old topic. Just don't think of this approach as your only option.

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