Staying Up to Date and Managing Information Overload

Lauren A. Maggio, PhD (@laurenmaggio) Anthony R. Artino Jr, PhD (@mededdoc)

The Challenge

As medical educators, we strive to implement up-to-date, evidence-based practices in our teaching, assessment, and research endeavors. One way to stay current in our field is to read the literature. While this seems straightforward, the multiple sources, varied formats, and sheer volume of available readings often lead to a feeling of information overload—or to a decision *not* to read at all. ¹ To avoid information overload and efficiently separate the wheat from the chaff, strategies for curating the literature are needed.

What Is Known

To help mitigate information overload, individuals have turned to strategies for managing and filtering the onslaught of available information. At the center of an effective strategy is finding the sources that identify the most relevant literature specific to an individual's needs and interests. Strategies vary depending on a person's individual information needs and personal preferences. Ironically, the very technology that is partly responsible for information overload can help manage it. ² This Rip Out outlines several tools and strategies for keeping current with the medical education literature, including tips for filtering without becoming overwhelmed.

How You Can Start TODAY

1. Work with a medical librarian to set up alerts. In our experience, librarians are an underutilized resource. Seek out your local medical librarian and ask him or her to set up medical education alerts. Alerts are sent to users via e-mail and can be created using database tools like PubMed³ or Scopus, which allow for customized alerts on specific topics across journals. Alerts can also be created within a given journal; most journals will e-mail you an electronic table of contents when a new issue is published.

Filter tip: Ask the librarian to set up a few alerts, and unsubscribe if the number of alert e-mails becomes unmanageable.

2. Subscribe to a medical education listsery or blog that aggregates the literature. A listsery is an electronic mailing list that regularly sends information to its subscribers. In medical education, there are several

DOI: http://dx.doi.org/10.4300/JGME-D-18-00621.1

Rip Out Action Items

Medical educators should:

- Utilize electronic tools, such as medical education listservs/blogs, automated database/journal alerts, Twitter, and reference managers, to help stay abreast of the latest medical education research and innovations.
- Seek sources that aggregate the literature, including "best of" lists and review articles.
- 3. Review for journals/conferences, attend medical education meetings, and learn from your peer network.
- Remind yourself that you do not need to read everything. Unsubscribe if a resource does not meet your needs.

listservs and blogs that consolidate and distribute relevant content, such as DR-ED⁴ and DR MERL.⁵

Filter tip: Test drive a few listservs or blogs, and do not hesitate to unsubscribe if the content does not fit your needs.

3. Create a Twitter account. Twitter is a social networking tool used increasingly by medical educators and researchers to post and interact via short communications. By using hashtags (key words or phrases that describe a topic), users can easily sort content. Popular medical education hashtags include #MedEd, #FOAMed, and #GME. Once you establish an account, you can tailor the tweets that appear in your timeline by following your favorite scholars and journals to see what they are reading/publishing.

Filter tip: Selectively "follow" Twitter accounts and "unfollow" accounts if those tweets seem irrelevant or too frequent.

4. Identify "best of" lists and review articles. Many journals and professional organizations create curated lists of high-quality articles, so-called "best of" or "editor's picks." Seek out such lists, including Medical Education's "Editor's Choice" articles, the Journal of Graduate Medical Education's "What JGME Editors Are Reading," and Sullivan's "Resources for Clinicians Becoming Clinician Educators." You can also find review articles relevant to your interests and scour their reference lists for articles on a specific topic.

Filter tip: Some topics are covered in several curated lists and/or review articles (eg, there are more than 30 reviews on work hours alone). Start by examining articles from only 1 or 2 curated lists or reviews. Remember, you do not need to read everything.

5. Volunteer to peer review for journals and conferences. As a peer reviewer you will be exposed to the latest educational research and innovations, which can help you stay up to date and excited about relevant medical education topics.

Filter tip: When setting up your reviewer account, be very specific about the topics and types of manuscripts you are willing to review. This assists both you and the journal.

What You Can Do LONG TERM

- 1. Go beyond journal articles. Increasingly, authors and educators are using alternative communication methods to disseminate and discuss their work, such as podcasts, blogs, audio books, and author interviews. *Filter tip:* Hone in on alternative communication methods that fit your routines. Use your commute or
 - methods that fit your routines. Use your commute or exercise time to listen to a medical education podcast (eg, KeyLIME⁷) or to an audio book.
- Attend scientific meetings in person or virtually. Medical education–related meetings provide opportunities to encounter cutting-edge educational research and innovations.

Filter tip: In advance, review session options in the meeting program and strategically plan what sessions you will attend. If available, familiarize yourself with the meeting app, which often features the capability to search by topic and includes presentation materials that can help you narrow down the sessions to attend.

- 3. Adopt a reference manager. Reference managers (eg, Zotero, EndNote, Mendeley) can serve as your personal reference library, helping to keep track of and organize references. Many reference managers are free and allow you to store full-text copies of articles.
 - *Filter tip:* Consult with your librarian to select the manager and meaningfully organize the references (eg, by project, topic area, or other searchable group).
- 4. Set up a Google Scholar Citations account. Google Scholar Citations allows you to track articles from specific authors. It will e-mail you the details of any articles the authors publish and articles that cite the authors' work.

Filter tip: As you begin publishing your own scholarly articles, you can follow citations of these works as a starting point. Once you are comfortable

- with the volume of e-mail alerts received, you can set up additional alerts for notification when your favorite authors have published.
- 5. Enlist your peer network and start a journal club. Ask your colleagues how they stay up to date and manage information overload. Consider starting a journal club with your colleagues and/or motivated trainees who want to learn more about medical education.

Filter tip: Remember, what works for 1 colleague may not work for you. Try several approaches and be open to mixing and matching strategies until you figure out what works best.

Resources

- Hemp P. Death by information overload. Harvard Bus Rev. 2009;87(9):83–89.
- Benselin JC, Ragsdell G. Information overload: the differences that age makes. J Libr Info Sci. 2016;48(3):284–297.
- Soskin D. Open source psychiatry. How to curate the medical literature. https://www.opensourcepsychiatry.com/ how-to-curate-the-medical-literature.html. Accessed August 8, 2018.
- Michigan State University. DR-ED instructions. http:// omerad.msu.edu/about-us/publications/dr-ed-an-electronicdiscussion-group-for-medical-educators/30-publications. Accessed August 8, 2018.
- Dependable Reviews of Medical Education Research Literature (DR MERL). https://drmerl.wordpress.com. Accessed August 8, 2018.
- 6. Sullivan GM. Resources for clinicians becoming clinician educators. *J Grad Med Educ*. 2015;7(2):153–155.
- Royal College of Physicians and Surgeons of Canada. Key Literature in Medical Education (KeyLIME) podcasts. http:// keylimepodcast.libsyn.com. Accessed August 8, 2018.



Both authors are with Department of Medicine, F. Edward Hébert School of Medicine, Uniformed Services University of the Health Sciences. Lauren A. Maggio, PhD, is Associate Professor and Associate Director for Graduate Programs in Health Professions Education; and Anthony R. Artino Jr, PhD, is Professor and Deputy Director for Graduate Programs in Health Professions Education.

Corresponding author: Lauren A. Maggio, PhD, Uniformed Services University of the Health Sciences, Division of Health Professions Education, Department of Medicine, Building 53, 4031 Jones Bridge Road, Bethesda, MD 20814, 301.295.1273, lauren.maggio@usuhs.edu