

## Channeling the flow of medical information

New, changing technologies are being incorporated into every aspect of medical care and education, and the impact cannot be overstated. While the ultimate qualitative impact (beneficial, intrusive, efficient, obstructive, or neutral) of specific individual implementations remains to be seen, there is no doubt that the faces of patient care and the financial management of healthcare delivery have been forever altered.

The amount of information now literally at our fingertips is overwhelming. Some of my patients bring the latest from www.clinicaltrials.gov to their appointments. One patient recently brought downloaded online testimony from patients who were being given an oil supplement to treat disorders including gout, neuropathy, carpal tunnel, sinusitis, headache, and postop hip and knee pain and wanted to know why I hadn't suggested it for her. Accessing the information pipeline is like drinking from a firehose, and there is no perfect valve that can adjust the flow to every thirst.

Lest we think that only patients use sites of variable reliability in getting their online medical information, in a recent survey by Kantar Media, when 508 physicians were asked which of 49 sites they looked at most often, Wikipedia came in at number 3 (UpToDate was number 1 and Cleveland Clinic Journal of Medicine was number 25). But when asked to rate the 49 sites for "quality clinical content," responders listed Wikipedia as 47 (UpToDate was still number 1 and CCJM was number 6).

We healthcare providers can assess the accuracy and quality of clinical content. But it is not always easy, especially when trying to access, digest, and utilize information within the real-time constraints of an office visit or inpatient consultation. The now almost universal use of electronic medical records (EMRs) in major health systems provides access to true point-of-care information to assist in clinical decision-making, but how we filter and channel this information and apply it to the patient sitting in the exam room is not always straightforward. It is naïve to think that one source can fit all of our information needs.

A "smart" EMR can reflexively direct me to diagnosis-linked clinical guidelines or care paths. But without knowing the specifics of how the guidelines were written, I can't know if they are ideally applicable to the patient in front of me. Guidelines based solely on clinical trial data may not be ideal for a given patient due to constraints of the clinical trial design and the tested clinical populations. There are times in areas outside my clinical field that I seek clinically nuanced expertise in interpreting clinical trials rather than the actual clinical trial data. Other times, when approaching problems within my own expertise, I want to see the raw data to reach a conclusion on its applicability and likely magnitude of effect in a specific patient. Using a trusted source of predigested, summarized data (as opposed to the raw data), knowing whether an author has a relationship with a specific company, and knowing that the clinical trials of a specific therapy are not intrinsically bad or good—all of these contribute to contextual decisions that lead to my clinical recommendations. I always want to

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know the nature of authors' commercial relationships, as well as the track record of my information sources.

It is in this context that the paper by Andrews et al in this issue of the *Journal* (page 225) addresses in a very practical way some of the nuances in using several popular point-of-care information resources. This is the second of 2 papers that these authors have contributed to the *CCJM* in an effort to inform and direct us how to quench our thirst for information without getting bloated.

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