

COMMENTARY AND OPINIONS

Skills over tools: rethinking clinical information literacy

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Les compétences avant les outils : repenser la maîtrise de l'information clinique

Three to four times a semester, usually when I'm at my most busy preparing for classes and workshops, I'll get a message in my inbox, labelled high priority, from a frantic practitioner at one of our affiliated hospitals that goes something like this: "URGENT! Our UpToDate access is not working! Delays in accessing information are devastating, as this is the most important tool we use to make decisions!

UpToDate is a clinical tool, also referred to as a point-of-care tool, that is designed for practitioners to quickly access recent and accurate information and make informed decisions at the bedside or in the clinic. I want to emphasize that I recognize the value of this tool. Having grown up in a province where medical appointments are tightly timed and healthcare providers are overworked, I understand that clinicians are often not afforded the time or resources they need. As physicians and other healthcare professionals in Quebec continue to grapple with the fallout from the province's latest

healthcare reform legislation, the appeal of a tool that promises efficiency and clarity is undeniable.

But why this particular tool? Why does UpToDate have such a chokehold on healthcare professionals? Why are so many of them unwilling to consider an alternative?

Of the four medical schools in our province, ours is the only institution that provides access to UpToDate. Our peer universities, along with their numerous affiliated hospitals, rely instead on alternative databases, yet their physicians continue to practice medicine effectively.

In trying to understand why users are so drawn to UpToDate, I encountered numerous posts across the Medicine, Pharmacy, and MedSchools subreddits in which users spoke openly about their frustration when their institutions no longer provided access. One user in the Pharmacy subreddit openly

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admitted, “I feel like UpToDate is the only site i [sic] enjoy to learn and look up stuff, otherwise I am not motivated to learn anything at all.”¹ Responses to this post suggested the original user find someone to share a password with, or even agree to precept a pharmacy student in the hopes of gaining university access. In my experience, once a practitioner’s loyalty is fixed on UpToDate, little can persuade them otherwise. This compulsion for a workaround rather than an alternative suggests that the issue is less about the tool and more about a culture that has not equipped practitioners and students with the confidence to navigate unfamiliar resources.

This dependency reveals a concerning gap in clinical education. I’ve seen students dive into UpToDate before pausing to define what they’re actually searching for, and rely on the first relevant PubMed result without questioning its accuracy or recency. Fundamental skills such as formulating clinical questions, evaluating levels of evidence, synthesizing conflicting recommendations, and assessing the currency and quality of information, should remain constant across platforms. Too often, the absence of a familiar tool like UpToDate creates a sense of paralysis, when in reality, the principles we teach, such as evaluating evidence, comparing sources, and applying reasoning to clinical contexts, remain constant. These skills ensure that decision-making is guided by sound judgment rather than dependence on any single platform.

This loyalty also comes at a literal cost. For large academic institutions such as my own, extending coverage beyond the university to affiliated hospitals requires substantial financial investment. This should prompt reflection on whether such reliance on a single, commercial product is sustainable in the long term. It also makes the case for skills-based teaching and learning all the more important. In a time of persistent budget cuts across the education and healthcare systems, institutions may need to make tough decisions about fund allocation. Knowing that their practitioners will be able to make sound decisions with cheaper but just as robust alternatives should be a comfort to administrators and educators alike.^{2,3}

I urge my fellow librarians and clinical educators to focus on the skill, not the tool. This is especially important now that artificial intelligence tools, such as OpenEvidence, continue to emerge. In practice,

educators should introduce the concepts of PICO question formulation, evidence hierarchy and critical appraisal before introducing specific tools. Having students complete a risk of bias or critical appraisal checklist and discuss the results in small groups can help them develop their critical thinking skills. So, too, will incorporating the teaching of the GRADE (Grading of Recommendations Assessment, Development, and Evaluation) tool or the SORT (Strength of Recommendation Taxonomy) tool.^{4,5}

Once that base knowledge has been acquired, educators can design assignments requiring the use of a minimum of two point of care tools to compare their findings. In my own teaching, I purposely choose questions where different tools present different references, conflicting information or articles that have been retracted, and ask students to comment instead on the relevance of the results based on the levels of evidence.

We are at a critical juncture in medicine and the landscape of clinical information tools will look dramatically different in a year or two than it does today, yet we continue to center our teaching on specific platforms as if they are permanent solutions. If we fail to teach transferable skills now, what happens when the next generation of AI-powered tools arrives? Or when an AI-generated recommendation contradicts established guidelines?

The goal is not to abandon UpToDate or any other valuable resource, but to ensure that our learners can practice medicine with or without it. This shift requires collaboration between clinicians and librarians. Together, we can design teaching that prioritizes the questions learners should ask. We can create assignments requiring students to compare recommendations across resources and justify their choices. Our students deserve the confidence that comes from real learning, not the false security of tool dependency.

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