

# Alberta Doctors' Digest

## Letter to Alberta Doctors' Digest

I appreciate Dr. Paterson's argument regarding empathy, communication, and the critical importance of taking a good history, conducting a thorough physical examination, and making sure that the patient is truly heard. These skills will never be replaced.

It's true – tech, apps, and the digital world are not all they're cracked up to be. And yet, we must keep an open mind because the digital world is coming whether we like it or not. Some of these innovations will be valuable and it will take critical appraisal, trial and error, and time to sort the wheat from the chaff.

That said, I think Dr. Paterson has glossed over one major potential area of advancement in health technology - big data. While still in its infancy, big data will one day allow us to see relationships, associations and risk factors that we cannot fathom today.

Imagine recording and integrating real time prospectively recorded health data over millions or billions of data points, and being able to analyze all this information, and ask specific questions about outcomes and associations. Of course, there are privacy implications, but the potential benefits are massive.

Imagine a world where you don't pick the starting dose of a medication arbitrarily and follow the response, or use the dosing from a carefully controlled clinical trial of 5,000 patients. Big data might be able to tell you the perfect dose for the patient sitting in front of you.

Imagine the largest pragmatic clinical trial every completed – thousands or millions of patients taking different doses of a medication under real world conditions (not a carefully contrived trial), and their outcomes. Now you can imagine a world where you know the dose likely to produce the desired outcome in the unique patient you sit with at that moment.

While this is still a long way off, it's no longer unfathomable. And that is the promise of technology.

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