Laughing alongside the best of evidence

Family physicians change ideas about tools, knowledge, practice, and medicine

Story by Sarah de Leeuw

Dr Michael Allan, a practising family physician and professor with the University of Alberta's Department of Family Medicine, remembers how he first got involved with evidence: "It was 10 or 12 years ago. I was leaving a meeting when someone called out: 'Hey Mike? Are you interested in that evidence stuff?'"

Little did Michael Allan know that answering with a slightly unsure and chagrined "I guess so" would both change his professional trajectory and affect the way family medicine is practised and informed around the world.

Not that Dr Allan has any particular hubris about any of this.

Around the water cooler (because the university won't pay for coffee or Guinness): The team takes time for impromptu collaboration, feedback, and laughs. They post their research papers on the wall as motivation. (Left to right) Ms Sharon Nickel, Dr Scott Garrison, Dr Adrienne Lindblad, Dr Tina Korownyk, Dr Michael Allan, and Dr Michael Kolber.

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The weekly *Best Science Medicine Podcast* in action. Hosts James McCormack (from Vancouver, BC, via Skype) and Michael Allan frequently have members of the team (such as Michael Kolber and Tina Korownyk) as guests.

Dr Tina Korownyk, a former resident and now research colleague of Allan's, laughs when recalling "early research conference presentations had quotes just to poke fun at Mike." Dr James McCormack admits some of the work just originates in "pet peeves: we all have them, things that annoy us about how patients are treated. We want to address those, while still being honest, funny, and accessible."

So, along with James and Tina, Drs Scott Garrison and Michael Kolber (guided and aided by Sharon Nickel and Dr Adrienne Lindblad) make sure humility and humour rule above all else during their work days with Michael Allan and what has coalesced into the Tools for Practice team.[1] Together the 7-member team, with a bevy of other primary care providers, produce some of the most influential and heavily accessed evidence by and for general practitioners in Canada and beyond.

Notwithstanding their chuckling good humour, this is a group with an extremely serious mission: change a history of medical knowledge and evidence that's been almost exclusively authored by specialists and not by primary care providers. The Tools for Practice team is now at work in multiple modes, from the *Best Science Medicine Podcast,* one of the top medical podcasts in the world, to videos and conference presentations, from grant applications to a number of the most highly cited and important impact-factor medical papers on the globe. Not to mention real-life on-the-ground implications in primary care communities.

"Within primary care, family doctors make up only 17% of CPD [continuing professional development] teachers and 17% of guideline authors,"[2,3] notes Allan. Which is a travesty, according to Michael Kolber, who for a decade practised in Peace River in northern Alberta: "I knew I wasn't being reflected in it, but I had no idea how to challenge the literature, the evidence base. I needed tools and confidence to do that, so I went back to school and completed an MSc in clinical epidemiology."

"The most important questions surrounding how to treat my patients weren't being addressed by specialty-driven research," adds Scott Garrison, reflecting on his personal drive to complete a doctorate in experimental medicine while in practice in Richmond, BC: he quite recently

Brainstorming and white boards: The team meets regularly, preparing conferences and teaching modules and developing research projects. (Above left) Scott Garrison reviews the sinusoidal seasonality of disease with (middle and right) Tina Korownyk, Adrienne Lindblad, and Michael Kolber while Michael Allan ponders tic-tac-toe. (Middle and right) Drafting the basics of the BedMed randomized trial.

joined the Tools for Practice team, now fully supported by the Alberta College of Family Physicians. "Trying to effect change inspired me. I love coming to work every day."

James McCormack, who finished his PharmD in 1986 and offers the odd hearty guffaw at the youthfulness of his *far* more junior colleagues, historicizes the issues at the heart of Tools for Practice: "Even at the end of the 80s, there was very little medical education not funded to some degree by industry," he observes. Additionally, even though most prescriptions are written by family doctors and filled by pharmacists—James is one himself—"well into the 1990s, much of the research about medications was funded by industry and done by specialists."

In contrast, content from the Tools for Practice team is produced completely free of industry support and is proudly based on "the best available evidence"—which, as anyone on the team can attest to, is created by family practitioners with the express intent of informing primary care.

Dr Korownyk expands on this concept: "We know from research around the world and in Canada that outcomes for patients seen by family physicians are as good or better than from our specialist colleagues. And we know that what we see and how we practise is different."

"People ask us how we know our work is going to be impactful," adds Dr Kolber. "We all practise clinical medicine and we listen to our patients. So we hear what questions are on the ground. We really have to realize how powerful *our* questions [as family doctors] are in research."

So just what are the questions being asked, the questions being generated on the front lines of practice? What's the evidence being collected, published, and disseminated?

The Tools for Practice team undertook critical reviews of the validity of medical expertise and advice on popular television programs like *Dr Oz.*[4] That paper went viral, becoming the fourth most highly discussed *BMJ* article in the history of the journal. The question originated with Tina Korownyk wondering why a number of patients would purchase and begin using medical supplements for which the evidence of benefit was clearly lacking. They'd heard about it on TV, she learned. The team also has tackled "rational prescribing" through an investigation into the actual costs of prescriptions. That work received "some push back," laughs Kolber, "with one person thinking we were supported by the generic [drug] industry. We weren't. But we have to be pretty laid back about criticism."

"We just try not to have any more than 2 groups angry with us at a time," laughs Allan, who adds the team recently "tackled lipid guidelines [and] through extensive reviews of literature, we knew our guideline[5] would differ from previous Canadian guidelines, being more evidence-based and perhaps more rational for primary care."

"Most of the guidelines are just too darn dogmatic," summarizes James McCormack.

Like so much evidence, many guidelines, adds Kolber, "are specialist driven, so knowledge of family docs is sublimated. We get told 'thou shalt' and that we can't ask our own questions. My clinical questioning began in residency when I examined the evidence for Pap tests for women with hysterectomies or the efficacy of eye patches for corneal abrasions. A bit of work and effort changed clinical practice in my community."

Despite many successes, the Tools for Practice team is really just getting started: because there are always more questions to ask, there is always more evidence to amass, there is always more interest of family doctors to spark, and there are always more ways to get the messages out there.

In June, through Scott's leadership of the Pragmatic Trials Collaborative,[6] the team was awarded an Alberta Innovates grant to complete what they're calling the BedMed Trial. Over the next 3 years, with more than 350 family doctors and 8700 patients taking part, the team is looking to replicate a 2010 study completed in Spain. That study suggested a 60% mortality and morbidity reduction in patients taking blood pressure medication at bedtime compared with traditional morning use.

It could be "game changing" states Scott matter-of-factly.

Don't think for a second, however, that things will get *too* serious. James is still hard at work "re-lyricizing" popular music, for example fitting nutrition evidence into the song "Hotel California" so health care providers can hum along to important facts.[7]

And Michael Allan is still responding to the odd critic who lets him know they "don't believe in evidence-based medicine," that only experience and intuition count: "I just tell them it doesn't matter, evidence believes in them," laughs Dr Allan. "Then I continue along with my passion: telling the world family medicine must take charge of our own house. We *do* have questions to ask. We *can* look at evidence. We *can* interpret evidence. We *can* do the research."

Dr Allan is Professor and Director of Evidence-Based Medicine in the Department of Family Medicine at the University of Alberta, a practising family physician, and Director of the Alberta College of Family Physicians Evidence and CPD Program. He has given more than 200 invited presentations and published more than 100 articles. He has been happily married for more than 20 years, has 2 (often lovely) teenage daughters, and 1 big goofy dog.

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The Cover Project The Faces of Family Medicine project has evolved from individual faces of family medicine in Canada to portraits of physicians and communities across the country grappling with some of the inequities and challenges pervading society. It is our hope that over time this collection of covers and stories will help us to enhance our relationships with our patients in our own communities.

PHOTO LEFT The usual hobbits: Like hobbits, the team is not particularly tall and, to get their writing done, they live underground. (From left to right) Sharon Nickel, Adrienne Lindblad, Michael Kolber, Scott Garrison, Michael Allan, and Tina Korownyk (James McCormack was on the lam in Vancouver, BC). PHOTO BELOW The team does more than write and speak on activity. The Mikes frequently cycle to work (Michael Kolber even in Edmonton's winter!) and Scott jogs in. Sharon, Tina, and Adrienne live farther out but run or attend the gym regularly.

PHOTOGRAPHER Jeff Hilbrecht, Edmonton, Alta

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