# Letters to the editor

We welcome original letters of less than 500 words; we may edit them for clarity and length. Letters may be emailed to journal@doctorsofbc.ca or submitted online at bcmj.org/submit-letter and must include your city or town of residence, telephone number, and email address. Please disclose any competing interests.

### **Closure of the College Library**

I strongly urge Doctors of BC to fill the horrific gap created by the College of Physicians and Surgeons of BC's financial risk management strategy of closing the College Library. Closing the library demonstrates a failure to support *quality* medical care and physician job satisfaction. The College Library provided physicians with reliable information for use in our medical practices—that is, beyond the assumptions made in practice guidelines, which can be siloed and often do not fit the more complex realities experienced by physicians on the ground.

I strongly support the letters on this subject published in the *BCMJ*.

—Andre Piver, MD Nelson

## Re: Radiologists as clinicians: Radiological interventions for knee osteoarthritis

I would like to thank the authors for covering platelet-rich plasma (PRP) as a treatment option for osteoarthritis in such detail [*BCMJ* 2024;66:159-164]. I have over 7 years of experience with PRP injections under ultrasound guidance for knees, shoulders, elbows, and other joints. The clinical importance of PRP was highlighted in a recent editorial commentary in *Arthroscopy: The Journal of Arthroscopic and Related Surgery*, "High-platelet-dose platelet-rich plasma may be the nonoperative treatment of choice for knee osteoarthritis."<sup>1</sup>

Of course, there are still limitations and controversies, and one of the most important is the wide range in concentrations that are being used. As mentioned by the BCMJ authors, multiple studies have shown variation in platelet concentrations by over 18 times between different PRP preparations. This is analogous to varying the dose of a medication by a similar factor. No one would accept a study looking at the effect of a medication where the dose is not even mentioned, yet this happens routinely in studies involving PRP. I wrote about this in a letter to the Aesthetic Surgery Journal in response to one study involving PRP, which was actually platelet-poor plasma (the opposite of platelet-rich plasma), as shown by the independent analysis that the investigators had done on their PRP.<sup>2</sup>

Recent systematic reviews have demonstrated the importance of concentration and dose in PRP treatments, showing that high doses work better than lower ones. This was highlighted in a recent meta-analysis of 29 studies of PRP for knee osteoarthritis, which concluded that an average platelet dose of 5.5 billion showed a positive effect at 6 months, whereas a dose of 2.3 billion showed no effect.<sup>3</sup>

Unfortunately, most clinics are not aware of the concentration or dose they are providing to patients, or they may rely on the PRP kit manufacturer's data to inform them. After testing many different PRP systems, we have found many manufacturers' claims about concentrations to be greatly exaggerated. At our clinic, we use a hematology analyzer to check the concentration and composition of PRP on a daily basis for each treatment, documenting the concentration, dose, and composition of the PRP used for every patient. Unfortunately, such a practice seems to be very rare, and most clinics rely on manufacturer claims to estimate dose, which is often inaccurate. This often leads to patients trying what they think is PRP but seeing little if any clinical benefit. Even worse, platelet-poor plasma may have inhibitory effects on tissue regeneration, leading to undesired clinical outcomes.

I hope that awareness of PRP increases, along with attention to crucial factors such as measured concentration, dose, and composition, improving efficacy and clinical outcomes for our patients.

—Patrick Yam, MD, CCFP Clinical Instructor, University of British Columbia Owner and Physician, PRP Medical Aesthetics

#### **Competing interests**

Dr Yam owns the PRP Medical Aesthetics clinic, which provides private-pay PRP treatment.

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# Re: Driving toward injury-free roadways

In a recent editorial, Dr Schwandt described the importance of speed limits in reducing injuries and deaths (and health care

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costs) from motor vehicle crashes [*BCMJ* 2024;66:146]. Physicians can and should be advocating for safer transportation. A suitable first step is broadcasting how unsafe our roads currently are.

Look at ICBC's map of pedestrians (not cyclists) who made an injury claim after being hit by drivers in the last 5 years.<sup>1</sup> Crashes involving cyclists are also widespread. A study in Vancouver concluded that cyclists had the right-of-way in about 90% of crashes.<sup>2</sup> We know motor vehicle crashes remain a leading cause of unintentional injuries and fatalities in BC.

Who is responsible to push for more proven preventive measures to be implemented? No level of government has a strong incentive to discuss the number of people injured on our roads. The public sees crashes as sporadic "accidents" and keeping traffic moving as the priority.

Doctors who treat crash survivors are uniquely positioned to speak to the prevalence of severe crashes and the huge unnecessary cost and burden they place on the health care system. Physician advocacy for seatbelt laws was effective in the past.

Pedestrians and cyclists are significantly more likely to survive a collision with a vehicle traveling at 30 km/hour than a vehicle traveling 50 km/hour. Transportation safety experts have called for speed reduction in BC for decades. Reducing residential area speed limits was recommended by Vancouver City Council in 1997, but it still hasn't happened.

Astonishingly, in response to a repeat of a 1999 request by the City of Vancouver and the Union of BC Municipalities asking the provincial government to allow municipalities to implement blanket speed zones in residential areas (without onerous and costly signage requirements),<sup>3</sup> the BC Ministry of Transportation eventually responded in 2003, saying it had "previously investigated a [Union of BC Municipalities] request for blanket speed zones and determined they were not feasible for legal, technical and safety reasons."4 In 2006, the ministry affirmed its position that reducing injuries and deaths by lowering speed limits wasn't important enough to justify the work of

changing the Motor Vehicle Act.5

Finally, after years of negotiation with the ministry, a few BC municipalities have been able to designate neighborhood slow zones. Vancouver's first slow zone appeared in 2021. Although a few bikeways have recently had 30 km/hour signs put up, the speed limit on most city roads remains 50 km/hour. Safer streets require stronger advocacy at both the municipal and provincial levels.

Let's join Dr Schwandt and spread the word at work, at home, and politically at all levels. Safer roads are both necessary and achievable.

#### —Jan MacPhail, MD, MSc (Epidemiology) Vancouver

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# Re: In-office management of knee osteoarthritis

Drs Sidhu, Sheridan, Badii, and Masri's article "In-office management of knee osteoarthritis" [*BCMJ* 2024;65:118-121] provides an excellent detailed overview of the in-office diagnosis and management of knee osteoarthritis that is relevant to so many physicians. The article was very informative, and we wish to affirm the points of discussion, as several important treatment options for knee osteoarthritis were outlined and reviewed. The article was brought to our attention because an important injection therapy was overlooked: prolotherapy.

Prolotherapy is a common in-office procedure that has been around (in its current form) for at least 70 years. Prolotherapy is most often a compounded solution consisting of dextrose, saline, and local anesthetic (procaine/lidocaine). The concentration of dextrose in the solution generally ranges from 10% to 25%. Although the mechanism of action is not entirely understood, it is thought that a neuromodulatory effect precedes a proliferative response.

With respect to pharmacologic interventions for knee osteoarthritis, several meta-analyses have demonstrated that prolotherapy has a very favorable safety profile and appears to be a promising treatment option. A 2021 meta-analysis suggests that prolotherapy for knee osteoarthritis is associated with improved Western Ontario and McMaster Universities Arthritis Index (WOMAC) composite score, pain relief, and knee function performance when compared with conventional methods such as corticosteroids, viscosupplementation, and physical therapy.<sup>1</sup> Similarly, a 2024 systematic review and meta-analysis of interventional studies showed that prolotherapy injections provided statistically significant improvements in pain, stiffness, and function in knee osteoarthritis.<sup>2</sup> When compared with physiotherapy, a systematic review and meta-analysis found that prolotherapy alone provided greater improvement in visual analog scale scores, WOMAC total values, and range of motion at 1 and 3 months posttreatment.<sup>3,4</sup> Further, a 2013 methodologically rigorous randomized controlled trial showed that prolotherapy resulted in safe, significant, progressive improvement of knee pain, function, and stiffness scores among most participants through a mean follow-up of 2.5 years.<sup>5</sup> The authors also wish to acknowledge the superiority of a combination of both pharmacological and exercise interventions rather than a single therapeutic approach.

Complications related to prolotherapy injection are rare, typically self-limited, and

similar to those of other injections, such as mild pain or stiffness and localized swelling and bruising in the treated areas. Prolotherapy also has a better safety profile than corticosteroids (i.e., it is not associated with osteonecrosis, rapidly progressive osteoarthritis, systemic side effects, or tendon rupture). Prolotherapy contraindications include acute infections such as local abscess or cellulitis, septic arthritis, and acute gouty arthritis. Prolotherapy is not currently covered by MSP but is available through private pay in some settings.

Evidence suggests that prolotherapy provides effective pain reduction and increased functional improvement and is recommended based on high-quality evidence for knee osteoarthritis. Due to easily accessible ingredients, relatively low cost, tolerability, and efficacy, prolotherapy should be considered as a potential treatment option and early intervention in mild to moderate knee osteoarthritis.

---W. Francois Louw, CCFP(EM), FCFP, MBChB(Pret), DA(SA), PgCPain, Adv Dipl Pain Mgt Clinical Associate Professor, UBC Department of Family Practice

—Adrian Gretton, MD, LMCC, CCFP Clinical Assistant Professor, University of Calgary Department of Family Medicine

—MJ Atkins, ND Victoria

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## Re: Province-wide implementation of the Vancouver Chest Pain Rule

In their April 2024 *BCMJ* article [66:80-85], the authors present the Vancouver Chest Pain Rule as a tool to "preserve scarce resources for higher-risk patients while alleviating unnecessary hospitalization . . . for lower-risk patients," thereby "increasing system-wide capacity." They present evidence that an intervention promoting physician use of this tool reduced hospitalizations (and other measures of health system costs) without increasing mortality.

I'm curious why no mention was made of possible redistributive effects despite an apparent net gain in health system efficiency. This is not precluded by the finding that there was no overall statistically significant increase in mortality between the intervention and nonintervention populations. Mortality may have been redistributed between social groups in the overall population. Harms other than mortality may have been inadvertently created, and the distribution of these harms may be unfair. Did the authors consider health equity impact?

In addition to the issue of equity in general is the issue of the impact on Indigenous people. As has been widely documented, Indigenous people in BC (and elsewhere) have suffered harm from the health system, have significantly higher rates of chronic disease than non-Indigenous people, and have generally poorer access to care. Given the BC government's declared commitment to redress these problems, and this journal's fairly frequent editorial exhortations to the same, I'm concerned that the authors (and by implication Emergency Care BC) may not be attending to this issue. To give an obvious example, using age 50 as a cutoff for "safely discharging" patients with normal ECG and troponins implies that age is a valid proxy for cardiac risk. How was the age cutoff determined to be appropriate for populations with high prevalence of cardiac disease? What was the patient experience? Did patients perceive that in being discharged after an ECG and blood tests, they had a safe, positive, and respectful engagement with the ER? There is literature on these and related issues, and Indigenous patient advocates who could be consulted. I wonder if they were.

—Nicolas Lenskyj, MBBS(UQ), CFPC, FRACGP, MA Vancouver

#### **Authors reply**

We thank Dr Lenskyj for his thoughtful comments. The evaluation of emergency department patients with chest pain, while improving over the past 2 decades,<sup>1</sup> still has few tools to risk stratify patients who do not have an acute coronary syndrome but may require further assessment. The Vancouver Chest Pain Rule (VCPR) is an adjunctive tool that permits clinicians to safely discharge a greater number of low-risk patients, while preserving scarce hospital beds for those at higher risk. Our study of 180000 British Columbia chest pain patients demonstrated an association between the provincial introduction of the VCPR to physicians<sup>2</sup> and a decrease in hospital admissions, but there are noteworthy caveats. We could not measure physician uptake of the VCPR and did not have data on important clinical information such as ECG characteristics or maximum troponin values. Nor did we have data on critical demographic information such as rurality, income quintile, or ethnocultural background, all of which are associated with outcomes.<sup>3</sup> Therefore, our design and findings cannot provide insight into potentially differential impacts on any subgroup of patients or the potential redistributive effects or health equity questions that Dr Lenskyj raises.

The VCPR was developed and validated in a single Vancouver site, which limits external applicability. It advises that patients younger than 50 years of age with normal ECG and initial and repeat troponin, as well as nonradiating chest pain, can be discharged home without further testing. Age is a powerful predictor of acute coronary syndrome: the only other similarly validated stratification tool—the no objective testing rule<sup>4</sup>—also uses age 50 as a cutoff.

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Emergency Care BC is committed to improving the patient experience, as was the BC Emergency Medicine Network that preceded it. Of note, these organizations have worked closely with BC Patient-Centred Measurement, which conducts in-depth surveys of over 10000 BC emergency department patients annually. The goal of these surveys is to evaluate the patient experience Dr Lenskyj correctly highlights the importance of and to identify opportunities to enhance care for Indigenous patients. Emergency Care BC and the UBC Faculty of Medicine see such actions as priorities. To illustrate, both support the Kwiis hen niip partnership with four remote Nuu-chah-nulth nations (Ahousaht, Hesquiaht, Ka:'yu:'k't'h'/Che:k'tles7et'h', and Tla-o-qui-aht) and the Nuu-Chah-Nulth Tribal Council. This multiyear implementation project is locally and federally funded to improve emergency care in these communities, in true partnership and with cultural sensitivity. Community leadership and guidance identified four priority themes: strengthen first responder programs; enhance community readiness, including resuscitation education; improve digital communications; and develop more efficient transportation.5 The inequities are stark, and we agree there is much more to be done.

- -Frank X. Scheuermeyer, MD, MHSc
- -Ross Duncan, MSc
- —Riyad Abu-Laban, MD, MSc
- -Floyd Besserer, MD
- —Sharla Drebit
- —Jim Christenson, MD

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## Physicians need to read and understand the Health Professions and Occupations Act

The most important piece of legislation in the last 30 years to affect all health professionals was quietly passed by the government in November 2022. Bill 36, now known as the Health Professions and Occupations Act (www.bclaws.gov.bc.ca/civix/document/id/ bills/billsprevious/3rd42nd:gov36-3), was an enormous piece of legislation (276 pages with 645 sections). It was inadequately debated in the legislature (233 of 645 sections debated) and passed by the majority government.

Ostensibly to protect patients from harmful health professionals, to update the previous Health Professions Act (1990), and to address racism in BC health care, the Health Professions and Occupations Act completely changes the structure of health professional colleges and the relationship between patients and their health professionals. Several key features are:

- More bureaucracy. Two new offices, a discipline tribunal and a superintendent's office, will be established to control the colleges and their members. The members of both new offices are appointed by the government and responsible only to the minister (s. 486).
- Lack of self-regulation. The number of health colleges will contract from 16 to 6 (the College of Physicians and Surgeons of BC is unchanged), but board members for each college will be appointed only by the government (s. 346).
- Health professionals are considered potential felons. In s. 6(a)(iii), health professionals are defined as those who "provide health services that may present a risk of harm to the public."

- The minister makes the regulations. In s. 213: "The minister may ... make regulations respecting the ... practice standards for the purposes of protecting the public from harm."
- Professional misconduct. In s. 514(2)(b):
  "A person ... commits an offence" who
  "knowingly provides false or misleading information to a person," with no definition of what is misleading or false information.
- Powers to search, inspect, seize, and record. In s. 131(2): "An investigator may ... without a court order ... enter premises used by a respondent to ... inspect and copy any records ... containing personal information or ... confidential information."
- Penalties. In s. 518(1): "An individual who commits an offence ... is liable on conviction to a fine not exceeding \$25000 or to imprisonment for a term of not more than 6 months, or to both"; a "corporation is liable on conviction to a fine of not more than \$500000" (s. 518(2)).
- No review or appeal. In s. 212(1): "a health occupation director is not required to give to an applicant notice or an opportunity to be heard." In s. 212 (2): "An applicant is not entitled to a review by the Health Professions Review Board."
- Statutory immunity for regulatory colleges. In s. 400(2): "[N]o legal proceeding for damages ... may be commenced ... against a regulatory college."
- Mandatory vaccination. In s. 49(1)(b)(v), vaccination for transmissible disease is mandated as a condition of licensing and employment. There is no definition of vaccine or transmissible disease.

Unfortunately, Doctors of BC was only minimally involved in this legislation. Only 56 members (out of 14000 doctors) commented on the steering committee's proposals (President's Letter, June 2019). Considering the acute shortages in physicians and access to care, this act does not benefit health care.

—York N. Hsiang, MB ChB, MHSc, FRCSC Vancouver

## **Doctors of BC president replies**

Doctors of BC shares Dr Hsiang's concerns about the government's lack of appropriate consultation when developing the Health Professions and Occupations Act. Doctors of BC has been, and continues to be, active in amplifying the physician voice and advocating for the concerns physicians are expressing in respect of this important and impactful new legislation. This will be particularly critical over the coming months as many of the regulations, bylaws, policies, and procedures that give the act true effect are being developed by the goverment, the new Office of the Superintendent of Health Profession and Occupation Oversight, and the College of Physicians and Surgeons of BC.

Doctors of BC continues to support members by curating accurate and current information on its website, which is accessible at www.doctorsofbc.ca/ advocacy-policy/advocacy/bill-36. More information about many of the points Dr Hsiang raises can be found in a ministry Q&A referenced on that page, which is accessible here: https://www2.gov. bc.ca/assets/gov/health/practitioner-pro/ professional-regulation/qa\_on\_health\_ professions\_and\_occupations\_act.pdf. —Ahmer A. Karimuddin, MD, FRCSC Doctors of BC President

Doctors need electronic

## health records to work for us, not the other way around

The BC Ministry of Health has committed to digitizing the health care system. In 2016, the Island Health Authority pioneered Cerner at Nanaimo Regional General Hospital (NRGH), transitioning from paper-based to digital systems, where clinicians could enter electronic orders and notes accessible across different settings.<sup>1</sup> Starting in 2018, Cerner was rolled out in phases in the Vancouver Coastal Health Authority and Provincial Health Service Authority, and Meditech Expanse adoption continued in the Fraser Health Authority and Interior Health Authority. While the public believes that electronic health records (EHR) can improve the quality of care, physicians have

expressed their concerns, and evidence suggests serious drawbacks.

# Shifting administrative tasks to physicians

Eighteen months after the implementation of Cerner at NRGH, 72% of physicians reported decreased productivity, and 61% acknowledged improving EHR proficiency.<sup>1</sup> The answer to this apparent paradox: task shifting from administrative staff to physicians.

Since hospitals eliminated transcription services, physicians now dictate or type reports. Dictation software does not accurately recognize physicians' accents or patient names that are not Euro-centric. Administrative workloads increase for physicians, who spend time correcting dictation errors or resort to typing.

# Increasing cognitive workload to enter orders and access data

EHR workflows are inflexible and userunfriendly when EHRs standardize data entry. Being unfamiliar with user manuals or EHR updates can result in inefficiencies (e.g., it can take more than 1 hour to order a rare diet).

The phased implementation since 2016 has resulted in various versions of the EHRs coexisting within one hospital. Physicians must compile information from all versions to optimize patient care when seeing patients followed by clinics at different implementation stages. This demands significant time and memory capacity.

# Increasing complexity to navigate incomplete and fragmented patient data

CareConnect is the platform that pools provincial EHR data. However, the data linkage remains incomplete. Document types that can be linked vary among health authorities, and sensitive data is inaccessible due to privacy rules. The lack of a robust search tool and meaningful data merge complicate clinicians' navigation process. When data are missing or unidentifiable to physicians, patients are at a higher risk of misdiagnosis and delayed care.<sup>2</sup>

# Increasing workload to adopt and use EHR

Physicians and trainees working in more than one health authority must train in various EHR platforms, which poses challenges for those who are not tech proficient. Additionally, a physician clicks an average of 4000 times during a 10-hour emergency room shift, which equates to 66 minutes dedicated solely to clicking.<sup>3</sup>

# EHR's impacts on patients and physicians

EHRs impact patient care. Patients cannot access timely care when administrative tasks consume physicians' time or force them into early retirement.<sup>4</sup> The quality of patient care is threatened when EHR data are missing or unmeaningfully merged<sup>2,4</sup> and physicians are exhausted with administrative tasks.<sup>5</sup>

EHRs are here to stay, so the crucial question is: How can we enhance EHR systems to better support physicians? It is imperative to conduct research and quality improvement projects to identify sustainable solutions.

—Olivia L. Tseng, MD, PhD, CCFP, FCFP Vancouver

#### —Esther Lee, MD, MCS, FRCPC Vancouver

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