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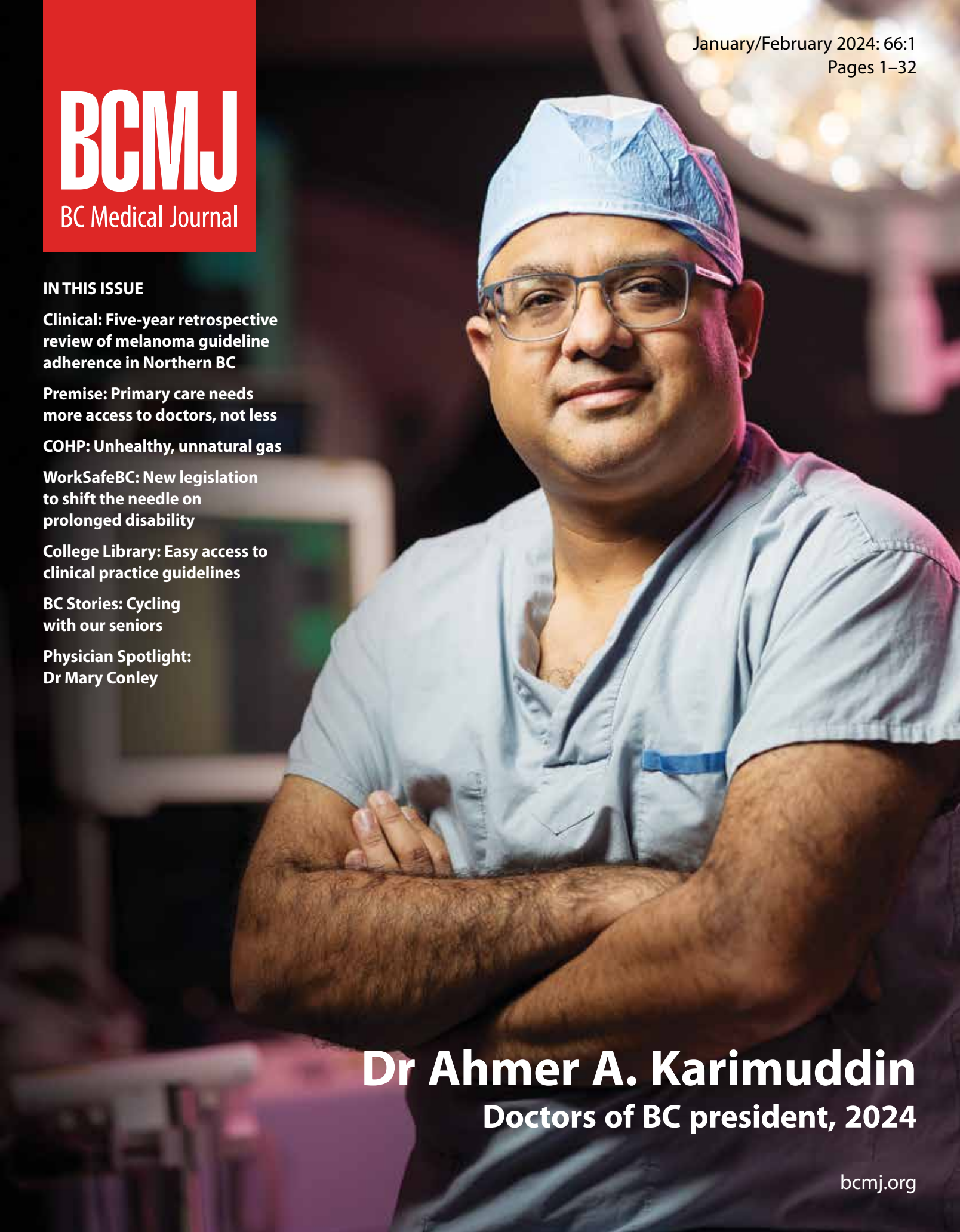

Dr Ahmer A. Karimuddin
Doctors of BC president, 2024

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Dr Caitlin Dunne's interview with new Doctors of BC president Dr Ahmer A. Karimuddin begins on page 10.

Mission: The *BCMJ* is a general medical journal that shares knowledge while building connections among BC physicians.

Vision: The *BCMJ* is an independent and inclusive forum to communicate ideas, inspiring excellent health care in British Columbia.

Values
Quality: Publishing content that is useful, current, and reliable.
Connections: Sharing diversity of thought and experiences from across the province and promoting communication between BC doctors.
Impact: Striving for healthier patients and communities by amplifying physicians' voices, opinions, research, and news.

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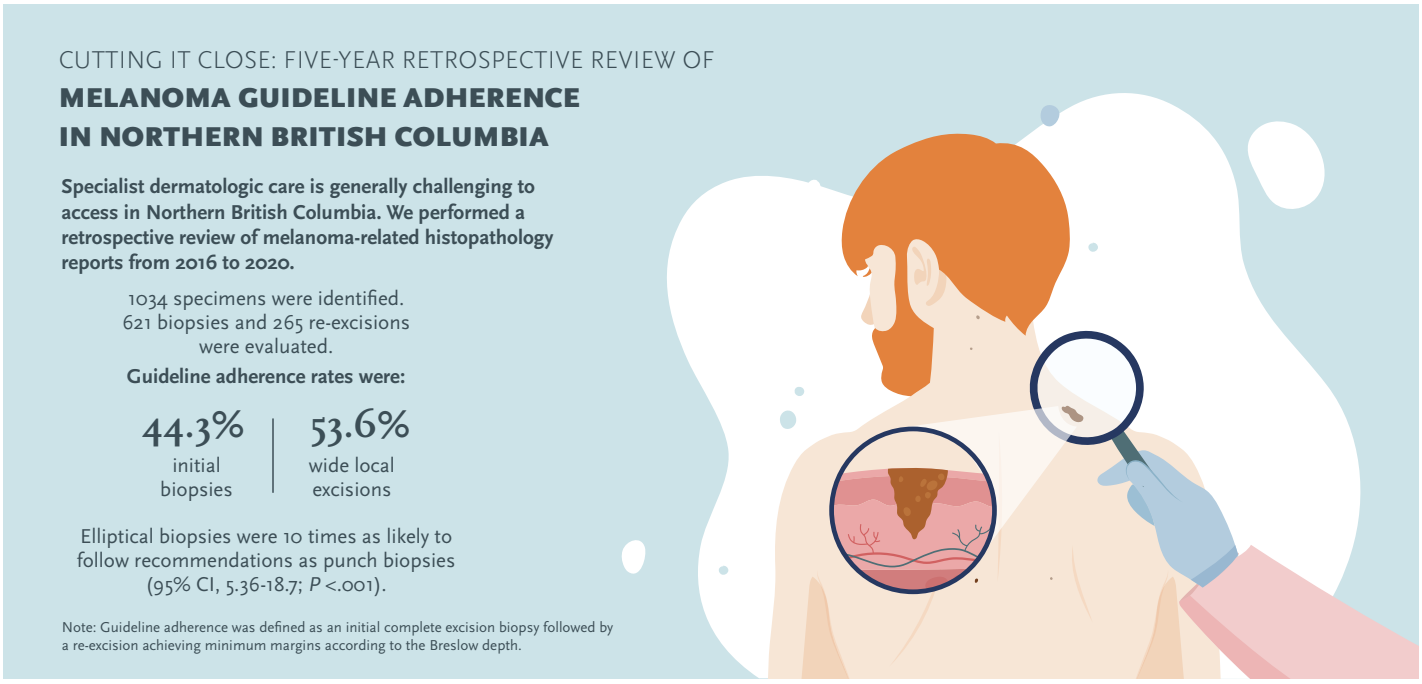

A visual abstract of the article "Cutting it close: Five-year retrospective review of melanoma guideline adherence in Northern British Columbia," which begins on page 16.

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doctors of bc

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Away from deficit-based language

I am on a journey of self-reflection and education about Canada's treatment of Indigenous people. It has been humbling to discover the multitude of ways that I have been oblivious to the harmful traditions of colonialism and my role within them. My complicity could be passed off as unwitting, but that would be too generous. I have learned that it's my responsibility to actively look for ways to improve myself and our systems in order to do better.

Moving away from the use of deficit-based language in articles that discuss Indigenous people is one thing the Editorial Board has been working on. Deficit-based language like *vulnerable* or *at risk* tends to blame the victim for their predicament and "fails to acknowledge that they live within coercive systems that cause harm with no accountability."[1] When certain language or problems are repeatedly associated with a specific population in the absence of context, stigmatization can occur.[2]

In a 2019 article for the *Canadian Journal of Bioethics*, Hyett and colleagues explain that health care research is inherently deficit-based because it is often designed to highlight poorer outcomes in one group compared with another.[2] This research may be well intentioned; however, historically, Indigenous people have been made into research subjects and described in ways that perpetuate harmful stereotypes.[2] For example, our implicit biases (and our overt medical education) might lead us to believe that Indigeneity is a "risk factor" for health outcomes like alcohol use disorder or diabetes. Stereotypes can become especially dangerous when they impact care. Hyett and colleagues recount the powerful examples of Brian Sinclair and Hugh Papik, whose fatal diagnoses were missed because they were falsely assumed to be drunk.

Strengths-based approaches consider the capacities and capabilities of Indigenous people—both within the person and in their environment—and how they might contribute to their well-being.[3,4] Bryant and colleagues suggest that sociocultural approaches are better able to capture Indigenous ways of knowing because strengths go beyond those of an individual to consider social relations, collective practices, and identities.[4]

Deficit-based language like *vulnerable* or *at risk* tends to blame the victim for their predicament.

Considering both the people and the context, a population typically called *at risk* might be more appropriately referred to as *oppressed* or *underserved*. Indigeneity is a validated protective factor that has been demonstrated to improve health outcomes if appropriately recognized and supported.[5,6]

I am learning about the various ways investigators can engage Indigenous stakeholders on health care research, such as through Elders' teachings.[1,7,8] Colonialized institutions and research practices may impede our own progress, however. In an article recently published in *Nature*, University of British Columbia researcher Dr Jennifer Grenz writes about how "[u]niversity ethics boards are not ready for Indigenous scholars."[9] In her own academic experience, she found the "current standard requirements of ethics committees—such as providing the exact questions that [Indigenous researchers] will ask Elders and knowledge keepers, and having fixed research objectives and methodologies—are not consistent with [Indigenous] ways of knowing. But this led to challenges with [the] ethics board. . . . [Her] research was seemingly held hostage until [she] complied to colonizing it."[9]

As I write this editorial, an article in the *Globe and Mail* highlights the staggering rates of youth suicide in Canada's Indigenous communities.[10] Tanya Talaga asks readers, "How have we grown numb to the suicide of Indigenous children?" I hope we have not. I believe there are many thousands of caring and thoughtful physicians in British Columbia who want to be part of the solution. Clearly, we need research to address the health care inequities we've created, but it is also apparent that a change in research methodology is critical if we want to achieve meaningful change. ■

—Caitlin Dunne, MD, FRCSC

Acknowledgments

I would like to thank Dr Terri Aldred for her assistance in editing this work.

References

1. Davis LP, Museus SD. Identifying and disrupting deficit thinking. Medium. 19 July 2019. Accessed 13 December 2023. https://medium.com/national-center-for-institutional-diversity/identifying-and-disrupting-deficit-thinking-cbc6da326995.
2. Hyett SL, Gabel C, Marjerrison S, Schwartz L. Deficit-based Indigenous health research and the stereotyping of Indigenous people. Can J Bioeth 2019;2:102-109.
3. First Nations Information Governance Centre. Strengths-based approaches to Indigenous research and the development of well-being indicators. Ottawa: First Nations Information Governance Centre, 2020. Accessed 13 December 2023. https://fnigc.ca/wp-content/uploads/2021/05/FNIGC-Research-Series-SBA_v04.pdf.
4. Bryant J, Bolt R, Botfield JR, et al. Beyond deficit: 'Strengths-based approaches' in Indigenous health research. Sociol Health Illn 2021;43:1405-1421.

References continued on page 6

Stop, collaborate, and listen

I was going to write this editorial as a rant, Rick Mercer style, regarding the woes of family medicine, but I think we are all aware of the ongoing crisis facing us by now. Then I considered writing a Kumbaya piece instead, but that would have been disingenuous. I settled on looking at how 2023 was a year of positive change for family medicine.

The Longitudinal Family Physician Payment Model[1] was introduced in early 2023. It promotes good medicine while providing some improved compensation, and it values the time we spend outside the clinic completing forms, tasks, charting, and administrative work. In 2024, the model is expanding to facility-based care, including inpatient, maternity, palliative, and long-term care. The model does not, however, change the intense workload and 24/7 obligations we face, and there are still not enough family physicians to do the work at hand. An estimated 1 million people in BC do not have a family physician. An article in the *Vancouver Sun* from 20 May 2023[2] discusses this shortage and informs us there are many family medicine residency spots in Canada that go unfilled every year.

There are also unoccupied long-term care beds in the province because there are not enough family physicians providing this type of care. While some of my family physician colleagues feel pressure to maintain the care of their patients when they are transferred to long-term care beds and short-term subacute care beds, transitioning from hospital to home, they feel overworked and undercompensated and do not have the capacity to provide this care. Perhaps the new incentives will revive some interest in long-term care and subacute care.

On a positive note, some family physicians who were on the verge of retiring have stayed in practice thanks to the new payment model, and this shift has been beneficial for family medicine.

Speaking with newer family physicians has revealed that many of them want flexibility and diversity without the burden of fiscal and administrative obligations attached to having a family practice. They also fear not being able to find coverage when they are away from their practices for some well-deserved rest and relaxation. Currently, most locums have a 70/30 or 80/20 split, which means they are financially compensated equally with longitudinal family physicians, and the split barely covers the cost of keeping the doors open. Why would newer family physicians take on that extra burden?

Let's stop and reassess how we practise family medicine.

Despite these barriers, there are new graduates who are considering joining practices or taking over retiring physicians' practices, and this newfound interest is largely due to the payment model. We are starting to see this trend in Kamloops.[3]

The terms *general practitioner* and *just a GP* are fading, and newer physicians want to be experts in family medicine and feel more valued. Many newer family physicians are pursuing this expertise in areas such as emergency medicine, rural medicine, maternity care, or hospitalist training.

I could go on regarding the issues facing family physicians, but we also need to discuss solutions. Many of the solutions need to come from the physicians entrenched in this predicament. To that end, what would make my life as a family physician easier is a common platform where family physicians, specialists, hospitalists, and long-term care physicians could communicate. It would be incredible if we all used the same EMR. The amount of time currently spent retrieving and communicating information is wasteful and inefficient for physicians and patients. Occasionally it will take a patient multiple visits involving several physicians in different locations to resolve one issue. This redundancy of services could be eliminated if we had one common, easily accessible, secure platform. I realize this is a multifaceted undertaking, and hopefully it is already in the works.

Let's stop and reassess how we practise family medicine. Perhaps it's time to collaborate and communicate with each other, with our divisions, and with our health authorities, rather than trying to carry the burden individually. The *BCMJ* is here to listen to your concerns, your successes, and your solutions and to advocate on your behalf by sharing your stories. ■

—Jeevyn K. Chahal, MD

References

1. Government of British Columbia. Longitudinal Family Physician (LFP) Payment Model. Accessed 2 January 2024. www2.gov.bc.ca www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/msp/physicians/longitudinal-family-physician-lfp-payment-model.
2. Culbert L. How UBC filled all of its family-medicine training spots to help B.C.'s doctor shortage. Vancouver Sun. Updated 21 May 2023. Accessed 2 January 2024. https://vancouversun.com/health/bc-training-186-new-family-doctors-in-effort-to-address-shortage.
3. Kneeshaw D. One year after it was announced, new pay model for B.C. family physicians showing signs of success. CFJC Today. 1 November 2023. Accessed 2 January 2024. https://cfjctoday.com/2023/11/01/one-year-after-it-was-announced-new-pay-model-for-b-c-family-physicians-showing-signs-of-success.

Continued from page 4

5. Whalen DH, Lewis ME, Gillson S, et al. Health effects of Indigenous language use and revitalization: A realist review. Int J Equity Health 2022;21:169.
6. Barker B, Goodman A, DeBeck K. Reclaiming Indigenous identities: Culture as strength against suicide among Indigenous youth in Canada. Can J Public Health 2017;108:e208-e210.
7. Kennedy A, Sehgal A, Szabo J, et al. Indigenous strengths-based approaches to healthcare and health professions education—Recognising the value of Elders' teachings. Health Educ J 2022;81:423-438.
8. Okpalauwaekwe U, Ballantyne C, Tunison S, Ramsden VR. Enhancing health and wellness by, for and with Indigenous youth in Canada: A scoping review. BMC Public Health 2022;22:1630.
9. Grenz J. University ethics boards are not ready for Indigenous scholars. Nature 2023;616:221.
10. Talaga T. How have we grown numb to the suicide of Indigenous children? The Globe and Mail. Updated 28 November 2023. Accessed 13 December 2023. www.theglobeandmail.com/opinion/article-how-have-we-grown-numb-to-the-suicide-of-indigenous-children.

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.

The inequities of climate change—Intersections between environmental health and health disparities

Climate change has been a global crisis of interest for decades; however, the physical and psychological impacts of climate change, particularly on Canada's underserved populations, are underexplored. The impacts of climate change are readily visible in the country, with Canada's average temperatures warming at twice the mean global rate.[1] However, recent extreme weather events, including wildfires raging through Western Canada and heat-induced storms in Ontario and Quebec, have brought the devastating health consequences of climate change to light. Canada has experienced unprecedented impacts from this wildfire season, with more than 5800 reported fires and over 15 million hectares burned to date.[2] Over 29 000 Albertans were left displaced by wildfires in the period of a few months, and thousands in British Columbia and the Northwest Territories were required to evacuate their communities as flames strained emergency services.[3] However, as we saw these events unfold, it became increasingly clear that the health hazards related to these environmental changes are not experienced uniformly across all populations in Canada,[4] and the differential impacts on physical and mental health outcomes have the potential to exacerbate existing health inequities for oppressed and underserved populations.

Differences in regional distribution and adaptive capacities are key factors contributing to potentially disproportionate exposure to climate-related events and resulting harms. For instance, lower socioeconomic regions, as well as northern and remote communities, face challenges in responding to and recovering from environmental hazards and disasters secondary to various factors, including lack of critical infrastructure and decreased capacity for emergency planning and response.[4] In particular, Indigenous communities have been overrepresented in wildfire evacuations, experiencing 42% of evacuation events, despite representing only 5% of the country's population.[1,5] Limited resources, resulting from chronic underfunding and remote locations, make it all the more challenging to access emergency resources and support in times of crisis, thus prolonging and intensifying the detrimental impacts of climate events.[1]

Physical impacts of climate change and environmental disasters are exacerbated by underlying health determinants such as poor housing, overcrowding, and geographic proximity to areas more prone to wildfires. A Health Canada report estimated that, annually, 54 to 240 premature deaths in Canada can be attributed to short-term exposure to wildfire, and 570 to 2500 premature deaths to long-term exposure.[4] Furthermore, access to and availability of basic amenities such as clean water are already strained in Indigenous and northern communities, with disproportionately higher frequency and duration of boiled-water advisories.[4] Extreme weather events can easily overwhelm fragile water treatment systems and exacerbate issues related to water sanitation and exposure to environmental contaminants.[4]

Beyond the physical health impacts, there are significant cultural and mental health implications in the context of place attachment and psychosocial impacts of migration. Evacuees are at risk for post-traumatic stress disorder and anxiety as a result of needing to adapt to new and often less-desirable conditions and loss of social structures and cultural practices tied to the land.[6,7] These impacts extend beyond acute natural disasters; climate change also results in permanent modifications of local landscapes, with detrimental impacts on foraging, trapping, and other culturally significant practices that may affect the mental and emotional health of Indigenous people. For instance, one study identified that environmental changes are closely intertwined with mental health impacts on Indigenous populations in Atlantic Canada, resulting from intangible losses that disrupt core drivers of psychological wellness and health in Indigenous communities.[8]

The record heat and wildfires seen earlier this year are only pieces of an alarming trend of the devastating effects of climate change, and it is expected that these changes will become more catastrophic and more frequent in coming years. It is imperative that the disproportionate impacts these changes have on Canada's Indigenous, northern, and remote populations are addressed through the development of legislation and federal programs to support building protective infrastructure, with the involvement of Indigenous leadership and partnerships in research efforts to identify needs. It is our responsibility to explore and understand the disproportionate impacts on Canada's oppressed and underserved populations to ensure an inclusive and sustainable direction to our collective climate solution.

—Min Jung Kim, BHSc, UBC Faculty of Medicine, class of 2024
Vancouver

References

1. Bush E, Lemmen DS, editors. Canada's changing climate report. Ottawa: Government of Canada, 2019. https://changingclimate.ca/CCCR2019/.
2. Allen RW, Cleland S. Wildfire smoke is an increasing threat to Canadians' health. PreventionWeb. 27 August 2023. Accessed 19 June 2023. www.preventionweb.net/news/wildfire-smoke-increasing-threat-canadians-health.
3. O'Neill N. Air quality advisories in Western Canada due to fires, as East Coast braces for May snowstorm. CTV News. 8 May 2023. Accessed 7 November 2023. www.ctvnews.ca/canada/air-quality-advisories-in-western-canada-due-to-fires-as-east-coast-braces-for-may-snowstorm-1.6388974.
4. Public Safety Canada. The first public report of the national risk profile. Modified 11 May 2023. Accessed 19 June 2023. www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2023-nrp-pnr/index-en.aspx.
5. Statistics Canada. Indigenous population continues to grow and is much younger than the non-Indigenous population, although the pace of growth has slowed. 21 September 2022. Accessed 7 November 2023. www150.statcan.gc.ca/n1/daily-quotidien/220921/dq220921a-eng.htm.
6. Agyapong VI, Juhas M, Omege J, et al. Prevalence rates and correlates of likely post-traumatic stress disorder in residents of Fort McMurray 6 months after a wildfire. Int J Ment Health Addict 2021;19:632-650.
7. Hrabok M, Delorme A, Agyapong VI. Threats to mental health and well-being associated with climate change. J Anxiety Disord 2020;76:102295.
8. Kınay P, Wang XX, Augustine PJ, Augustine M. Reporting evidence on the environmental and health impacts of climate change on Indigenous peoples of Atlantic Canada: A systematic review. Environ Res: Climate 2023;2:022003.

Re: Justice, rights, and unnecessary suffering

Livestock are subject to crowding and sensory deprivation and must be killed to provide meat. Dr Hajek proposed that we extend promotion of human rights to animals, because cattle and pigs have complex cognitive and emotional lives.[1] I agree.[2]

There are also environmental and health reasons to eat mostly plant-derived food. It takes 4 kg of grain to produce 1 kg of pork,[3] and 7 kg of grain to produce 1 kg of beef.[4] Carbon dioxide is produced by burning oil or gas to produce fertilizer, to pump water for irrigation, and to power farm machinery. The cattle industry is a major source of methane, a potent greenhouse gas.[5] Human-caused climate change is contributing to the drought affecting western North America.[6] Eating less animal-derived food decreases our environmental footprint.

Human disease can be caused by manure-contaminated runoff getting into water sources, as happened in Walkerton, Ontario.[7] Antibiotics are used in raising livestock. This practice accelerates the development of antibiotic-resistant bacteria and can transfer antibiotic-resistant bacteria to humans.[8] Animal-derived foods are calorie-dense, expensive, easily digested, and a major source of cholesterol. The current Canadian lipid guidelines recommend the Mediterranean diet, which contains little meat, to help lower cholesterol.[9]

—Robert Shepherd, MD
Victoria

References

1. Hajek J. Justice, rights, and unnecessary suffering. BCMJ 2023;65:280-281.
2. Broom DM, Sena H, Moynihan KL. Pigs learn what a mirror image represents and use it to obtain information. Anim Behav 2009;78:1037-1041.
3. Global Agriculture. Agriculture at a crossroads. Findings and recommendations for future farming. Accessed 18 December 2023. www.globalagriculture.org/report-topics/meat-and-animal-feed.html.
4. David Suzuki Foundation. Food and climate change. Accessed 18 December 2023. https://davidsuzuki.org/living-green/food-climate-change.
5. NASA Global Climate Action. Which is a bigger methane source: Cow belching or cow flatulence? Accessed 18 December 2023. https://climate.nasa.gov/faq/33/which-is-a-bigger-methane-source-cow-belching-or-cow-flatulence.
6. Overpeck JT, Udall B. Climate change and the aridification of North America. Proc Natl Acad Sci USA 2020;117:11856-11858.
7. Salvadori MI, Sontrop JM, Garg AX, et al. Factors that led to the Walkerton tragedy. Kidney Int Suppl 2009;75:S33-S34.
8. Arsène MMJ, Davares AKL, Viktorovna PI, et al. The public health issue of antibiotic residues in food and feed: Causes, consequences, and potential solutions. Vet World 2022;15:662-671.
9. Kolber MR, Klarenbach S, Cauchon M, et al. PEER simplified lipid guideline 2023 update: Prevention and management of cardiovascular disease in primary care. Can Fam Physician 2023;69:675-686.

Re: How can we improve competence in conducting pelvic exams?

Drs Steidle and Lostchuck are correct in surmising that there is a reluctance on the part of doctors to perform pelvic examinations [*BCMJ* 2023;65:329-330]. My experience suggests it is nothing new.

While practising family medicine in the North of BC in the late 1960s and early 1970s, I was asked to explain why my practice profile registered three standard deviations above "normal" for pelvic exam billings. Investigating the matter, it was found that our nurse instituted a call-in system for Pap smears at the recommended interval for the time. The conclusion to be drawn is that "normal" meant that the need for Pap smears (and thus pelvic exams) was being neglected, perhaps reflecting such reluctance.

The authors also noted a reluctance of supervisors during their medical students' training to permit them to perform pelvic exams. My medical school gynecological training featured an introduction to the pelvic exam. Four volunteers, suitably screened, permitted us trainees to perform pelvic examinations on them to become familiar with pelvic anatomy. It seems this helpful practice has been discontinued.

I suspect the reluctance toward pelvic exams extends to rectal exams. My student training included a pathology department presentation of the medical case of an obscure anemia, the patient having succumbed to this disease. The morgue pathologist was able to demonstrate that a large rectal carcinoma was the cause of the anemia. None of the many examining physicians had performed a rectal exam.

—Anthony Walter, MD
Vancouver

Re: Does working part-time mean I've failed as a feminist?

I'm certain Dr Caitlin Dunne's editorial in the October 2023 issue of the *BCMJ* [2023;65:277] resonates with many. I'd like to point out that this is not only the experience of women in the MD profession, but also of some men.

My life partner and I married in 1969, the year I entered medical school. In her subsequent application to the same program the following year, she encountered significant sexism from the (all-male) application review board during her interview: "Are you planning on a family?" "How does this square with a demanding profession as medicine?" Etc. Bottom line, she shifted career plans and became a sought-after consultant as a speech-language pathologist in school programs, focusing on children with learning difficulties. It also gave her better flexibility over time commitments. That, however, is only half the story.

Twenty years and three children ages 10 and under into our marriage, we had serious discussions about what needed to change if we weren't going to divorce. I was (as was typical) overly committed to my practice, and she had the family burden, to the detriment of her professional development and satisfaction. I consequently agreed that we would equally share the family-raising burden, which entailed me giving up my family practice and working part-time for the next 10 years. This also meant a financial hit in pooled income.

The benefit, however, was such that I couldn't agree more with Dr Dunne's statement that "[t]ime is a nonrenewable resource and . . . 90% of the time you have with your kids is before they turn 18." I found myself volunteering in kindergarten, preparing suppers different from my wife's, and generally engaging in more significant ways in our children's formative years during their learning and sports events.

Looking back, it benefited me in many ways beyond parenthood. My identity was not as glued to the public aura of a medical doctor. I volunteered for nonmedical organizations. As a former engineer, I published a number of review articles on a topic interfacing with physiology. I formed a company focused on interactive multimedia in exercise and ran a pilot study in cardiac rehab using this technology. I worked in various aspects of medicine—hospital ambulatory care and extended care for neuromuscular and traumatic spinal cord injuries, which included ventilators, I was a hospitalist for a time, and in the remaining 5 years of a 42-year career, I focused solely on rural and remote medicine. Looking back, working part-time for a significant time when it counted for my family was the best move I ever made. It saved my marriage, and we remain close as a family—to which I say, hooray for assertive feminism.

—Rainer Borkenhagen, MD (retired)
Vancouver

Correction: Navigating the nonarthritic hip: Labral tears and femoroacetabular impingement

Dr Taylor Crown's article in the December issue (*BCMJ* 2023;65:376-381) has been revised online. The authors requested the highlighted change postpublication: "A head–neck offset value of ~~more~~ less than 8 mm is abnormal and suggestive of a cam deformity."

Supplementary material added: Third-degree heart block secondary to Lyme carditis

In response to a reader's question, Dr Jordanna Roesler has provided two supplementary ECGs, demonstrating third-degree heart block, for her December-issue article (*BCMJ* 2023;65:382-384). The supplementary ECGs are available online for additional information. No changes were made to the article text.

Better, together

There is no better or more important time than now to lean in and commit even more to our patients, our work as physicians, and each other as human beings.

The last few years, while extremely challenging, have brought our profession to a hopeful moment. More than 4000 family doctors have enrolled in the Longitudinal Family Physician Payment Model. Nearly 2000 physicians across the province are now trained in quality improvement and health care leadership. More than 80 health care facilities in BC now have medical staff associations allowing them to engage with each other and the organizations where they work in new ways. Through the COVID-19 pandemic, the evolution of virtual care occurred. Much has changed, but our focus remains the same: how do we provide our patients with the care they need?

As doctors, we are at our best when we are caring for our patients. The ability to provide this care without structural barriers or undue administrative burdens is as much a source of joy for us as it is truly meaningful. As a surgeon, I work with all kinds of doctors, nurses, and health care providers to deliver the complex care my patients need. As we head into 2024, amid the ongoing challenges of increased wait lists, increasing wait times in emergency rooms, and a lack of infrastructure and health care human resources, it is even more important that we double down on providing patients the care they need in the best possible way.

The answer to this conundrum, while difficult to execute, is that we can do better together. When doctors come together to talk about what their patients need, we make things better. When doctors focus on new models of care that put the patient at the centre, we make things better. When doctors ask for equitable and just access for all patients, we make things better. When doctors focus on sustainable health care models that are resilient to evolving climate and economic changes, we make things better. When doctors refuse to accept gender bias, racism, and discrimination in all its forms in our institutions, we make things better. And when doctors work together with a common purpose, we make things better, together—for our patients and for ourselves.

We have the ability and the resources to change the way our health care system works, and we will make it better, together.

This is why I chose to run for president. Now is a time of unique challenges to our health care system and to our ability to look after our patients. Now is also a time when we have motivated, passionate, and driven doctors in all corners of our province who want to work together to improve patient care. By increasing our connections with one another and by engaging in more meaningful ways with the health care and political systems around us, we will be able to deliver new, innovative models of care. By sharing both our successes and our challenges as doctors, we will be able to learn from each other and find better ways forward. By emphasizing our individual ability to create positive change, we will share our common purpose—our collective work—and create a more functional and sustainable health care system.

Doctors of BC recently shared our new strategic plan, developed to guide the association over the next 5 years. The focus, largely informed by members, is to maintain a position of leadership and influence over the health care landscape in British Columbia. This will require us to engage in more meaningful ways with all stakeholders to make things better for our patients.

We have the ability and the resources to change the way our health care system works, and we will make it better, together.

—Ahmer A. Karimuddin, MD, FRCSC
Doctors of BC President

Dr Ahmer A. Karimuddin

Dr Karimuddin started his 1-year term as president of Doctors of BC on 1 January 2024. He spoke with *BCMJ* editor-in-chief Dr Caitlin Dunne in December.

Congratulations on being elected the new president of Doctors of BC. I learned a lot about you from your personal website, www.drkarimuddin.com, and I would encourage readers to have a look. Why don't you start by introducing yourself to the readership?
I come to this role having worked for 15 years in BC. As a colorectal surgeon, my practice is predominantly at St. Paul's Hospital, where I've looked after a population of patients sent to me by colleagues around the province. My other big role is in medical education. I've been program director of our general surgery residency program for the past 6 years, which is very fulfilling.

Along with that, I have a family with four kids. My oldest is in grade 12 and applying to university this year—last night I helped him with his university applications; we're working out the essays he's writing. My wife is an English teacher in Richmond, where we live.

If you read my website, you saw that I've worked in many spaces with Doctors of BC, so *this* space isn't alien to me. I was president of our Section of General Surgeons, which we call the General Surgeons of BC. I was on the Tariff Committee and chair of the Specialist Services Committee.

You're being modest; I see you've also won many awards and published a lot of research. How does somebody with so much on their plate decide now is the time to jump into taking on the presidency?
I had no plans to do this until 5 days before the nominating deadline. My feeling toward medical politics and advocacy has always been what can you do to make health care and the spaces you work in better, whether that's hospitals or clinics. That's been my lens, and I wasn't convinced that being president of an organization like Doctors of BC would serve that kind of broader purpose. It seemed a little too meta, a little too removed. What helped me make the decision was colleagues reaching out to say that health care has been in a difficult position for physicians. Doctors have had a hard time coping with the postpandemic world, dealing with challenges in our facilities, with emergency room wait times, and with ever-longer wait lists, which I'm sure you deal with in your practice. The feeling I got from a lot of people was that they were at their wits' end, there was no other path forward, and they were going to continue to feel stressed and distressed for their patients and not be able to do much about it. That didn't sit right with me; my feeling is there's always hope as long as you work your way forward. The idea of talking to our colleagues around the province, hearing their stories, and helping them find a way forward in these difficult times seemed like something tangible and material for me to do, both as a surgeon and as someone who's committed to the hard work of research and quality improvement. Over 1 week, I transitioned to thinking this might be a good idea given the state we're in, and over the past year, for me as a facility-based physician, someone who has spent their life with a collaborative, quality improvement lens on things, thanks to the conversations I've had, it has seemed like the right decision.

What I hear is optimism. A belief that we as doctors can impact the systems in which we work toward positive change. That seems like a heavy lift right now. As you come into this job, what's your approach to spreading that optimism to get more people helping you on that journey?
I can start at the micro level. In our work as physicians, we make a difference in innumerable patients' lives daily. On a busy clinic day, I'll see between 30 and 35 patients, and I'd like to think I make a positive difference in the majority of their lives. If you expand from that to the entire health care system, it's nothing more than a sum of its parts—physicians, patients, and other health care providers. We know the challenges our patients face. We know the challenges our colleagues face. Something past president Dr Joshua Greggain might have said that I'll repeat is that the only thing that's ever changed anything in the world is a group of committed people committing to make a difference along a common path. When we decide what we're going to work on, what's going to be important, how can that group of people *not* make a difference? I would challenge anyone who says things are too dark and heavy to lift to think, yeah, they are, but that's not a reason to stop working.

I see you won an award for your role as residency program director. What do you say to the young doctors soon to become general surgeons to inspire them in this current environment?
That's a great question, and thank you for phrasing it that way. How we inspire our trainees is the true testament to where our profession is and what our values are.

Just yesterday I had a resident say to me that it's a tough time to be a doctor, people don't trust physicians, and people don't feel

When our patients tell us they're upset that they waited a long time or they're upset that their care was delayed, we need to acknowledge that and say, that's right, the system let you down. But in this moment, I'm not going to.

physicians are doing the right thing for them. And I said, you're right, as a whole, patients have less and less trust in the health care system, and patients are worried about how the health care system can look after them, but they don't distrust the physician who is looking after them. The best way to serve the profession and make health care better for the population is to do the best job you can for the patient who is in front of you. Are you being an advocate for that patient? Are you doing your best for them in that moment? If the answer is yes, I've done the best I can given the restrictions I have around me; that's all anyone can ask. I know it's a high bar to hold, but that is both the solution and the inspiration for many of our challenges in the health care system.

That resonates with me. Patients *are* broken in body and they're broken in heart. Do you think we prepare our residents as much for the latter?

No, I don't think so. Most of us have been trained in a pathophysiological basis of disease and we think if we fix the broken body part, then automatically the heart will mend. I think, both in your work in reproductive endocrinology and the work I do, we know that's not true.

The journey can be very, very taxing. And we forget the human cost of the journey a cancer patient goes through, for example, or a patient struggling with diabetes or another medical condition. That journey needs to be acknowledged. When our patients tell us they're upset that they waited a long time or they're upset that their care was delayed, we need to acknowledge that and say, that's right, the system let you down. But in this moment, I'm not going to.

When we talk about what we can do for the system and what should give us hope, it is that eventually, if we all keep doing our best for the patient in the moment, the system will work. That might mean us working differently, or working in teams, or trying to figure out other strategies to get the work done. But we can do it. We have a lot of resources in Canada.

I love that—the system has let you down, but in this moment I'm not going to. Speaking of resources—this is something women are often asked, but it's not often asked of men—you have four kids, your wife has a career, and you have a busy practice and obligations to patients; how are you going to balance your work and your family during this additional step in your career?

Balance is difficult to figure out in our type of life, right? As physicians we're pulled in many directions, both in our jobs and in the leadership roles we have in our communities. My first step toward balance has always been to try to only do things that give me joy. If it's doing research and working with residents, I'll choose projects I'm excited by. When we did work on patient-reported outcomes or recovering from major abdominal surgery for inflammatory bowel disease, that gave me joy to do.

Almost all the committees I've been on at Doctors of BC and the Specialist Services Committee were places where I felt I was making a difference, and that gave me joy. When I was asked to consider this role, I talked to my wife and my partners at work to ask if we could make this work.

My wife's first questions were: Is this something you will enjoy doing? Is it going to be fun? Are you going to grow? And I said, I think so, so she was very supportive. From my colleagues' perspective, I'm decreasing my clinical practice by 50% for the upcoming year to serve in this role. It's the first time as a surgeon I've done that. This will resonate with you as a surgeon as well; putting down on paper that I'm going to work 50% of my regular hours was one of the harder things I've ever done, but that's how I'm going to create time and capacity to represent the 17 000 BC physicians and tell their stories.

You mentioned the Specialist Services Committee, the SSC. I didn't learn about it until I'd been a specialist for a number of years. What would you like specialists to know about the SSC?

I'll take a step back and talk about why the SSC is an important space. As physicians, we know it takes a group of people to provide one patient the care they need. As a surgeon, there's nothing I do in the hospital that doesn't require 100 people, even the most minor surgical procedure. But somehow we think the way to change the health care system is by standing alone in an office saying listen to me, this is the right thing to do, everybody should do it. We're willing to have 100 people involved for an individual patient, but to change the health care system we think one passionate physician can do it on their own. That's not how it works. We need all stakeholders at the table to leverage change for patients, which can include health authorities, people from the Ministry of Health, other physicians, and affiliated health care providers and nurses. That's what the SSC provides. Around a collaborative table, we can have people from the Ministry of Health, specialist colleagues, the health authorities, and operational leads all talking about what matters to us and offering solutions from our different perspectives. As physicians, we know what happens to our patients day to day,

but our administrators know what happens on a larger scale and what challenges the system is facing. That's the big-picture reason why places like the SSC, and collaborative tables in general, matter.

The SSC is also a space for quality improvement in the province. There are 5000 physicians around the province who have trained in quality improvement methodology through the SSC. And that's the Institute for Healthcare Improvement quality improvement initiative. Funding and training to learn that methodology is available through health authorities and through a community-based specialist's lens. There is also leadership training akin to many of the leadership programs offered through Harvard and Yale; that's offered through the UBC Sauder School of Business, and I think about 1500 physicians around the province have completed that. There are opportunities to not only help patients, but also grow yourself and learn new things about how health care works and how we can make health care better.

My feeling is there's always hope as long as you work your way forward.

On your profile, and in your statement for Doctors of BC, you also talk about diversity, equity, and inclusion, particularly with respect to people to whom our society is unfair or unjust. You are mid-career; looking back over your career in medicine, how have you seen that evolve?

When I started practising 15 years ago, the first literature came out showing that people of lower socioeconomic status and people of color had differing clinical outcomes. The first paper showing that Indigenous patients had worse surgical outcomes across North America was, I think, published in 2011 or 2012. But we didn't talk about differing outcomes. We continued to live in the Pollyanna dream that, in Canada, because we've got universal medicare, everybody's looked after, regardless of their background, regardless of their socioeconomic status. We now *know* that's not true. If you think about how far we've come in that amount of time, it's actually a phenomenal leap. When I did my residency training from 2001 to 2007, the idea of different socioeconomic status having an impact on outcomes wasn't talked about. We talked about how that might influence access or perceptions of disease, but no one talked about outcomes. We now know as a matter of fact that there are glass-ceiling effects that affect women and people of color—in both the Canadian and the North American health care systems—from a career-progression standpoint for physicians, and we *know* that clinical outcomes are different for people of color and lower socioeconomic status. I've been privileged to work with colleagues in the UBC School of Population and Public Health, where we've shown that data to be true in BC. Acknowledging that is the first important step to figuring out how we're going to make things better. Our biggest health care system challenge moving forward will be holding ourselves accountable to deliver the package of care a patient needs regardless of their socioeconomic status, cultural background, or Indigenous status—simply because they have a problem. And I'd like to challenge each of us as physicians to do that in our daily practices.

What I'm learning is that it's about meeting patients where they are and understanding the culture they come from, the beliefs they hold, and the society in which they live their lives, and then trying to make that part of the bigger picture. It's not a one-size-fits-all approach. Illness is more than the disease that we see in front of us.

That's a great point—asking patients what's important to them and what they want their care journey to look like. You probably do that in your practice, but even in my practice in colorectal surgery, when we talk to patients about permanent ostomies and disfiguring surgeries, we ask what is important to them. Maybe they're from a small community an hour and a half away from Bella Bella, so as we're looking after them, we ask if having care at home is what's important; being in Vancouver for 6 months while going through the package of care can be onerous.

In the past we didn't ask those questions because we had a pathophysiological approach to disease—that's what the guidelines say, so that's what we're going to do. We're realizing there are no guidelines; there's just the patient sitting in front of us and what they want in that moment.

How about when you look forward? What will a successful term look like for you?

There are two parts to that. Philosophically, I feel that whenever someone is talking about physicians or our patients, we need to be in the room—nothing about us or about our people without us. I'm realizing more and more that in our current health care system, physicians are often not in the room when big decisions are made. That's the message I want to take, on behalf of our members, to people in the health authorities and the Ministry of Health. If I can increase the number of physicians in the room when decisions are being made, I think that will be a win.

For the other part, I don't think physicians have ever felt more alone in the work they do. When working against resource challenges or demands on our time, we feel as if we are each the only ones struggling with it. We need to get past that. Just as we involve colleagues to help us with patients and when we need consultations or advice, when *we're* struggling, we need to ask our colleagues for help and advice about how to navigate that. Dr Greggain often talked about better together being his motto for what he wanted to work on in his year; I'll add an addendum to that. Yes, we are better together, but also, we are never alone. And if we *are* feeling alone, whether because our biases make us feel that way or because our desire to be autonomous freaks us out and tells us we are alone, we need to realize we're not. Whenever *I* reach out for help, someone's always there. ■

Primary care needs more access to doctors, not less

Primary care is increasingly distanced from patients, both physically and emotionally, while increased access is the needed change.

Warren Bell, MD, CM, CCFP, FCFP(LM), John Sloan, MSc, MD, FCFP

Almost everyone seems to agree there is a crisis in primary care. Almost one-third of people who want a family doctor can't find one, and even people who have a family physician generally find them quite inaccessible, especially outside regular office hours. Speculation has advanced as to why this problem exists: baby boomers are growing old and need more care; younger doctors are more determined to protect time for their families and themselves; doctors have too much paperwork; and graduating MDs want to be specialists, while family practice residency positions go begging, or family physicians go into hospitalist and ER care, where hours are fixed and access is limited.

We are two older family doctors who believe the most frequently touted solution—train more doctors and pay them more—is unlikely to be sufficient or to solve the fundamental problem. We see a profession increasingly distanced from patients, both physically and emotionally. We believe greater availability to the people who count on us for care is the critical, needed change. We think an important change in how doctors work, and one that has always been part of primary care, is required.

Medical practice is seen as divided into the science and art of medicine. Medical teaching today is driven almost exclusively by specialists and tends to focus on what could loosely be called science—research and evidence, treatments and procedures, and outcomes that can be measured. Recent studies of medical advice given by artificial intelligence suggest that a machine may be nearly as good as (or perhaps even better than) a human for many parts of the technical side of medicine.

But in primary care, the quality of the relationship between caregiver and care receiver is paramount. We believe it is important to people who are worried or suffering to have timely and ongoing access to a health care professional *who knows them* and with whom they have a trusting relationship.

From years of direct experience, we are sure this is deeply beneficial to both parties, and it's also unlikely to be accomplished by a machine anytime soon. In the primary care world where we work, we are advocating for a rejuvenation in professional behavior away from the current overemphasis on science and technology and toward the side of health care we family physicians used to excel at, and a practice where we think humans will be irreplaceable.

What would that look like? Both of us have been personally on call for our patients, at any time, for several decades. This idea prompts gasps of horror from many friends and colleagues: "We're already burned out! Do you want us to be driven mad, or out of the profession?!"

We hear and understand these concerns. However, we know from direct experience that when we are willing to answer the telephone, two things happen: first, our patients are deeply grateful, respect our time, and almost never abuse the privilege of being able to speak to us, and second, our availability makes us more human in our patients' eyes, and them more human in ours. In other words, a relationship of trust develops that is enormously affirming and professionally satisfying.

A recent survey conducted by the College of Family Physicians of Canada found that patients prefer contact with their own family physician within a few days over immediate contact with a doctor they have never met.[1] Care by physicians who have never met the patient results in more ER visits, investigations, hospital use, and referrals (that is, significantly greater costs and some added risk, per visit). Worried patients, rushed through encounters with care providers they don't know or necessarily trust, accept reassurance through more referrals and investigations when a few minutes of

Dr Bell is a family physician who has practised in Salmon Arm since 1979. He has been engaged in community issues and advocacy work for decades. He is currently attempting to retire gracefully, with limited success. Dr Sloan, also a family physician, has practised in Vancouver and now the Sunshine Coast for the same period of time. His practice has been confined to the home care of homebound frail elderly patients for about 35 years. He has published a couple of books on the frail elderly. He, too, is in the process of retiring from longitudinal clinical work.

This article has been peer reviewed.

discussion and explanation from a doctor they know, and who knows them, could often provide all they need.

A visit with a doctor who knows your history, social circumstances, family, work, and school, and something about your behavioral nuances, preferences, and context (familiarity that takes a few years to develop), improves health outcomes over a simple diagnosis and treatment by a practitioner who is a stranger. Available and trusted family physicians are more common in countries such as Costa Rica and the Netherlands, and patient satisfaction is better under those conditions.

There is also a benefit to doctors arising out of this approach. Because it is easier for doctors to deal with familiar patients on the phone, we have experienced a reduction in the sense of futility and professional dissatisfaction causing some of the burnout physicians frequently complain about. Individual physicians in solo and group practices, especially where there is easy access to their services and to a multidisciplinary team, often cite a restored sense of purpose and value.

There are, of course, caveats to our suggestion. While there are benefits to patients and doctors from enhanced access, we understand that the style of practice prevalent during our training many years ago may seem foreign to recently trained doctors. New physician graduates may feel anxious about supplying information over the phone until they have an established practice and have patients with whom they are familiar. While we find unrestricted availability affirming and not wildly burdensome, it may be inconsistent with some doctors' and patients' values or simply unfeasible.

We are advocating for a change in doctors' relationships with patients away from consistent inaccessibility toward greater professional availability and intimacy. We think this can be brought about by doctors improving their personal availability, even if only in parts of their practice. We believe this direction will improve the sense of meaning and purpose primary care practitioners experience, and we have observed how it generates sincere gratitude among patients.

Increased access can be implemented selectively, in stages. For example, unrestricted availability can be limited to certain patients, such as homebound frail elderly people or persons receiving palliative care. Additionally, another physician, nurse practitioner, or nurse can share familiarity with some or all patients so availability can be rotated among trusted professionals. A nurse hired by a health region can take calls outside office hours, contacting the doctor only when necessary. And 24/7 access can be pruned so specified family hours, special days, and other protected times are addressed through a carefully crafted phone message or a referral to a trusted colleague.

An administrator once told us this about frail older people who have decided not to go to the hospital: "It's the relationship of trust that keeps them at home." Our goals in writing this piece are twofold: to suggest to our colleagues that they needn't fear being a little more human toward their patients and to encourage patients to be respectful and protective of doctors' willingness to enter a sustained personal relationship of mutual trust. This can be attained through a collaborative process between patients, family physicians, and other primary care practitioners.

If the tide turns and more doctors welcome closer and more meaningful relationships with the people whose trust we hope to deserve, the benefits to primary care in dollars, emotional satisfaction, and effectiveness will be profound. ■

Reference

1. Nanos. National survey: Summary. Conducted by Nanos for the College of Family Physicians of Canada, March 2023. Accessed 30 November 2023. www.cfpc.ca/CFPC/media/Resources/CFPC-NANOS-Report.pdf.

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Cutting it close: Five-year retrospective review of melanoma guideline adherence in Northern British Columbia

Primary cutaneous melanoma is a potentially life-threatening disease treated primarily by surgical excision. Adherence to expert consensus guidelines likely helps physicians optimize patient outcomes.

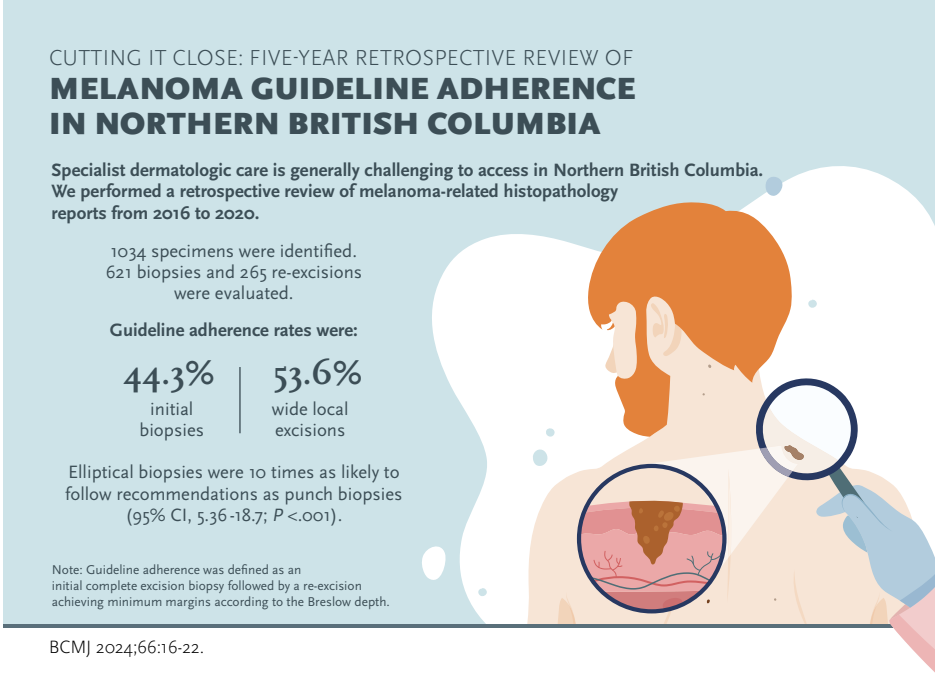
ABSTRACT

Background: Specialist dermatologic care is generally challenging to access in Northern British Columbia. We aimed to quantify guideline adherence rates in the Northern Health Region for both biopsies of suspected melanoma and wide local excisions of confirmed melanoma.

Methods: We performed a retrospective review of melanoma-related histopathology reports from 2016 to 2020. Guideline adherence was defined as an initial complete excision biopsy followed by a re-excision achieving minimum margins according to the Breslow depth.

Results: Of 1034 specimens identified, we evaluated 621 biopsies and 265 re-excisions. Guideline adherence rates were 44.3% for initial biopsies and 53.6% for wide local excisions. Elliptical biopsies were 10 times as likely to follow recommendations than punch biopsies (95% CI, 5.36-18.7; $P < .001$).

Conclusions: Multiple deviations from published standards were identified in the clinical management and pathology reports. A melanoma database and standardized reporting are needed to fully evaluate current practices in Northern British Columbia.



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This article has been peer reviewed.

Introduction

Primary cutaneous melanoma is a potentially life-threatening disease treated primarily by surgical excision. Guidelines recommending complete excisional biopsies with clinical margins have been published by the American, Australian, and British dermatological associations.[1-3] The initial biopsy is vital for staging melanomas via the Breslow depth and ulceration status, which determine the re-excision margins. See **Table 1** for stage-specific wide local excision margins.

While BC Cancer does not provide specific guidelines for the initial excision, the American Academy of Dermatology recommends a narrow excisional/complete biopsy with 1–3 mm margins that encompasses the entire breadth of the lesion and is of sufficient depth to prevent transection at the base.[1] This can be accomplished by elliptical excision, punch excision around the entire lesion, or deep shave/saucerization to a depth below the lesion. A clinical example is shown in **Figure 1**.

If a suspected melanoma is only partially excised, the thickest part of the melanoma may be missed, which risks underestimating the Breslow depth **[Figure 2]**. According to clinical practice guidelines, incisional biopsies should be performed only in sensitive or cosmetically important areas.[1,2,4,5] However, the margins of the subsequent wide local excision should follow current guidelines, regardless of location, unless the risks of underexcising are clearly discussed with the patient **[Figure 3]**.

Incisional biopsy of a melanoma alone does not appear to directly affect the local recurrence or overall survival of melanoma patients.[6] However, a 2014 study found a significant proportion of Breslow depth values upstaged at the subsequent wide local excision when the initial biopsy was incisional.[7] Incisional biopsies often underestimate the Breslow depth, potentially leading to subsequent wide local excision margins that are too narrow for the true tumor stage. Additionally, incisional sampling prevents assessment of vital histopathologic features in the differentiation of melanoma from

TABLE 1. BC Cancer melanoma staging and recommended re-excision margins.

T staging		Definition	Recommended re-excision margins
Tis		Melanoma in situ	0.5–1 cm
T1	T1a	Breslow depth up to 0.8 mm; no ulceration	1 cm
	T1b	Breslow depth 0.8–1.0 mm regardless of ulceration OR Breslow depth up to 0.8 mm with ulceration	
T2	T2a	Breslow depth 1.01–2.0 mm; no ulceration	1–2 cm
	T2b	Breslow depth 1.01–2.0 mm with ulceration	
T3	T3a	Breslow depth 2.01–4.0 mm; no ulceration	2 cm
	T3b	Breslow depth 2.01–4.0 mm with ulceration	
T4	T4a	Breslow depth over 4.0 mm; no ulceration	
	T4b	Breslow depth over 4.0 mm with ulceration	

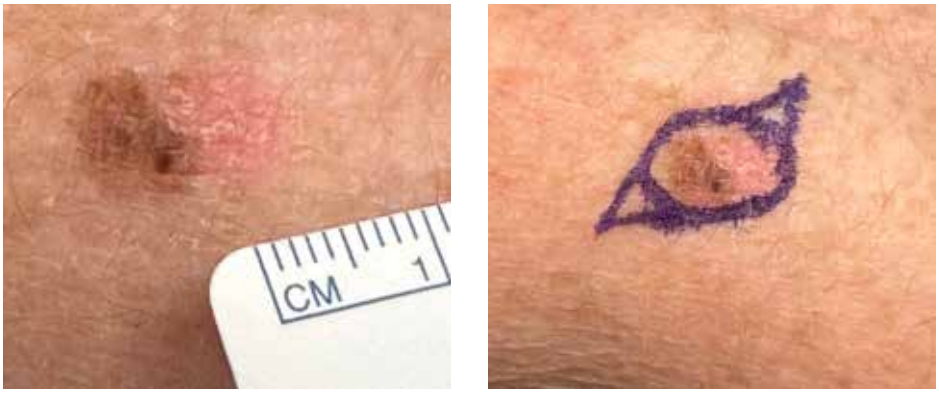

FIGURE 1. Clinical example of an elliptical biopsy with 1–3 mm clinical margins.
Both pigmented and erythematous portions of the lesion were excised in their entirety. Patient consent was received for publication.

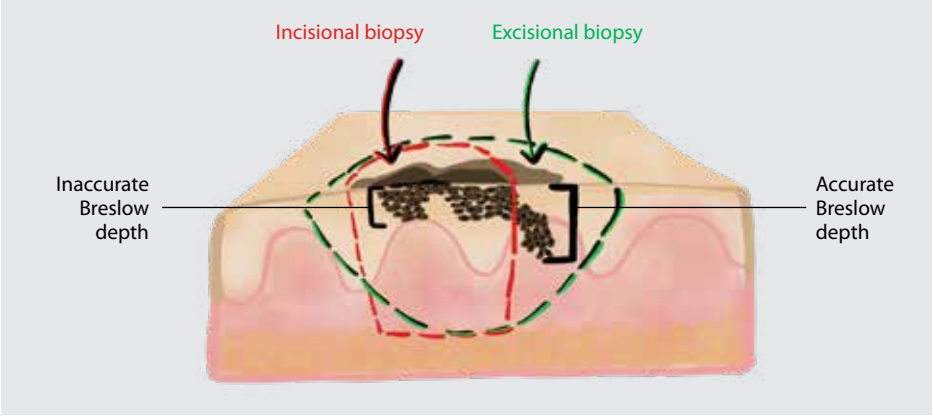

FIGURE 2. Schematic representation of an incisional biopsy (red) versus an excisional biopsy (green).
Incisional biopsies may miss the deepest portion of a melanoma, leading to an inaccurate Breslow depth. In this example, the incisional biopsy would have rendered a diagnosis of melanoma in situ, whereas the lesion is truly an invasive melanoma. Consequently, only 5 mm margins would be re-excised if diagnosed as a melanoma in situ, rather than the guideline minimum 1 cm margin for invasive melanoma. Subclinical melanoma cells may be left behind and pose a recurrence risk.

nevus, including breadth, symmetry, and, to some extent, circumscription. Thus, a partial excision may miss the diagnosis of melanoma altogether; this rate has been measured at 23% for punch biopsies.[8] Taken together, adherence to expert consensus guidelines likely helps physicians optimize patient outcomes.

British Columbia's Northern Health Region primarily serves rural and remote populations. Practitioners in Northern BC have historically had challenges accessing specialist care. Given this, we raised the question of whether this impacted guideline adherence in the region for melanoma biopsy and re-excision. To our knowledge, there has never been an audit of melanoma surgeries within the Northern Health Region. This study aimed to quantify guideline adherence rates for both initial biopsies of suspected melanomas and final melanoma re-excisions within the region.

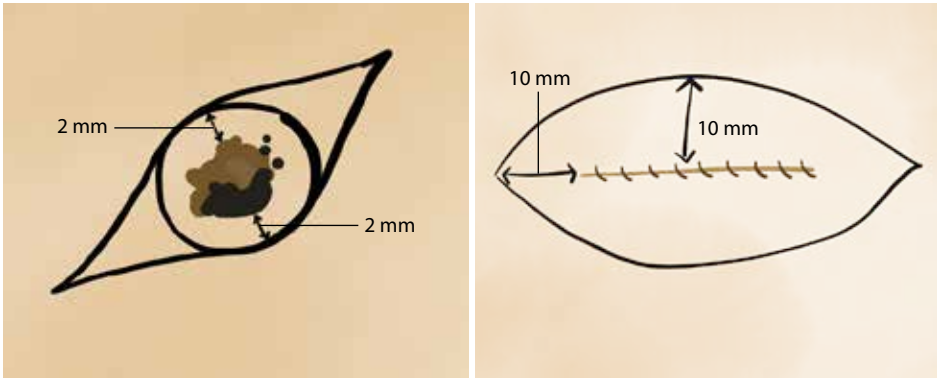

FIGURE 3. Guideline recommendations for melanoma biopsy (left) and re-excision (right). Biopsy of the skin remains the first step in diagnosing and treating a cutaneous melanoma. Each confirmed melanoma undergoes two incisions: the initial biopsy to diagnose and the second as a wide local re-excision down to the fascia, with margins based on the biopsy's Breslow depth.

Materials and methods

We conducted a retrospective chart review of histopathology reports for all melanoma-related cases in the Northern Health Region from 2016 to 2020. Ethics approval was granted by the Northern Health Research Review Committee. All histopathology reports containing the word "melanoma" were identified. Ordering physician and patient demographic data were removed. Each patient and physician was given a unique identifying number. Operational variables were pilot tested with 2016 data; one author abstracted the final data. Lesions were not selected based on histopathologic diagnosis; thus, biopsies of both benign and malignant lesions were included. For re-excisions, all primary cutaneous invasive melanoma and melanoma in situ were included. Relevant patient history was extracted from the requisition when available. Peripheral and deep histologic margin distance was recorded as the nearest approach to either invasive or in situ melanoma. The face, scalp, ears, hands, feet, nipples, and anogenital areas were defined as sensitive locations. Exclusion criteria included irrelevance to melanoma, conjunctival and ungual specimens, and atypical specimens such as amputations.

Adherence to management guidelines was compared with the recommendations available on the BC Cancer website.[9] For biopsies, adherence to guidelines was defined as achieving complete excision (determined by gross margins) and inclusion of at least the superficial dermis. In cases where clinical margins were unavailable, a minimum biopsy width of 6 mm was set, given that the majority of melanomas have a diameter greater than 6 mm.[10,11] In cases where gross margins were unknown, they were inferred from the histologic margins or substituted by the stated clinical margins in the requisition. Due to an incomplete data set, these uncertain data were included separately in select analyses as either likely adherent or likely nonadherent.

Re-excision gross margins were counterchecked with prior biopsy Breslow depth to assess adherence to respective minimum excisional margins **[Table 1]**. If gross margins were unavailable, they were approximated by halving the maximum width of the specimen. Gross measurements were allotted error margins of 21% for length and 12% for width to adjust for sample shrinkage.[12] When margins were equal to or extremely near the guideline standard (e.g., < 0.1 mm margins or 2.0 cm re-excision margins), they were categorized as borderline and separated in the analyses.

Initial data were inspected using univariate analyses, including contingency tables and descriptive statistics. The mean and standard deviation were used to summarize continuous data. Categorical data were analyzed with the chi-square test, and continuous variables with the Student's *t* test. A two-tailed *P* value of ≤ .05 was considered statistically significant.

Results

Of the 1034 specimens identified during the study period, 31 were excluded, including 18 irrelevant cases and 13 other specimens, such as frozen sections and subungual biopsies. We collected 18 core needle biopsies, 13 lymphadenectomies, 56 sentinel lymph node biopsies, 17 subcutaneous masses, and 15 internal metastasis specimens. Overall, 886 cutaneous specimens formed the data set, composed of 621 biopsies of pigmented lesions (any pathologic diagnosis) and 265 re-excisions (pathology-confirmed melanoma, invasive and in situ).

Cutaneous biopsies

In 46 (7.4%) skin biopsies, the biopsy technique (e.g., punch) was not mentioned in the pathology requisition. After excluding these and two from unknown anatomic locations, data from the remaining 573 cases were analyzed **[Table 2]**. The primary techniques employed for biopsies were elliptical

(61.6%), punch (30.9%), and shave (3.3%). Nontraditional formats were used in 4.2% of biopsies, including saucerization, wedge, narrow incisional fusiform, multiple punch biopsies within the same lesion, and placing multiple lesions in the same formalin container. On 16 instances, a second biopsy was taken as an intermediate step between an incisional biopsy and wide local excision.

Minimal clinical history was provided in most pathology requisitions and rarely mentioned the suspected diagnosis or whether the biopsy was incisional or excisional, which can inform tissue sectioning technique. Anatomic locations were not provided for two surgical specimens and four sentinel lymph node biopsies.

Incisional biopsies were slightly more frequent in sensitive anatomical areas. Excisional biopsies were taken with a 2.47 mm clinical margin on average (SD 2.45 mm, $n = 118$). Of all biopsies, 5.3% (14/265) were too shallow and had positive deep margins. Excluding these, the mean Breslow depth of incisional biopsies (1.68 mm) was lower than that of excisional biopsies (2.08 mm) but did not reach statistical significance.

Excluding those in cosmetically sensitive areas, 44.3% (159/359) of initial biopsies adhered to guidelines **[Figure 4]**. Elliptical biopsies were 10 times as likely to follow guidelines as punch biopsies (odds ratio 10.0; 95% CI, 5.36-18.7; $P < .001$). Reasons for not meeting guidelines were nonexclusive and distributed as follows: inadequate width (212), partial excision (83), shallow depth (6), multiple samples per lesion or container (14), and other technical errors (3), such as a nonperpendicular angle.

The occurrence rates of five important prognostic factors (ulceration, mitotic rate, satellitosis, lymphovascular invasion, and neurotropism) in biopsies positive for invasive melanoma are in **Table 3**. Ulceration status was not reported in 19.91% of melanoma biopsy reports. Approximately half (116/226) of invasive melanoma biopsy reports reported all five prognostic factors.

In 5.9% of biopsies, the Breslow value could not be determined due to melanoma extending to the deep margin.

TABLE 2. Descriptive data for biopsies of suspected primary cutaneous melanoma.

Variable	Percentage (*n*/total count)
Biopsy technique	
Unknown	7.4% (46/619)
Elliptical	61.6% (353/573)
Punch	30.9% (177/573)
Shave	3.3% (19/573)
Other	4.2% (24/573)
Location	
Unknown	0.33% (2/605)
Sensitive area	23.7% (143/603)
Nonsensitive area	76.3% (460/603)
Diagnosis	
Benign	42.8% (259/605)
Melanoma in situ	16.4% (99/605)
Nonmelanoma skin neoplasms	1.65% (10/605)
No diagnosis reached	1.82% (11/605)
Melanoma (all subtypes)	37.4% (226/605)
Superficial spreading	49.6% (112/226)
Nodular	12.8% (29/226)
Lentigo maligna melanoma	4.42% (10/226)
Other	16.4% (37/226)
Unspecified	16.8% (38/226)

Variable	Size (standard deviation, range, *n*)
Biopsy size (all anatomic locations)	
Punch diameter	4.35 mm (1.46 mm, 2.0–10 mm, 169)
Elliptical length	16.7 mm (11.94 mm, 2.2–150 mm, 318)
Elliptical width	9.9 mm (9.39 mm, 1.0–110 mm, 271)
Breslow depth	
Average Breslow depth (nonmetastatic biopsies)	1.85 mm (2.26 mm, 0.08–12.0 mm, 175)
Breslow depth not available (deep margin positive)	**Percentage (*n*/total count)**
	5.9% (11/187)
Breslow depth not reported	1.6% (3/187)

Biopsies diagnosed as benign and malignant were both included. Frequencies are reported in percentages, and means are provided along with standard deviation, count (*n*), and data range from smallest to greatest values.

TABLE 3. Frequency and percentage of positive prognostic factors of 226 invasive melanoma biopsies.

Prognostic factor	Ulceration	Mitotic rate	Satellitosis	Lymphovascular invasion	Neurotropism
Percentage	19.9%	28.1%	3.3%	5.3%	5.2%
Positive count	36/181	50/178	6/140	10/188	8/153
Reporting rate	80.1%	78.8%	61.9%	83.2%	67.7%

The denominator provides the count of the number of times each was reported. More than 1 mitotic figure per mm^2 was assessed as positive. Those reported as high power fields were excluded.

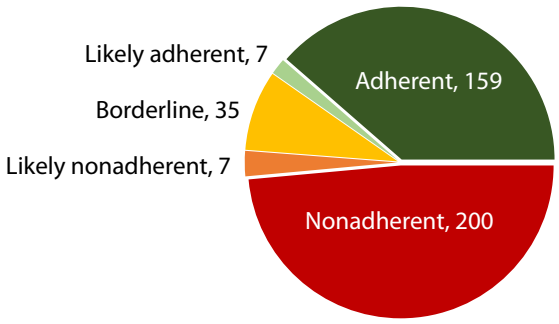

FIGURE 4. Adherence to excisional margin guidelines in initial cutaneous biopsies of suspected melanoma (*n* = 412).
Biopsies diagnosed as benign and malignant were both included. Biopsies taken in sensitive body locations were excluded. Meeting guidelines was defined as achieving negative gross margins or, if unknown, a minimum width of 6 mm. Uncertain data (likely adherent or likely nonadherent) were inferred from clinical margins on the pathology requisition or histologic margins. Borderline specimens had melanoma located less than 0.1 mm from the clinical margins or a width of exactly 6.0 mm.

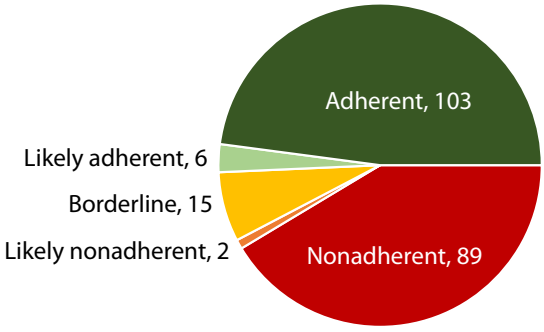

FIGURE 5. Adherence to excisional margin guidelines for wide local excisions of primary cutaneous invasive melanoma and melanoma in situ, across all anatomic locations (*n* = 215).
Guidelines were based on corresponding Breslow depth of the prior tumor biopsy (in situ = 5 mm; < 2 mm = 1 cm; > 2 mm = 2 cm). Uncertain data (likely adherent or likely nonadherent) were inferred from clinical margins on the pathology requisition or histologic margins. Borderline specimens had margin widths at the exact margin cutoff (e.g., 5.0 mm).

Nonmetastatic melanomas biopsied with negative deep margins had a mean Breslow depth of 1.85 mm (SD 2.26 mm, range 0.08–12.0 mm, *n* = 175).

Wide local excisions

There were 265 wide local excisions, including 28 repeat attempts (third surgery following a biopsy and re-excision with inadequate margins). There were 27.1% fewer re-excisions than expected, since all positive biopsies should theoretically prompt a re-excision. The disproportionate number of re-excisions suggests that not all biopsy-proven melanomas were followed up with a wide local excision. However, there is a possibility that some of these patients died or traveled out of the area for their re-excisions.

Of wide local excisions with available measurements, 53.6% (103/192) adhered to guidelines **[Figure 5]**. Re-excision guideline adherence decreased to 41.0% (16/39) in sensitive body locations. Deviations from published guidelines were primarily in the way of inadequate surgical margins. However, in three instances, providers aimed only to re-excise a specimen with a 5 mm total width, rather than re-excising 5 mm of healthy tissue on both sides of the scar. Residual tumor was present in 30.5% (81/265) of all re-excisions. Four re-excisions had positive gross margins, and 6.3% (16/253) presented with positive histologic margins.

Discussion

This 5-year melanoma retrospective review in the Northern Health Region in British Columbia identified multiple areas where melanoma guidelines were not adhered to. Across anatomic sites, approximately one-third of biopsies for suspected melanoma were incisional. Even excluding those in cosmetically sensitive areas, only 44.3% of initial biopsies adhered to guidelines. For wide local excisions, guideline adherence was slightly higher, at 53.6%.

Overall, less than half of surgical excision specimens followed BC Cancer recommendations.

Overall, less than half of surgical excision specimens followed BC Cancer recommendations. Adherence rates were lower than those in other countries, which ranged from 88% to 96.8%.[13,14] Rural populations with a low geographical density of dermatologists have previously been found to have a greater proportion of melanomas with Breslow depths greater than 2 mm.[15] Another study showed that melanoma guidelines were less likely to be followed in rural areas than urban areas.[16]

Significant barriers exist to the uptake of melanoma guidelines. Smaller biopsies may be more comfortable for physicians who do not regularly perform surgical procedures. Time constraints, remuneration, and cosmesis may also play a role. Some argue that strict guidelines pose barriers to biopsy for physicians, resulting in delayed or fewer diagnostic biopsies. There is also no evidence that incisional biopsies adversely affect patient outcomes, if one assumes that incisional biopsies do not miss some melanomas altogether.[8] Given current evidence and the potential consequences of incompletely excising melanomas, we recommend that physicians continue to strive to meet BC Cancer guidelines. Melanoma guidelines were developed through expert consensus and interpretation of available evidence to standardize the clinical management of melanoma and improve quality of

Clinical takeaways

- Punch biopsies should encompass the entire lesion, unless in a sensitive anatomic location. In this study, elliptical biopsies were 10 times as likely to follow recommendations as punch biopsies.
- Measure re-excision margins from the perimeter of the biopsy scar. If re-excising 5 mm margins, the total width of the specimen should be a minimum of 10 mm.
- In cosmetically sensitive areas or with a large lesion, an incisional biopsy may be clinically indicated. Sampling with a scalpel or punch biopsy within the most atypical part of the lesion is appropriate.
- Include the following elements in a pathology requisition:
  - Site, description, and size of lesion.
  - Excisional or incisional intent.
  - Type of biopsy (e.g., ellipse, punch, shave).

Key terms

Breslow depth: Maximum tumor thickness, measured from the top of the granular layer of the epidermis (or the base of an ulcer) to the deepest point of tumor involvement.

Invasive melanoma: Melanoma present in the dermis or deeper.

Melanoma in situ: Melanoma confined to the epidermis.

Melanoma staging: Based on tumor thickness (T), lymph node involvement (N), and presence of distant metastases (M). See **Table 1** for tumor staging details and corresponding re-excision margins.

Sentinel lymph node biopsy: Identification and excision of the first lymph node(s) the primary melanoma tumor is most likely to spread to. This procedure is considered for stage T1b and recommended for stage T2a and higher.[1] A positive sentinel lymph node biopsy leads to consideration for lymphadenectomy and adjuvant therapy.

care. Whether adherence to recommended margins plays a major factor in long-term survival is controversial and the subject of other studies.

When submitting a sample, providing more complete clinical information can be helpful for the pathologist. Stating the lesion's clinical size, the biopsy intent, and the area sampled is important. The excisional versus incisional status of the biopsy can impact tissue preparation and aid pathologists in the diagnostic process. If an incisional biopsy is clinically indicated due to a large lesion or a cosmetically sensitive location, sampling with a scalpel or punch biopsy in the most atypical part of the lesion is appropriate.

Future directions

Further surgical training may lead practitioners to feel more confident to follow excision guidelines. We encourage practitioners to review the most current guidelines before melanoma-related procedures. We recommend that most wide local excisions be referred to practitioners who are comfortable undertaking surgical re-excisions and regularly do so. To ensure high standards of melanoma care, interest is increasing in determining and monitoring the quality of interventions. A prospective study is needed to better assess clinical melanoma management in the Northern Health Region. Standardizing melanoma reports and creating a melanoma data registry are needed to fully evaluate current practices. Promoting standardization and quality assurance of surgical procedures is likely to improve patient outcomes.[17] Pathology reports can help emphasize guidelines—for instance, by explicitly stating when clinical history was missing, that a biopsy was incisional, or next steps in management (e.g., "Although the biopsy margins are negative for melanoma, a 10 mm re-excision +/– sentinel lymph node biopsy is indicated"). These study results can inform targeted educational initiatives in the region.

Stating the lesion's clinical size, the biopsy intent, and the area sampled is important.

Limitations

This study had significant limitations. Data were coded by a single nonblinded author. Since pathology requisitions rarely included clinical differential diagnoses, some biopsies of nonmelanocytic lesions without suspicion for melanoma may have been included and inappropriately held to melanoma biopsy standards. Some biopsies occurred outside of the Northern Health Region or the study time frame; thus, re-excision target margins could not be verified. These factors resulted in a largely incomplete data set. Margin clearance and prognostic factors were more frequently reported in aggressive melanomas, skewing the data toward advanced disease. Last, shave biopsies and small punches are inaccurate representations of tumor distance from margins due to specimens stretching during slide preparation.

Conclusions

In this study, guidelines for melanoma-related biopsies and wide local excisions in Northern British Columbia were often not adhered to. Whether guidelines impact long-term patient outcomes is controversial, but considering the stakes of missing a melanoma, striving for guideline-based care for melanoma patients remains important. Changes can be made in multiple dimensions—from biopsy to pathology report to subsequent re-excision—and these results

can be used to inform physician education in the future. A prospective study should be undertaken to better document guideline adherence rates and the effect on patient outcomes.

Competing interests
None declared.

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Data availability statement
The data that support the findings of this study are available upon request from the corresponding author, C.S. The data are not publicly available, as they contain details that could compromise patient privacy.

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References

1. Swetter SM, Tsao H, Bichakjian CK, et al. Guidelines of care for the management of primary cutaneous melanoma. J Am Acad Dermatol 2019;80:208-250.
2. Sladden MJ, Nieweg OE, Howle J, et al. Updated evidence-based clinical practice guidelines for the diagnosis and management of melanoma: Definitive excision margins for primary cutaneous melanoma. Med J Aust 2018;208:137-142.
3. Hanna S, Lo SN, Saw RP. Surgical excision margins in primary cutaneous melanoma: A systematic review and meta-analysis. Eur J Surg Oncol 2021;47:1558-1574.

Whether guidelines impact long-term patient outcomes is controversial, but considering the stakes of missing a melanoma, striving for guideline-based care for melanoma patients remains important.

4. Marsden JR, Newton-Bishop JA, Burrows L, et al. Revised U.K. guidelines for the management of cutaneous melanoma 2010. Br J Dermatol 2010; 163:238-256.
5. Garbe C, Amaral T, Peris K, et al. European consensus-based interdisciplinary guideline for melanoma. Part 1: Diagnostics—Update 2019. Eur J Cancer 2020;126:141-158.
6. Bong JL, Herd RM, Hunter JAA. Incisional biopsy and melanoma prognosis. J Am Acad Dermatol 2002;46:690-694.
7. Kaiser S, Vassell R, Pinckney RG, et al. Clinical impact of biopsy method on the quality of surgical management in melanoma. J Surg Oncol 2014; 109:775-779.
8. Ng JC, Swain S, Dowling JP, et al. The impact of partial biopsy on histopathologic diagnosis of cutaneous melanoma: Experience of an Australian tertiary referral service. Arch Dermatol 2010;146:234-239.
9. BC Cancer. Melanoma. In: Cancer management manual. Accessed 4 November 2023. www.bccancer.bc.ca/health-professionals/clinical-resources/cancer-management-manual/skin/melanoma.
10. Helsing P, Loeb M. Small diameter melanoma: A follow-up of the Norwegian Melanoma Project. Br J Dermatol 2004;151:1081-1083.
11. Soltani-Arabshahi R, Sweeney C, Jones B, et al. Predictive value of biopsy specimens suspicious for melanoma: Support for 6-mm criterion in the ABCD rule. J Am Acad Dermatol 2015;72:412-418.
12. Kerns MJJ, Darst MA, Olsen TG, et al. Shrinkage of cutaneous specimens: Formalin or other factors involved? J Cutan Pathol 2008;35:1093-1096.
13. Livingstone E, Windemuth-Kieselbach C, Eigentler TK, et al. A first prospective population-based analysis investigating the actual practice of melanoma diagnosis, treatment and follow-up. Eur J Cancer 2011;47:1977-1989.
14. Blakely AM, Comissiong DS, Vezeridis MP, Miner TJ. Suboptimal compliance with national comprehensive cancer network melanoma guidelines: Who is at risk? Am J Clin Oncol 2018;41:754-759.
15. Barbe C, Hibon E, Vitry F, et al. Clinical and pathological characteristics of melanoma: A population-based study in a French regional population. J Eur Acad Dermatol Venereol 2012;26:159-164.
16. Green J, Murchie P, Lee AJ. Does patients' place of residence affect the type of physician performing primary excision of cutaneous melanoma in Northern Scotland? J Rural Health 2013;29(Suppl 1): 35-42.
17. Pasquali S, Sommariva A, Spillane AJ, et al. Measuring the quality of melanoma surgery—Highlighting issues with standardization and quality assurance of care in surgical oncology. Eur J Surg Oncol 2017;43:561-571.

Unhealthy, unnatural gas

British Columbia is facing a critical health crisis that is inextricably linked to the environment. Extreme weather events like wildfires, heat waves, and droughts are on the rise, impacting public health.[1] These events are directly connected to the global rise in temperatures caused by burning fossil fuels such as coal, oil, and gas.[1] The increase in fossil fuel emissions is trapping heat around our planet, turning what were once rare weather events into frequent, severe health emergencies. The 2021 heat dome is a stark example, causing over 600 deaths in BC, overwhelming health care services, and overheating essential medical equipment, such as MRIs and CT scanners.[2]

Fossil fuel emissions are not only heating our planet but also polluting the air.[1] Burning these fuels releases a hazardous mixture of pollutants that cause respiratory and cardiovascular diseases, contributing to an estimated 15 300 premature deaths per year in Canada.[3] Reducing fossil fuel emissions, also known as decarbonization, is imperative to protect people from these harms.

One of the most pressing issues in BC is growth of the liquefied natural gas (LNG) industry, which is rapidly becoming the province's leading source of fossil fuel emissions.[4] Misinformation suggests that "natural" gas is part of a clean energy transition, but there is no scientific basis for these claims. LNG is a fossil fuel predominantly composed of methane, which has heat-trapping potential 85 times greater than carbon dioxide over a 20-year span.[4] From extraction to transportation and usage, methane gas releases harmful pollutants that have substantial immediate and long-term health implications.

The extraction process of methane gas, known as hydraulic fracturing or fracking, involves drilling several kilometres into the earth and injecting water, sand, and chemicals to release trapped gas.[5] This process poses multiple health risks, including water contamination, air pollution, and earthquakes.[5,6] Despite these growing concerns, BC continues to accelerate its fracking activities.

Misinformation suggests that "natural" gas is part of a clean energy transition, but there is no scientific basis for these claims.

Transporting methane gas also presents significant issues. Pipelines transporting gas are disruptive to the communities they cross. Most notably, the Coastal GasLink for methane gas transport has passed through several traditional Indigenous land areas and sparked conflict with communities like the Wet'suwet'en First Nation.[7]

Burning methane in indoor gas stoves releases harmful air pollutants, heightening the risk of asthma in children and aggravating chronic obstructive pulmonary disease.[8] Studies have demonstrated that methane leaks persist even when the stove is off, such that range hoods are only partially protective.[9]

We are increasingly confronted with the severe health consequences of fossil fuel emissions. The urgency to reduce our dependence on LNG is backed by compelling evidence and health benefits. From a health care perspective, LNG is a misnomer; its label as *natural* gas is in stark contrast to its substantial harm to human health. ■

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This article is the opinion of the authors and not necessarily the Council on Health Promotion or Doctors of BC. This article has not been peer reviewed by the BCMJ *Editorial Board.*

References

1. Romanello M, di Napoli C, Green C, et al. The 2023 report of the Lancet countdown on health and climate change: The imperative for a health-centred response in a world facing irreversible harms. Lancet 2023;402(10419):2346-2394.
2. Beugin D, Clark D, Miller S, et al. The case for adapting to extreme heat. Canadian Climate Institute, June 2023. Accessed 4 December 2023. https://climateinstitute.ca/wp-content/uploads/2023/06/The-case-for-adapting-to-extreme-heat-costs-of-the-BC-heat-wave.pdf.
3. Health Canada. Health impacts of air pollution in Canada: Estimates of morbidity and premature mortality outcomes – 2021 report. Accessed 4 December 2023. www.canada.ca/en/health-canada/services/publications/healthy-living/health-impacts-air-pollution-2021.html.
4. Kühne K, Bartsch N, Tate RD, et al. "Carbon bombs"—Mapping key fossil fuel projects. Energy Policy 2022;166:112950.
5. Benusic MA. Fracking in BC: A public health concern. BCMJ 2013;55:238-239.
6. Chapman AR. Hydraulic fracturing, cumulative development and earthquakes in the Peace River region of British Columbia, Canada. J Geosci Environ Prot 2021;9:55-82.
7. McLinden AJ. The role of legacy media: An examination of coverage during the Coastal GasLink conflict [doctoral dissertation]. Ottawa: Carleton University, 2022. Accessed 4 December 2023. https://repository.library.carleton.ca/concern/etds/x059c849p.
8. Balmes JR, Holm SM, McCormack MC, et al. Cooking with natural gas: Just the facts, please. Am J Respir Crit Care Med 2023;207:996-997.
9. Lebel ED, Finnegan CJ, Ouyang Z, Jackson RB. Methane and NO_x emissions from natural gas stoves, cooktops, and ovens in residential homes. Environ Sci Technol 2022;56:2529-2539.

New legislation to shift the needle on prolonged disability

Unemployment and worklessness are critical social determinants of health and economic stability. Losing their livelihood can put workers at greater risk of morbidity, mortality, and social harms. For employers, losing experienced workers can cause them hardship, affecting overall productivity, staff morale, and their workers' compensation costs.[1,2]

A recent amendment to the Workers Compensation Act aims to reduce the risk of prolonged worklessness after a work-related injury by introducing new duties for employers and workers as of 1 January 2024.[3] The goal of the legislation is to encourage connection and collaboration between employers and workers by setting out formal responsibilities in the event a worker sustains a work-related physical or psychological injury or occupational disease.

New duties for workers and employers

Under the amendment, if an employer who regularly employs 20 or more workers has employed the injured worker for at least 1 year before their injury, the employer has an obligation to maintain that worker's employment.

In addition, workers and employers have an obligation to cooperate with each other and with WorkSafeBC to identify suitable work following an injury. Employers must make this work available in a timely and safe manner, and workers must not unreasonably refuse it.

The duty to cooperate applies to claims with an injury date up to 2 years before the 1 January effective date, while the duty to maintain employment applies to claims with an injury date up to 6 months before the effective date.

What this means for physicians

Physician participation is vital for workers and employers to meet these new legal obligations, given that the physician–patient relationship is one of the most meaningful a worker may have in the aftermath of their injury.

By encouraging injured workers to remain active and focused on their abilities at the outset of their injury, physicians can set a positive tone for conversations and advise on timely, meaningful, and medically safe return to work through light or modified duties.

Using an occupational medicine approach, physicians can outline the worker's abilities and contraindications to performing certain tasks, helping guide employer–worker conversations about safe work options. Armed with the medical best guess on recovery times, the worker and employer can develop safe return-to-work plans and adjust them as needed if the worker's condition changes.

Some injuries may not require specific medical advice—simple strains, for example. In those cases, as long as the worker feels they can tolerate the work tasks being offered and the employer and worker agree to them, there is no reason for a physician to review them—and you can let the worker know this.

Support for physicians

WorkSafeBC's team of medical advisors can provide resources and support for the worker's recovery and help physicians access expertise in coordinating a worker's return to work.

By working together, community physicians and medical advisors (who are also physicians) can apply a broader lens to decisions surrounding return to work and help workers maintain a lifeline to their employment.

To reach a WorkSafeBC medical advisor, use the RACE app or call 604 696-2131 or 1 877 696-2131 (toll-free). Medical advisors are available Monday to Friday, 8 a.m. to 5 p.m., and will call you back within 2 hours. ■

—Peter Rothfels, MD
Chief Medical Officer and Director, Medical Services, WorkSafeBC

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Director, Practice and Quality Support Services, WorkSafeBC

References

1. Roelfs DJ, Shor E, Davidson KW, Schwartz JE. Losing life and livelihood: A systematic review and meta-analysis of unemployment and all-cause mortality. Soc Sci Med 2011;72:840-854.
2. Waddell G, Burton AK. Is work good for your health and well-being? London, UK: The Stationery Office, 2006. Accessed 11 December 2023. www.gov.uk/government/publications/is-work-good-for-your-health-and-well-being.
3. Government of British Columbia. Return-to-work requirements will protect injured workers. Last modified 9 June 2023. Accessed 13 December 2023. https://news.gov.bc.ca/releases/2023LBR0025-000884.

For more information:

- Return-to-work information for health care providers (www.worksafebc.com/hc-providers-rtw)
- Pathways (https://pathwaysbc.ca)
- Related *BCMJ* articles:
  - "Performing a return-to-work consultation for patients with a workplace injury or illness" (2023;65:351,353)
  - "WorkSafeBC medical advisors are here to help" (2010;52:100)

This article is the opinion of WorkSafeBC and has not been peer reviewed by the BCMJ *Editorial Board.*

Easy access to clinical practice guidelines

The College Library has updated our clinical practice guidelines web page (www.cpsbc.ca/registrants/library/clinical-practice-guidelines) to curate current sources of clinical practice guidelines and ensure they are easy to find and use.

CPG Infobase, a key directory of Canadian practice guidelines, is no longer available (as of 1 December 2023). BC Guidelines and Canadian Network for Mood and Anxiety Treatments (CANMAT) guidelines are still available. A new addition is the Guidelines International Network's International Guidelines Library, which includes Canadian, US, and UK guidelines. Filters may be used to locate guidelines in English and to sort by country of origin. Here are other new sources that may be used to quickly search for disease-focused guidelines:

BMJ Best Practice and DynaMed have links to guidelines included in each disease module.

ClinicalKey includes a guidelines search.

College librarians have created a guidelines-specific search in Medline (PubMed). A link is provided on the Library's clinical practice guidelines web page.

The Turning Research Into Practice (TRIP) database is also a new addition to the clinical practice guidelines web page. It is free to search and easy to limit search results to guidelines. Once citations have been found, some full-text content may be available for direct download, and more can always be requested from the Library.

As always, registrants may ask the Library to search for a current guideline on any topic. If you would like to request a search or suggest a source not currently included on the clinical practice guidelines web page, contact the Library at www.cpsbc.ca/registrants/library/make-request. ■

—Paula Osachoff
Librarian

This article is the opinion of the Library of the College of Physicians and Surgeons of BC and has not been peer reviewed by the BCMJ *Editorial Board.*

Obituaries

We welcome original tributes of less than 700 words; we may edit them for clarity and length. Obituaries may be emailed to journal@doctorsofbc.ca. Include birth and death dates, full name and name deceased was best known by, key hospital and professional affiliations, relevant biographical data, and a high-resolution head-and-shoulders photo.

Dr John Drummond Fitzpatrick

1949–2023

My good friend Dr John Drummond Fitzpatrick (Fitz) graduated from McMaster University in 1973. He interned at Calgary General Hospital, where he met his long-time friend and recently deceased colleague Dr Dave Musgrave. He returned to rural Ontario for 5 years but came west permanently in 1979 to join Dave's clinic, Courtenay Medical Associates. He couldn't believe that Vancouver Island did not have mosquitoes but did have occasional cougars!

He worked hard at Courtenay Medical Associates and St. Joseph's General Hospital in Comox for the next 35-plus years and was well loved by all. He welcomed me immediately when I did a locum here 40 years ago. (I knew his cousin at Queen's School of Medicine.) We were good ski buddies, colleagues, and friends from March 1984 onward, when I moved here permanently. We went on countless powder skiing and Whistler trips. I worked with him for 20-plus years when Courtenay Medical Associates expanded into a new larger building in December 1993. Initially I was the only woman working with seven men, but Fitz always treated me with respect at work and play, as I could mostly keep up with him on skis and match his medical expertise. He did bail me out on a few occasions over the years, though.

Fitz was the ultimate family doctor, who worked 50 to 60 hours per week, cheerfully. He laughed this summer when I told him that working 3 days per week in the office is now considered full-time! He did family practice maternity, emergency room shifts (until we got emergency room physicians), hospital call, house calls, and then walk-in clinics and locums after he gave up his full-time practice in 2011. He also did joint injections. At Courtenay Medical Associates we often gathered in his office after 5:30 p.m. to discuss our workdays once patients had left. Lots of practical jokes too!

Fitz always made a point of getting to know his patients better by asking about their families and mutual passions such as skiing, sailing, cycling, rugby, politics, and music. He loved to participate in our local multisport relay, Snow to Surf: skiing, cycling, and paddling. He was very attentive to his good friend, Dr Dave Musgrave, who declined slowly over 13 years from Parkinson disease. Fitz was heartbroken when he could not give Dave's eulogy in person this summer as he was at home recovering from COVID-19.

Fitz will be greatly missed by the entire Comox Valley community. He is survived by his wife, Lynn; sons, Ben and Thomas; and daughter, Sarah. All three children are avid skiers like him and his brother Dennis. His other brother, Chris, is a rugby player, like Fitz was in his younger days.

Despite his untimely death, we are all glad that he lived life well until the end. He cycled his usual 50 km route the day before his fatal myocardial infarction.

Please drink a Guinness in his honor and go skiing whenever possible. Fitz won't be able to use his prepurchased passes for Whistler and Mount Washington; it was intended to be his last ski season before total knee replacement.

—Janet Green, MD
Courtenay

Dr Roger Page

1933–2023

Dr Roger Hubert Vincent Page died peacefully in Ridge Meadows Hospital in Maple Ridge on 23 September 2023, a few days after his 90th birthday.

Roger was the second of four children born into a family who farmed in Matsqui, near Abbotsford. He is survived by his younger twin siblings: Merrill, a rancher in

Barriere, and Marion, a retired nurse living in Menno Home in Abbotsford.

Roger worked on the farm with his family but from an early age set his sights on becoming a doctor. His cohort was one of the first graduating classes of the UBC Faculty of Medicine. He completed his residency at St. Paul's Hospital in Vancouver and later undertook extra training in surgery to better equip him for working in remote areas. Among his vacation jobs as a student were two summers in Yukon as a deckhand on a tourist riverboat. One task he joked about was sneaking onto the beaches ahead of the tourists to plant gold nuggets in the fields for them to find.

Roger was deeply religious. He took up a position in Bella Bella, a small island on BC's Central Coast, in the R.W. Large Memorial Hospital (renamed ʔuxválásùilas Heiltsuk Hospital), which was established by the Methodist Mission (later the United Church). This was the only hospital west of Williams Lake in the Cariboo. He traveled annually up and down the Central Coast on the *Thomas Crosby* mission ship, providing medical services to many Indigenous communities, as well as to remote logging camps and commercial fishing establishments. He was often the only doctor in the hospital in Bella Bella. In those days, evacuation of sick and injured people from remote communities was difficult. Roger had to undertake major emergency surgeries in the Bella Bella hospital; he would anesthetize the patient and perform the surgery with nursing assistance. He gained the trust and friendship of many people along the Central Coast—friendships that endured for years.

After a number of years, he moved to the small town of Terrace, where he worked as a family physician and helped staff the hospital, as did all the local doctors. He did ward rounds on his patients, delivered many babies, assisted in the operating room, and took his turn in the emergency department. He was much appreciated by his patients for the care he provided. He was knowledgeable and experienced and made thorough assessments in a relaxed and friendly fashion.

While living in Terrace, he traveled a couple of times a year, on his own time, to the remote northwest BC communities of Iskut, Dease Lake, and Telegraph Creek, each of which had clinics staffed by excellent federal nurses but no visiting doctors. The volunteer medical services he provided in his relaxed and friendly manner made him many friends among the local Indigenous people.

In the mid-1980s, Roger moved to Vancouver, where he worked with WorksafeBC for a while, followed by a 6-month period at the G.F. Strong Rehabilitation Centre. He continued visiting Terrace to do locums for some years.

Roger enjoyed many holidays to Mexico. He appreciated the Hispanic language and culture, and his visits to the country became lengthier over time. He rented accommodation away from the tourist areas, living among Mexican families; he learned to speak Spanish, even attending university courses in the language. He helped many families with medical problems, both with advice and financially. At one time he and BC friends cooperated in gathering secondhand wheelchairs, which, after many bureaucratic problems, they drove to Mexico in a truck and distributed among people in need.

Around 2000, Roger retired to Maple Ridge, close to his roots. As he aged and became less able to travel to Mexico, Roger discovered the large community of Mexican migrant farm workers on his doorstep, and they became his new family. His weekly routine was to visit the surrounding thrift shops, buying up suitcases, backpacks, clothing, rain gear, bicycles, and anything else that would make the workers' lives more comfortable. When they returned to their families in Mexico at the end of each season, he sent them with suitcases of clothing for their children.

Roger was a man of deep faith, from early days in Matsqui to his final church home at Haney Presbyterian Church. He studied his Bible, encouraged and prayed for others, and lived out his faith. As a friend and driver for the Mexican workers, on Sundays he would worship with them at the Catholic or Pentecostal churches as well as his home Presbyterian church.

Roger's health declined over the past few years. He was hospitalized with various ailments including three separate bouts of COVID-19, but he was always determined to get back on his feet. His final hospitalization, after a heart attack, pneumonia, and a fall, lasted 2 weeks, when he died peacefully in his sleep. Our thanks to Dr Lee and the nursing staff at Ridge Meadows Hospital for their excellent care and to the many friends who visited to encourage him in his last days. There was no funeral service, at his request. A celebration of life held for him a few weeks after his death was attended by many friends from many walks of his life.

—Gillian Hodge, MD
Maple Ridge

Cycling with our seniors—It's transformational!

Lauren Lypchuk, MD, CCFP (retired!)

Lauren piloting Frederick and Gladys along the Okanagan Rail Trail, August 2019.

Throughout my 30-year medical career, I often reflected about my parents, grandparents, aunts, uncles, elderly friends, and elderly patients—what is it like to age and experience loss of mobility, chronic illness, and pain, combined with the numerous other life challenges and changes that come with time?

For our elderly, many of these challenges and changes lead to social isolation, loneliness, and depression. For many, their outings are often the necessity trips to see us (their doctors), to go to the pharmacist, to get groceries, or to attend other appointments. I have had elderly patients tell me their doctor's appointment was the social highlight of the month!

Our communities are generally geared toward the younger and more able, and our elderly tend to be marginalized. We see this every day. We especially saw it during the COVID-19 pandemic.

It was during a period of reflection, with retirement approaching, that a 3-minute event captured my attention and heart. In 2017, I came across a short YouTube documentary produced by the BBC called *Amazing Humans*. It told the story of Fraser, a 21-year-old medical student in Scotland, who was taking elderly people for free rides in the community on a specialized e-assist bike called a trishaw. Fraser's passengers sat together in the front carriage, and Fraser peddled them around while they merrily chatted away. Fraser was part of a program called Cycling Without Age, which began in Denmark in 2012 with one elderly gentleman being taken out for a ride. Cycling Without Age has since grown to a worldwide volunteer program, with chapters in 52 countries at last count.

I was transfixed, watching the video many times over, and knew immediately my community (Vernon and surrounds) would be the perfect place for this program. I was hooked! My husband, Ward, agreed, and, with his support, I applied to Denmark and was accepted into the program as a volunteer affiliate. And so began the process of fundraising, developing the program, and bringing Cycling Without Age to Vernon. The timing was perfect, as I wound down my work to part-time in 2019 and then retired at the end of 2021.

The Vernon community has fully embraced our program. Colleagues, friends, and charitable groups have been phenomenally encouraging, excited about the program, and supportive. As a result, we have raised over $80 000, allowing us to purchase three trishaw bikes and the accessories needed to get our program rolling. Vernon and Coldstream Cycling Without Age officially started taking elderly passengers for rides in June 2019. We are a 100% volunteer organization. Despite a 2-year break due to the pandemic, we were able to restart in 2022 and are cycling strong in 2023, 7 days/week, May through October, with 45 volunteers taking people out for free rides. We have now taken 1000+ seniors on our trishaws, covering over 9000 km and giving our seniors an opportunity they otherwise would never have—visiting and experiencing local sites they would never have access to, out from the confines of their residences.

We meet many people along the way (I counted more than 200 one day)—kids, teens, adults, people on bikes, people walking dogs, and people in cars, often waving, cheering us on, and wanting to chat. We have had teens call our seniors "cool dudes." The effect on our elderly passengers is often transformational. We routinely hear how valued they feel, and their comments are so telling: "I feel like the queen." "This is the best thing since sliced bread!" "I haven't had this much attention since I was a kid." "I feel worthy and loved." "This is magnificent!" We have helped our seniors celebrate 60th wedding anniversaries, 90th and 100th birthdays, and even their last outing as part of a palliative gift while on our trishaws.

One of my passengers cried as we cycled along Kalamalka Lake on our beautiful Okanagan Rail Trail. It was her first outing in 2 years, and despite seeing photos of the trail, reading about it, and donating to its development, she never dreamt she would get to experience it. And here she was seeing it on our trishaw bike!

There is so much we can offer our communities if we have the time and choose to get involved. It doesn't have to be medically related or large in scope. Like many experiences throughout my medical career, I have found putting this program together and taking seniors out for rides to be incredibly humbling, gratifying, and heartwarming. Our volunteers routinely say this too, that it is even better than they imagined.

A bit of kindness goes a long way. The experience we give in providing trishaw rides to our elderly passengers we get back in spades with the stories and laughter we hear and the smiles we see. Life doesn't end at 80. Our elderly are important. Someday we will hopefully be there too.

Cycling Without Age's motto is "The right to wind in your hair." There is a lot of truth to this!

To find out more about the program, visit https://cyclingwithoutage.ca. To get in touch with the Vernon chapter, email cyclingwithoutage.vernon.bc@gmail.com. ■

Dr Mary Conley

The inspiring life of an incredible doctor, artist, author, volunteer, and teacher.

Konia Trouton, MD, CCFP, MPH, FCFP

Dr Mary Conley.

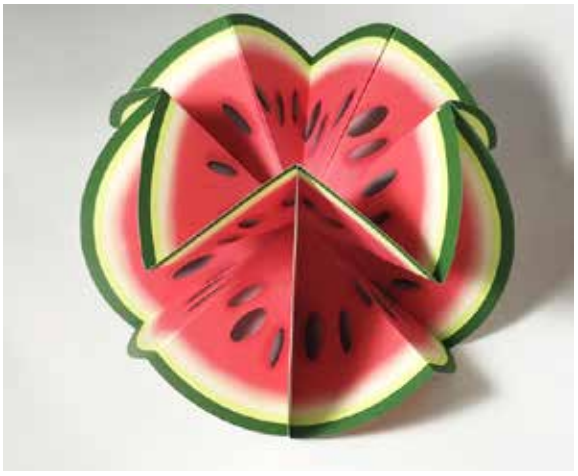
Dr Mary Conley received an honorary Doctor of Science degree from the University of New Brunswick on 17 May 2023. This is an incredible honor for an incredible woman. Dr Conley also holds a Bachelor of Science from the University of New Brunswick (1966) and a Doctor of Medicine from the University of British Columbia (1975). She attended the Honolulu Academy of the Arts and the Vancouver School of Art between degrees, achieving excellence in both. Devoting herself to both art and science has been her joy, one she shares through teaching.

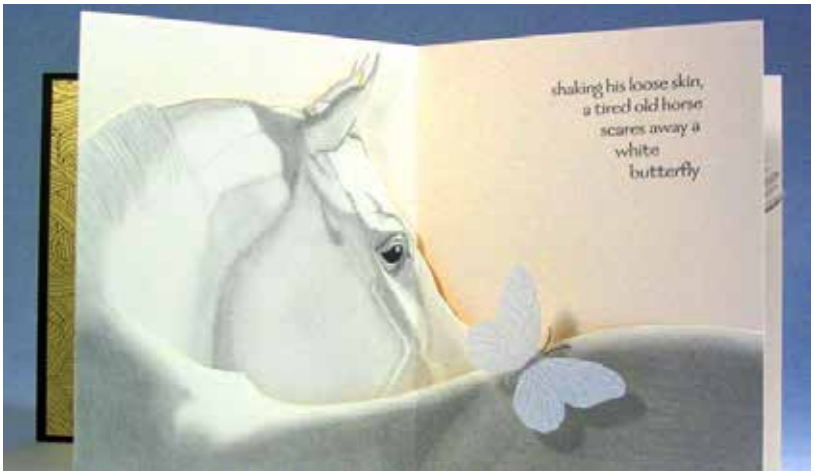
Dr Conley began her medical career a few years after decriminalization of contraception and abortion in Canada in 1969. When she began practice, she was motivated to work in these fields; at that time, women still needed to make their case to terminate a pregnancy to a three-physician hospital-based committee, waiting on their consensus before proceeding with an abortion. Dr Conley opted to step forward and train to do the procedure and sought training with Dr Henry Morgentaler in Montreal in 1980, the first doctor outside of Quebec to do so. Both are family doctors, as are most of the physicians who provide abortion services in Canada. Dr Morgentaler, along with two other family physicians, challenged the Supreme Court and won, establishing today's reality that a decision about ending a pregnancy is made between the patient and their physician. Dr Conley worked through this transition, providing care in the operating rooms of Royal Jubilee Hospital in Victoria until her retirement.

With a passion to ensure that women could decide if and when to have children, Dr Conley worked tirelessly, and under extreme personal risk to her life, to ensure access to safe abortion services was available on Vancouver Island. She was threatened, bullied, harassed, and picketed but still managed to shine through with her positive attitude, kind words, and careful procedures. When Dr Gary Romalis was shot for providing abortions in Vancouver

Dr Trouton is a clinical professor in the Department of Family Practice at the University of British Columbia and a clinical associate at Women's College Hospital in Toronto. She completed her medical training at Queen's University and her residency in Calgary, and she holds a Master of Public Health from Harvard. She co-founded the Vancouver Island Women's Clinic in 2003. In addition to reproductive health care, she participates in many research and teaching initiatives. In 2016, she added MAID to her practice and co-founded the Canadian Association of MAID Assessors and Providers, currently serving as its president.

This article has been peer reviewed.





A selection of Dr Mary Conley's works of art.

in 1994, all the family physicians who provided abortion services on Vancouver Island were threatened, and most quit. Dr Conley carried on. In 1996, she won a Victoria YWCA Women of Distinction Award for Health for volunteer service to the community. In 2008, Dr Conley was profiled in Dr Eileen Nason Cambon's book *Uppity Women We Are: 100-Year History of Medical Women in British Columbia (1893–1993)*. As a summative award for her years of work, she received the 2011 Reproductive Health Award from the Federation of Medical Women of Canada.

Her career in art is no less remarkable. In 2003, she won first prize in the International Realism Show on Granville Island and since then has won major awards at the Sidney Fine Art Show. As a dedicated author, she has written six books, illustrating two of them. *The Artistry of Art Deco*, an illustrated selection of buildings in Greater Victoria, won the 2020 Hallmark Heritage Award. Other paintings, sculpture, calligraphy, and paper art have qualified for other awards and accolades and have been the subjects of numerous exhibits and media stories. She exhibits a whimsical view of the world, with a love for color and nature, and captures happiness in every medium she touches.

Once she developed her excellence in care and technique, Dr Conley taught and encouraged others. In 1998, she was voted as a leader by her peers at the University of British Columbia for her influence in the field of education. Teaching has always been one of her passions, and she has taught interns about contraception and given lectures about women's health at Camosun College, the University of Victoria, and various community centres. At the University of New Brunswick, her alma mater, she established the Dr Mary Conley Scholarship, awarded annually to a student entering the Bachelor of Science in Environment and Natural Resources program. Today, she teaches international groups via Zoom, focusing on pop-up books and book binding, a rare skill. Her most recent exhibitions were in St. Andrews, New Brunswick, in May and June 2023. Her works are also featured on her Facebook page, Mary Conley Artist, as well as on her website, www.artworksbymaryconley.com.

Dr Conley is an inspiration, balancing art and science and sharing her enthusiasm and zest for life. Her focus is clear and her achievements exemplary. It is no wonder that the University of New Brunswick decided to confer a Doctor of Science on her in 2023. ■

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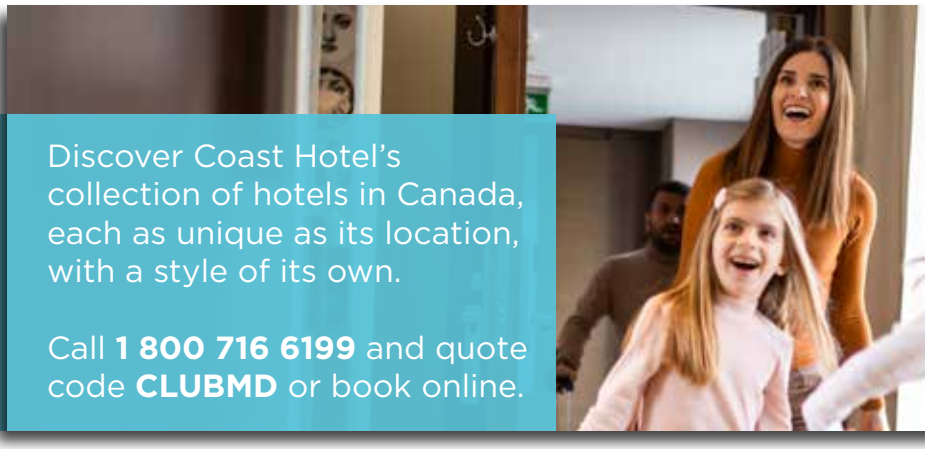

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