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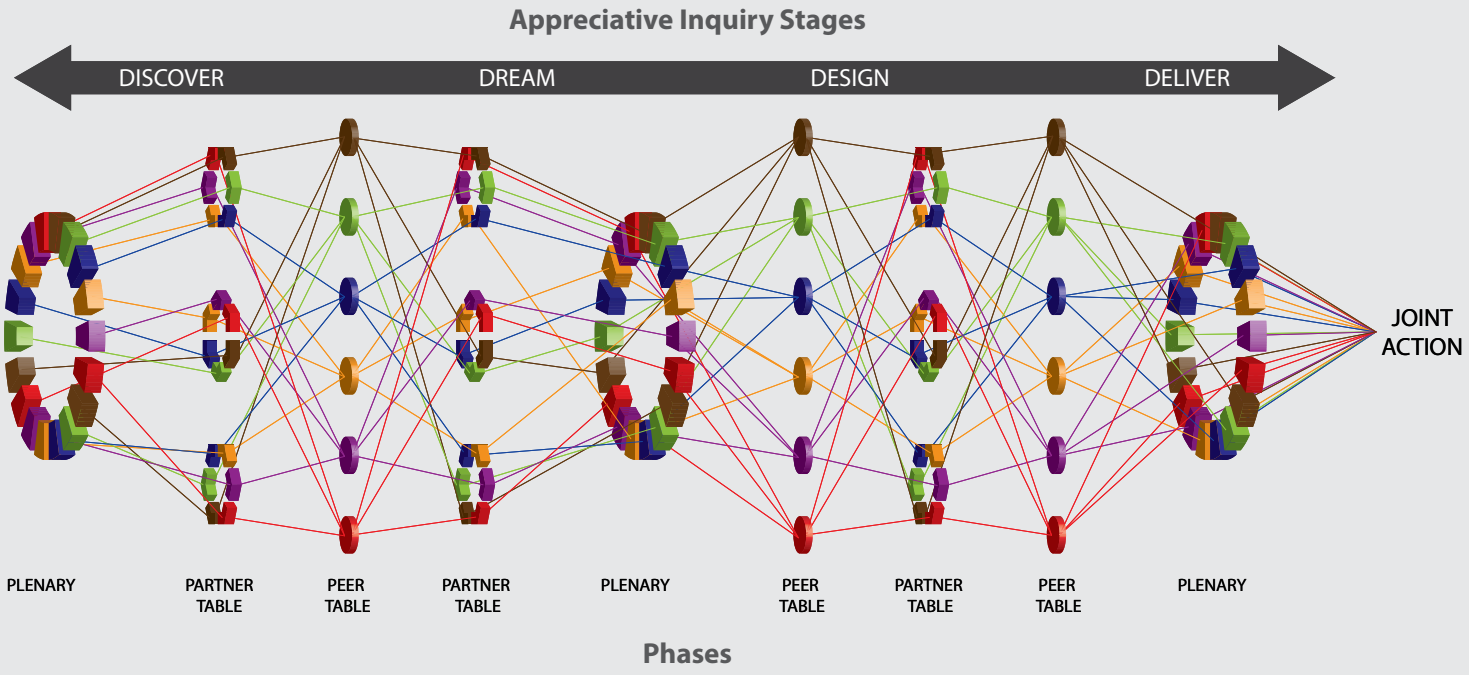

Detail from an illustration of the Breathing and Weaving model, an adaptation of the appreciative inquiry method, from the article article "Co-planning for collaborative rural and First Nations health care system transformation." Article begins on page 416.

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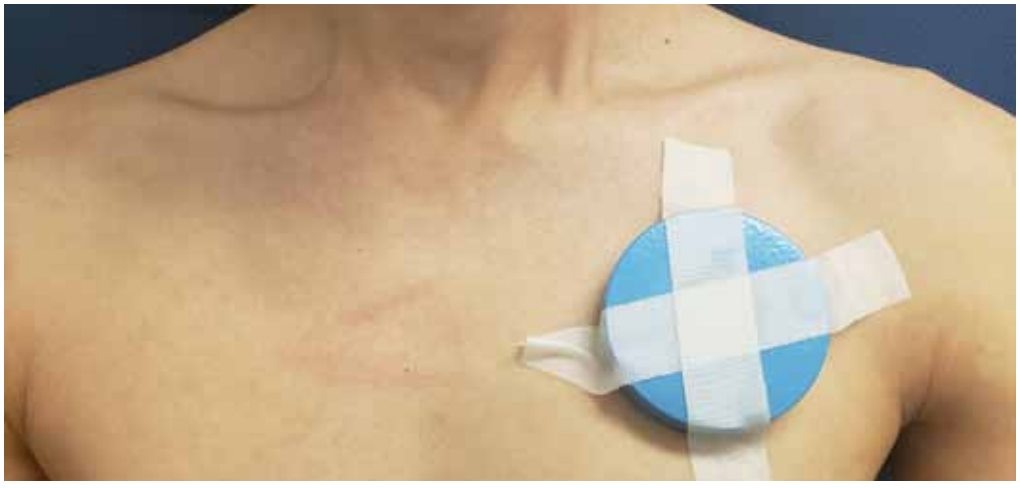
ON THE COVER
This Rod of Asclepius, made of sweetgrass and cedar smudge, represents the blending of Indigenous and Western medicines. The article "Co-planning for collaborative rural and First Nations health care system transformation" begins on page 416.



Development of an interdisciplinary, collaborative, patient-focused care plan is vital for successful medical assistance in dying for patients with pacemakers or implantable cardioverter defibrillators. Article begins on page 426.

The *BCMJ* is published by Doctors of BC. The journal provides peer-reviewed clinical and review articles written primarily by BC physicians, for BC physicians, along with debate on medicine and medical politics in editorials, letters, and essays; BC medical news; career and CME listings; physician profiles; and regular columns.

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CLINICAL

Holiday message

[15 November 2020]

By the time this editorial is in print, you may be listening to Mariah sing about shunning her millions because all she really wants is you, while you sip mulled wine or eggnog. My scientific mind does wonder how you "nog" an "egg." After extensive research (a.k.a., Google) I determined it is some combination of grog (rum), nog (strong ale), noggins (wooden mugs), and eggs (oval-shaped things that come from chickens).

All joking aside, I know that most would agree that 2021 has been a difficult year. The first global pandemic of our generation marched on with increased cases and deaths, often affecting the most vulnerable among us. Many families lost loved ones without the opportunity to comfort them in person and say goodbye. Just as the virus seemed to ebb, another wave developed, driven by the Delta variant.

The year started with much hope as the scientific miracle of rapidly developed COVID-19 vaccines became a reality and doses were put into arms. I think many of us in the medical community were taken by surprise by the degree of vaccine hesitancy and resistance encountered as the months rolled on. Conspiracy theorists were having a heyday, often spreading misinformation through social media to all who would listen. Primary care became an often-confrontational place as we did our best to educate our patients on the safety and efficacy of the vaccines. Despite this, I am proud to say that British Columbia has done better than many jurisdictions, with approximately 80% of the province's population being vaccinated up to this point.

In 2021 we also experienced continued worsening of the opioid crisis. In the first 9 months of this year, over 1500 individuals died of opioid poisoning in our province. Sadly, this eclipses last year's record-setting pace. Solutions for this crisis remain elusive and difficult to come by. Despite its human devastation, it currently receives less focus in the news, in part due to the presence of the global pandemic.

We have been on the front lines since the beginning and can be proud of our dedication, selflessness, and resilience.

It's been a difficult year on a personal level, too, as my wife became ill and continues to bravely battle what is at best an uphill struggle. Not by choice, I have sampled the health care system from the other side, initially during hospital COVID-19 restrictions, and can attest to how trying it's been for those who are ill as well as for their concerned loved ones.

So, not the best year on paper, but the optimist in me remains undaunted. The kindness I have experienced on a personal level has been overwhelming and has reinforced my belief in the underlying goodness of people. On a broader level, I have been so impressed with the way in which our profession has handled this difficult pandemic. We have been on the front lines since the beginning and can be proud of our dedication, selflessness, and resilience. As I look ahead to 2022, I am confident that the doctors of BC will face whatever challenges arise with the same compassion and skill.

Happy holidays to you all.

—David R. Richardson, MD

Growing up in a pandemic

At the beginning of this pandemic, there were many unknowns about the virus. No one knew how contagious the virus was, whether it affected children and adults equally, or how long the pandemic would last. My daughter was born during the first lockdown of the COVID-19 pandemic. The transition of bringing a new life into this world alongside the constant worry of how to best take care of a newborn during a pandemic was definitely overwhelming in those first few months. What we didn't know at the time, but do now, is that SARS-CoV-2 will be with us for a long time. The worry of how the pandemic will impact babies and children in the long term, especially in terms of development and mental health, is very real and probably resonates with many other parents.

Due to a lack of social interactions, and with public health measures such as social distancing and masking in place, children are missing out on crucial ways to hone social skills and develop language. A retrospective study from China looking at the SARS pandemic of 2003 suggested that experiencing SARS in childhood was associated with delayed milestones, including walking, saying a sentence, and dressing independently.[1] That is worrisome, as this pandemic is even more extensive and on a much larger global scale.

My daughter thinks it is normal for people to wear masks and that we rarely have play dates indoors.

The first few years are a crucial time in a child's development. As we try to carry on with the pandemic being our new normal, I now find it challenging to weigh the risks and benefits of trying to establish social interactions while also staying safe. I want my daughter to experience as much of a normal childhood as possible, while doing it within our family's comfort zone.

The COVID-19 pandemic is undoubtedly also contributing to significant mental health concerns. A study in China investigating symptoms of depression and anxiety among close to 2000 students in Hubei Province, the epicentre of the outbreak, showed 22.6% reported depressive symptoms while 18.9% reported anxiety symptoms in the last year.[2] In the US, there has been a significant increase in emergency department visits related to mental health for children younger than 18 years. Compared with 2019, there was an increase of 24% in children aged 5 to 11 and an increase of 31% in those aged 12 to 17.[3] This is concerning given the potential long-term impacts of this pandemic on youth for years to come. There will likely be many downstream effects, which I think all health care providers will come to deal with. Caring for a young, evolving mind can be a challenge on its own, but the pandemic adds an even more complex layer.

As the pandemic continues to evolve, such as with the introduction of the Delta variant and challenges with vaccinations, we are all learning to carry on with our lives. For some children; unfortunately, the pandemic is all they have known. My daughter thinks it is normal for people to wear masks and that we rarely have play dates indoors. Being a parent is hard enough, and the pandemic has not made it easier. If this is our new normal, then we need to find new ways to live our lives and teach our children the same. How we as adults perceive and deal with the pandemic can have an enormous impact on children's psychology and well-being. Constantly comparing things to the past might be a reason for disappointment, and constantly thinking about the past might be a reason for anxiety. Although this pandemic has taken a toll on everyone's lives, I hope that in the end it builds resilience in our future generations and we are able to one day look back and learn from it. ■

—Yvonne Sin, MD

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We will prevail

Colleagues, it has been an honor to serve you as president of Doctors of BC. We have been through a lot together this past year: multiple waves of COVID-19, the most important vaccination program in BC's history, catastrophic wildfires, widespread antivaccination protests, and now record levels of burnout in the medical community. It is hard to see the people I care about suffer and toil as you have. And yet, the optimism I shared with you at the beginning of my term has not wavered. I continue to know in my heart that, no matter what happens, we will prevail. I know this because you have shown me.

I have walked among heroes in the true sense of the word. Whether you fought your battles in public, in private, on the provincial stage, or one-on-one, each of you has shown courage and strength. It is inescapable. To simply put one foot in front of the other as a health care worker during these times is a heroic act.

And yet, some acts have been so conspicuously magnanimous that I will never forget them. I remember the colleagues who wrote to me in the earliest days of the COVID-19 vaccination campaign selflessly putting others first: "Give our vaccine doses to people more vulnerable, we'll wait our turn." I remember the retired members who kept begging me to be given the opportunity to help the profession: "Get us back on the front lines so that we can contribute once more." I remember the doctors who faced public attacks, yet who refused to retaliate: "Let's seek to understand and educate rather than judge and belittle."

I have lost count of the moments of sacrifice, triumphant successes, and heartbreaking tragedies. Through it all you have demonstrated professionalism, compassion, and most importantly, humanity.

My fondest memories will be of the meetings with you, my cherished colleagues. We shared ideas, hard realities, tears, and laughter. I also treasure the exchange of thousands of emails, text messages, and social media posts. Though COVID-19 pushed us apart physically, it drew us closer together virtually. I hope I was able to bring my best self to every encounter, just as you brought your best selves to me.

I will admit that there have been low points too. Our profession is hurting in a way that it has never hurt before. We have been attacked, ridiculed, assaulted, threatened, and just plain worn down. Record numbers of our colleagues are needing and seeking help. We are paying the price for years of chronic underfunding and misallocation of resources in our health care system. In a cruel twist, we are relied upon more than ever before.

In times like this, I recall the words of Martin Luther King Jr.: "…the arc of the moral universe is long, but it bends toward justice." We are part of that arc because medicine remains a just and noble profession. We champion science, speak out about inequities, stand up for the vulnerable, and push back against misinformation. We are an integral part of our communities, leaders in our own right, and we are entrusted with people's very lives. Take heart that even when we are tired, even when we feel defeated, even when the loud voices of division and hate temporarily prevail, we are still part of the bending of society toward justice.

Remember, too, that we continue to have much to be grateful for. We live in a free and democratic society, one in which most people respect science and in which we have maintained a standard of living envied by many around the globe. Our society's important institutions remain strong and resilient even in the face of many challenges. And most of all, we have each other. We have been bent, but remain unbowed. We have been tested, but maintained our integrity. We are tired, but our spirit remains strong.

To each and every one of you, thank you for the opportunity you gave me to serve. I wish for you continued wisdom, continued strength, and continued courage. We will prevail. ■

—Matthew C. Chow, MD
Doctors of BC President

Letters to the editor

We welcome original letters of less than 300 words; we may edit them for clarity and length. Letters may be emailed to journal@doctorsofbc.ca, submitted online at bcmj.org/submit-letter, or sent through the post and must include your mailing address, telephone number, and email address. Please disclose any competing interests.

Aphantasia

"If counting sheep is an abstract concept to you, or you are unable to visualize the faces of loved ones, you could have aphantasia."[1] The origin of the word is "a" from the English "without" and the Greek "phantasia" meaning imagination or appearance.

The phenomenon was first described by Francis Galton in 1880 and remained relatively unknown until publication of a study conducted by a team led by Professor Adam Zeman of the University of Exeter. Hyperphantasia, the condition of having extremely vivid mental imagery, is the opposite of aphantasia. In a research report by Professor Zeman published in 2020, he describes hyper vivid visual imagery as allowing one to inspect absent items in the mind's eye, somewhat as if one was seeing them.[2]

My experience with aphantasia began with a report by the BBC of the condition described above. I was a practising anesthesiologist who retired in 2018 and realized that the description of aphantasia applied to me. I subsequently took a number of tests online under the heading of Vividness of Visual Imagery Questionnaire (VVIQ), which confirmed my poor visual imagination.

During my career in anesthesia, I made extensive use of atlases to aid me in the performance of regional anesthesia such as spinal and epidural anesthetics. Although moderately proficient in such techniques, I would often call on colleagues when I had an especially challenging patient with obesity. In particular, one colleague who would reliably be successful in cases where I struggled had what I thought of as X-ray vision.

I write this short report to bring awareness of this condition to the general medical community, especially in areas where visualization may play an important role. Diagnosis of this condition is initially established by the VVIQ, which I mention above. Establishing this condition in medical students may help learning in areas where visualization is important and also in specialty selection. Finally, there are many resources on the Internet to explore this condition.

—Thomas M. D'Arcy, LRCP&SI, FRCPC
Vancouver

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Re: Re-embracing physical activity after COVID-19

Recommending that patients exercise more is definitely a worthwhile venture, as Dr Anne Pousette outlined in her article, "Re-embracing physical activity after COVID-19: What is the physician's role" [*BCMJ* 2021:63:298]. In fact, she says, "Physicians can play a crucial role in promoting a societal return to physical activity." But by recommending that family physicians take on this task, and giving time-consuming examples of how they might do that, I am wondering if Dr Pousette is aware of what province she practises in.

BC MSP does not allow family physicians, or any physicians, to bill MSP for such counseling or for any lifestyle or preventive counseling. This is clearly outlined in the Doctors of BC revised fees for uninsured services document (www.doctorsofbc.ca/sites/default/files/uninsured_services1apr2021_421287.pdf). Patients are to be billed under code A00054, which states: "Preventative medicine counselling all forms, e.g.: health maintenance, assessment and counselling to include physical examination, smoking withdrawal and other harmful habits, weight and/or diet control, exercise programs (planning and management), stress management techniques, social support systems, establishing normal sleep patterns and other forms of lifestyle counselling - per half hour $158.00."

Dr Pousette's recommendations clearly fall under the above uninsured fee code, meaning MSP cannot be billed for such a visit. That means family doctors are left with the impossible choice of either doing the work and not being paid, which is clearly untenable, or saying sorry to patients who want advice for weight loss, smoking cessation, or exercise guidelines. Please, Doctors of BC, consider requesting coverage of such services in your next round of fee negotiations. Our patients, our families, our communities deserve it.

—Lesley Horton, MD, CCFP
Vancouver

Author replies

I will leave responding to the issue of billing in relation to "lifestyle or preventive counseling" to those engaged in prioritizing health system spending. However, I would like to acknowledge that those are important conversations, particularly given the inequity of health and outcomes that have been exemplified throughout the pandemic and reported extensively elsewhere. Thank you, Dr Horton, for placing the topic back on the table for discussion.

When this article was written and the core messages conceived, we anticipated that by November 2021 much of COVID-19 would be in the rearview mirror. We anticipated looking forward—addressing what we learned from the pandemic about health inequities and

re-engaging in proactive use of health promotion knowledge and evidence. Sadly, we are still facing the strain of a fourth wave.

The capacity of family physicians to engage in these conversations is recognizably dependent on their practice contexts, their community resources, and their own comfort with and knowledge of the topic. The suggestions offered in the article were provided in response to requests from physicians for specific information that would assist them in promoting physical activity to whatever extent is feasible in their roles as physicians. There was no intent to add burden to physicians who already have a full plate, but rather to enhance opportunities for physicians to be part of a large cross-sectoral strategy to enable British Columbians from all walks of life, across the life course, to benefit from health-enhancing physical activity.

The province of BC's comprehensive physical activity strategy, Active People, Active Places,[1] and the 2020 update[2] documents provide a framework for collective action by multiple stakeholders. Physicians belong at the implementation table and have much to offer at multiple levels—from what happens in our offices to advocating for policy and spending priorities. Collectively, we can make a difference, just as we have in the areas of seatbelts, helmets, and smoking cessation.

—Anne Pousette, MD, MPH
Council on Health Promotion

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BC Family Doctors replies

BC Family Doctors was asked to provide a response to Dr Horton's letter regarding the article "Re-embracing physical activity after COVID-19: What is the physician's role?" The article highlighted the critical role that family physicians play in promoting a return to physical activity and other health promotion activities. Dr Horton correctly pointed out, however, that this care, as with many health promotion activities, is currently not payable by MSP as an insured service.

This discussion highlights a disconnect between the practice of medicine and the current fee-for-service system in BC. Under the General Preamble of the MSC Payment Schedule,[1] the fees are for "services which are medically required for the diagnosis and/or treatment of a patient." The Preamble further states that, "when services are provided for simple education alone. . . such services are not appropriately claimed under fee-for-service listings." As a result, the uninsured fee A00054 exists in the Doctors of BC Fee Guide for Uninsured Services[2] to enable private billing for preventive medicine counseling of all forms.

Community-based longitudinal family physicians can bill chronic disease management[3] fees for providing guideline-informed care, including encouragement of physical activity, for patients with specific health conditions (diabetes, hypertension, COPD, and congestive heart failure). Similarly, this small cohort of physicians can also provide personal health risk assessment[4] visits with at-risk patients, including patients with physical inactivity. However, this fee is limited to 100 patients per calendar year per physician.

These fee code limitations make it almost impossible to provide primary care that is inclusive of health promotion activities recommended by Doctors of BC's Council on Health Promotion. The current Payment Schedule is a complex, antiquated document that does not reflect modern medical practice or support patient-centred appropriate care. Despite the agreed-upon direction for primary care transformation,[5] family physicians have limited ability to provide comprehensive, equitable, high-quality care due to current fee-code constraints.

BC Family Doctors believes that we need to modernize and create equity in physician compensation.[6] This requires a comprehensive review of the MSC Payment Schedule, including updating the General Preamble. Together with the introduction of alternate payment models, fee-for-service modernization will align current medical practice with the values and goals of our health care system. As we emerge from the pandemic, we need to consider how we build a stronger, more equitable health care system that meets the needs of all British Columbians.

—Renee Fernandez, MD, CCFP
Executive Director, BC Family Doctors

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Re: Canada's largest purpose-built public day-care surgery centre

The conclusions in this article [*BCMJ* 2021;63:330-335] are predicated on two observations—that the admission rate for outpatient surgery is very low and that the readmission rate is also very low. What the study does not address is a reasonable explanation for the difference in admission rates for outpatient surgery in the setting of a hospital and that of a same-day surgery centre. What am I missing? I suspect there is a strong bias at play.

—Scott A. Lang, MD
Calgary, AB

Author replies

I agree that there is a strong bias in play in hospitals to admit a patient rather than discharge them. The ease of bed access and the ingrained habit of admitting that is present

at a full-service hospital is not present at an outpatient centre.

Our article clearly shows a low rate of unplanned admissions and readmissions in patients who receive their surgery at the Jim Pattison Outpatient Clinic and Surgery Centre (JPOCSC). As mentioned in the article, our criteria for eligibility for surgery at this centre are clearly defined (ASA 1 or 2 and no history of significant sleep apnea or adverse reactions to general anesthetic). When all variables are controlled, the admission rate at a hospital is significantly higher than at an outpatient centre.

In a previous article looking at the unplanned admission rate in breast reconstruction patients at JPOCSC and Surrey Memorial Hospital, a significant difference in admission rates was observed when all other patient variables were controlled for.[1] The surgeons and anesthetists are the same individuals at both sites; therefore, the only remaining explanation is an institutional bias to admit. As the OR theatre staff is the same, this bias lies in the postanesthetic care units and day surgery units present in full-service hospitals. It is this inherent bias that our article hopes to change, showing that discharge rates for planned day-care surgeries can be very high, and that planned outpatient surgery centres cannot have a bias to admit.

—Paul Oxley, MD, FRCSC
Surrey

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News

We welcome news items of less than 300 words; we may edit them for clarity and length. News items should be emailed to journal@doctorsofbc.ca and must include your mailing address, telephone number, and email address. All writers should disclose any competing interests.

Temporary fee codes for 2021/22 flu season

As of 1 October 2021, temporary fee codes introduced last year for adult influenza and pneumococcal immunizations have been reactivated for the 2021/22 flu season. The reactivation was made to address the increased costs of providing immunizations during COVID-19.

In addition, pertussis immunization in pregnancy has been added to the list of immunizations for which these fee codes can be billed. This has been a publicly funded vaccination in BC since November 2020.

Both temporary respiratory immunization fee codes are effective for dates of service on or after 1 October 2021, with an end date of 30 April 2022.

Details of the fee

T10040 Respiratory immunization for patients 19 years of age or older (with visit):

- Payable for influenza (using ICD-9 code V048) and pneumococcal (using ICD-9 code V05) and pertussis during pregnancy (using ICD-9 code V036) immunizations.
- Payable in full with an office visit.
- If the primary purpose of the service is for immunization, bill fee item 10041 using ICD-9 code V048 for influenza, and/or V05 for pneumococcal and/or V036 for pertussis during pregnancy.

TB10041 Respiratory immunization for patients 19 years of age or older (without visit):

- Payable for influenza (using ICD-9 code V048) and pneumococcal (using ICD-9 code V05) and pertussis during pregnancy (using ICD-9 code V036) immunizations when the primary purpose of the service is for immunization.
- Not payable with an office visit.

#BePelvicHealthAware: Starting conversations about pelvic health

One of every two women will experience one or more pelvic floor symptoms during her lifetime. Led by Dr Roxana Geoffrion, urogynecologist and UBC researcher, a Vancouver-based team launched www.bepelvichealthaware.ca and an accompanying social media campaign to promote pelvic floor health by sharing best practices. The website is home to four whiteboard animation videos, with more to come. Through simple images and plain language, the videos aim to illustrate best practice clinical guidelines on pelvic health and prevention of disease from the Society of Obstetricians and Gynecologists of Canada.

So far, the videos cover pelvic health and pregnancy, obstetrical anal sphincter injuries, pessaries, and urinary incontinence. The website also offers information on pelvic health after childbirth, menopause-related issues, pelvic floor disorders such as prolapse or incontinence, and the importance of exercise to keep healthy. Website viewers are also encouraged to submit their own questions. The goal is to provide access to medical information on these sensitive topics and empower people to speak to their providers about childbirth trauma, healing, and prevention of further disease.

The website and its resources are also aimed at women's health care providers looking to direct their patients to simple evidence-based information on pelvic floor health during pregnancy and beyond.

To learn more about the campaign, visit www.bepelvichealthaware.ca or follow the team on Instagram or Facebook. Visit www.bepelvichealthaware.ca/spread-the-word for a communications toolkit with sample web and social media content to share with patients.

VCH Medical Staff Hall of Honour, 2021 inductees

Dr Victoria Bernstein

Dr Anthony W. Chow

Dr Allan D. McKenzie

Dr Frank P. Patterson

Dr Gordon L. Phillips

Five doctors, all pioneers in their specialties, have been inducted into the VCH Medical Staff Hall of Honour for 2021.

Dr Victoria Bernstein, clinical professor of medicine, award-winning cardiologist, outstanding educator, and pioneer for women in cardiology. Dr Bernstein was an organizational leader in cardiology and medicine at VGH/UBC Hospital and for 30 years was the only woman cardiologist at VGH/UBC Hospital.

Dr Anthony W. Chow, professor of medicine and founding head of the Division of Infectious Diseases. An outstanding researcher, Dr Chow published over 430 peer-reviewed papers and book chapters and has won many prestigious awards. He is also an inductee of the Brandon University Alumni Wall of Fame.

Dr Allan D. McKenzie (1917–1992), professor of surgery and past head of the Department of Surgery, UBC. Dr McKenzie was well recognized nationally and internationally for his clinical and academic contributions to the specialty. Dr McKenzie's heroism during World War II was also noteworthy. While he was a volunteer regimental medical officer, his regiment came under heavy enemy fire in Holland. For his efforts to aid wounded soldiers under gunfire, he was awarded the Military Cross, a military decoration for valor within the British Empire second only to the Victoria Cross at the time.

Dr Frank P. Patterson (1915–2002), professor of surgery, past head of the Division of

BC-based accredited PPE testing lab

Western Canada's first accredited personal protective equipment (PPE) lab, specializing in testing and validating PPE, is a pandemic-driven innovation from Vancouver Coastal Health (VCH), with support from the Ministry of Health and the Provincial Health Services Authority (PHSA). VCH recognized the need for a local lab that could quickly test and validate the effectiveness of PPE to provide assurance to health care workers and patients in the province.

Located on the Vancouver General Hospital campus, the lab was completed in June 2020 and accredited in October 2020. The lab's initial mandate was to ensure the safety of health care workers and patients by providing testing for priority pieces of PPE, such as N95 respirators. The scope of the lab has since expanded, and the lab now offers seven tests, including tests for gowns (such as fluid resistance and hydrostatic pressure) and surgical masks (such as flammability and synthetic blood resistance) and is now available to any Canadian organization.

The lab team continues to work closely with the PHSA supply chain to ensure the supply of PPE obtained from new local, national, and international suppliers meets all Health Canada and WorkSafeBC regulatory requirements as well as certification requirements for the Canadian Standards Association and National Institute of Occupational Safety and Health.

The lab is supported by the Public Health Agency of Canada, National Research Council Canada, Standards Council of Canada, BC's Ministry of Health, the University of British Columbia, the PHSA, and Providence Health Care.

For more information about the laboratory, including tests available, visit www.vch.ca/for-health-professionals/ppe-testing-laboratory.

Hall of Honour, *Continued from page 411*

Orthopaedics, and past head of the Department of Surgery. Dr Patterson followed the footsteps of his esteemed father, VGH's first orthopaedic surgeon. Dr Patterson served in the Royal Canadian Air Force during World War II and became one of the preeminent orthopaedic surgeons in the province after the war, receiving many accolades. He was also a surgical historian and published a book on the history of surgery at VGH.

Dr Gordon L. Phillips, recruited from the United States. Dr Phillips developed the VGH Bone Marrow Transplant Unit for the province of BC, created the necessary infrastructure to support the unit, and created training programs and protocols associated with the unit. Recognized by the Vancouver Medical, Dental and Allied Staff Association for "bringing clinical renown to VGH" in 1989, Dr Phillips has provided hope to many patients with hematologic malignancies, which had previously been regarded as fatal conditions. Under his leadership, the VGH Bone Marrow Transplant Unit became one of the most successful in the country.

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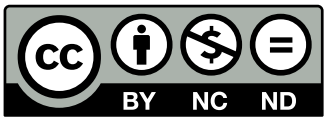

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Text-message program to ease transition to parenthood

To help with the transition to parenthood, UBC researchers have launched SmartParent, Canada's first parenting education program delivered by text message.

Research[1] by the Public Health Agency of Canada has shown that new parents in Canada often struggle to find the information they need. Additionally, access to postnatal care and resources is complicated by many other factors, including education level, stigma and discrimination, language, income, whether parents live in rural or remote areas, and isolation due to the COVID-19 pandemic. The pandemic has made things even more difficult for new parents because they haven't been able to attend parenting classes or visit parenting drop-in centres. Many of the resources they would normally depend on are limited or closed due to safety protocols. SmartParent will help fill these gaps and eliminate barriers.

Founded be Dr Patricia Janssen, professor at UBC Faculty of Medicine's School of Population and Public Health, SmartParent was developed by researchers from UBC in collaboration with Optimal Birth BC, the BC Ministry of Health, and BC health authorities, and in consultation with pregnant and new parents, practising nurses, doctors, midwives, and experts in maternal and child health.

SmartParent is modelled after the SmartMom program, a prenatal text messaging program that has been successfully supporting healthier pregnancies. The two programs are designed to work in tandem. SmartMom supports mothers with information during each week of their pregnancy, while SmartParent continues that support for parents from the birth of their child through the first year of life. During the pilot phase, SmartMom users showed lower rates of gestational diabetes and healthier pregnancy weights, and were less likely to smoke during their pregnancies than non-users. Their newborns were also healthier.

How SmartParent works

Parents receive three messages every week, each with a link to further information online. The messages are tailored to the infant's age and stage of development to help guide parents through each week of their baby's first year. The information is provided in an engaging, accessible format, intended to complement the information and support provided by parents' health care providers.

Information parents will receive

Comprehensive, evidence-based information covers everything from growth and developmental milestones, infant safety, feeding and sleeping, follow-up and screening procedures, and vaccinations. SmartParent also provides information for parents about mental health and self-care. Parents will receive resources on

Continued on page 414

Spoken interpretation services available to community specialists

When working in their community offices, specialists can access free spoken language interpreting services as part of a 1-year pilot project, funded by the Specialist Services Committee (SSC)—a partnership of Doctors of BC and the BC government.

SSC is providing $50 000 for this pilot project in response to physicians' feedback about supporting the delivery of safe and equitable patient care to diverse populations. Previously, this service was available to specialists who chose to pay privately or who work within the boundaries of health authority sites. Family doctors have access to the service through the PHSA.

Accessible through the Provincial Language Service, professional interpreters offer services that are available:

- Via telephone.
- 24 hours a day, 7 days a week.
- On demand.
- In roughly 240 languages.

How specialists can connect with an interpreter:

1. Call 1 833 718-2154 (toll free).
2. Select a language.
3. Enter your access code, which was emailed to you by your section head, or contact SSC at sscbc@doctorsofbc.ca.
4. Indicate you are a member of Doctors of BC.
5. Wait 30 to 60 seconds to connect with an interpreter.

For more information, visit www.phsa.ca/health-professionals/professional-resources/interpreting-services.

how to deal with exhaustion, how to maintain healthy relationships, and how to manage the stresses of parenting.

How to sign up

Parents can register for SmartParent by texting the keyword smartparent to 12424, or by signing up at www.smartparentcanada.ca. Those interested in SmartMom can text smartmom to 12323 or visit www.smartmomcanada.ca.

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Dr Josh Greggain, Doctors of BC president-elect

Dr Josh Greggain was acclaimed as Doctors of BC's president-elect. For over 15 years, Dr Greggain has been a family physician for rural, Indigenous, and underserved populations. He became involved with Doctors of BC in 2020 as a member of the Joint Standing Committee on Rural Issues, and previously held a number of medical leadership roles including medical director at the Hope Medical Centre and the Fraser Canyon Clinic, site medical director at Fraser Canyon Hospital, and board member and chair of the Chilliwack Division of Family Practice. He was also instrumental in development of the House of Sexwna7m, an Indigenous-led primary care outreach clinic in Anderson Creek.

Dr Greggain will begin the role on 1 January 2022, at which time current president-elect, Dr Ramneek Dosanjh, will become president.

Ray Markham, MB ChB, MRCGP, FCFP, Megan Hunt, RTC, Sarah Huebert, MSW, BSW, RSW, Scott Graham, BEd, MA, CE

Co-planning for collaborative rural and First Nations health care system transformation: Developing a pattern for partnership and social accountability

A workshop held in Northern BC provides an example of how multiple partners can work together to transform the relationship between the colonized health care system and First Nations health and wellness priorities.

ABSTRACT: Health care system partners in BC are shifting toward delivering primary care approaches that are socially accountable and reflect the needs of all health partners. A partnership development and strategies workshop that was held on the Gidimt'en territory of the Wet'suwet'en First Nation was designed to support health care system transformation in Northern BC. Indigenous female health leaders led the workshop planning processes and facilitation to ensure that gender and racial power imbalances were addressed and the planning work was grounded in appreciation and respect for Indigenous ways of knowing and being. Workshop participants included partners from Northern Health, the First Nations Health Authority, northern divisions of family practice, medical staff associations, the Ministry of Health, academia, First Nations communities, and the community at large. Together, they used the "breathing and weaving" approach, an adaptation of the appreciative inquiry method, to discuss health care priorities. The outcomes of the workshop included the development of relationships among participants that were built on trust, mutual understanding, and respect; an increased appreciation of participatory, decolonized workshop design that included traditional healing; and a commitment to ongoing collaboration and health care system transformation to improve health and wellness service access and outcomes.

Dr Markham is the executive director of the Rural Coordination Centre of BC. Ms Hunt is the First Nations Health Authority acting executive director, primary health care and ehealth. Ms Huebert is a registered social worker and formerly a researcher at the Social Planning and Research Council of BC. Mr Graham is the First Nations Health Authority director of operations and planning, primary care, and ehealth.

This article has been peer reviewed.

Health care system partners in BC are shifting away from siloed approaches to the planning and delivering of primary care and toward approaches that are socially accountable[1] and reflect the needs and strengths of all health partners: citizens, clinicians, policymakers, educators, and linked sector and health administrators, with a particular focus on First Nations priorities[2] (we use BC to refer to a geography, and acknowledge that most of what is referred to as BC is unceded First Nations territories). With this shift comes a strong step by health care partners toward one another, which is resulting in exciting and challenging collaboration opportunities.

Northern BC has long been a leader in health care system collaboration and providing team-based care. The emergence of team-based primary care networks[3] across the province provides a framework and set of aspirations that are facilitating important further partnership work in the North, evidenced by periodic engagement, planning summits, and multipartner workshops. At the same time, the emergence of primary care networks also creates challenges and new collaborative opportunities in the effort to reconcile a provincial effort with local realities and priorities.

One such collaboration activity took place at a northern rural health summit in 2018. We describe this multipartner workshop, with a focus on the design process and methodology, and the qualities of the gathering. We also provide a summary of results and reflect on the journey ahead to developing a holistic care system that is socially accountable,[1] culturally safe,[4] and relationship based. By sharing the process and outcomes of this workshop, health care system partners across BC will be better equipped to engage in health care system transformation that is centred on diverse perspectives on primary care design; is grounded in appreciation

and respect for Indigenous ways of knowing, being, and doing; and provides a First Nations leadership role in health care system transformation going forward.

Background

To address health inequities, health care system partners from the North have consistently worked together to create an integrated, holistic, primary care system.[5] These partners are generally aligned with the view that primary care in the North needs to move toward a holistic care system that is not only team based but also socially accountable,[1] culturally safe,[4] and relationship based. To achieve health care system transformation and shift power from the existing colonized system of care toward a holistic system of care, a series of partnership development and strategies workshops were designed with key leadership from the First Nations Health Authority, northern divisions of family practice, Doctors of BC, Northern Health, and the Rural Coordination Centre of BC.

The first of these workshops was held in Smithers on the unceded Gidimt'en territory of the Wet'suwet'en First Nation from 19 to 20 July 2018. The purpose of this workshop was to:

- Engage in dialogue and deliberation regarding health care system improvements to allow for the best holistic patient care across the North.
- Build relationships between and among First Nations and health care system partners to enhance health services across the North.
- Advance priority areas regarding health care system transformation and commit to short-term action steps.

Workshop design

When the decision to pursue health care system transformation was established and the call for a partnership development and strategies workshop was made, organizers declared a desire to work in a participatory, relationship-based, equity-focused way. The Partnership Pentagram+ model[2,6] **[Figure 1]** was used to inform meaningful collaboration, with a focus on creating an experience that amplified social accountability and First Nations values and perspectives. The model, "embraces all partners simultaneously with an appreciative inquiry approach to build upon existing strengths [as] an

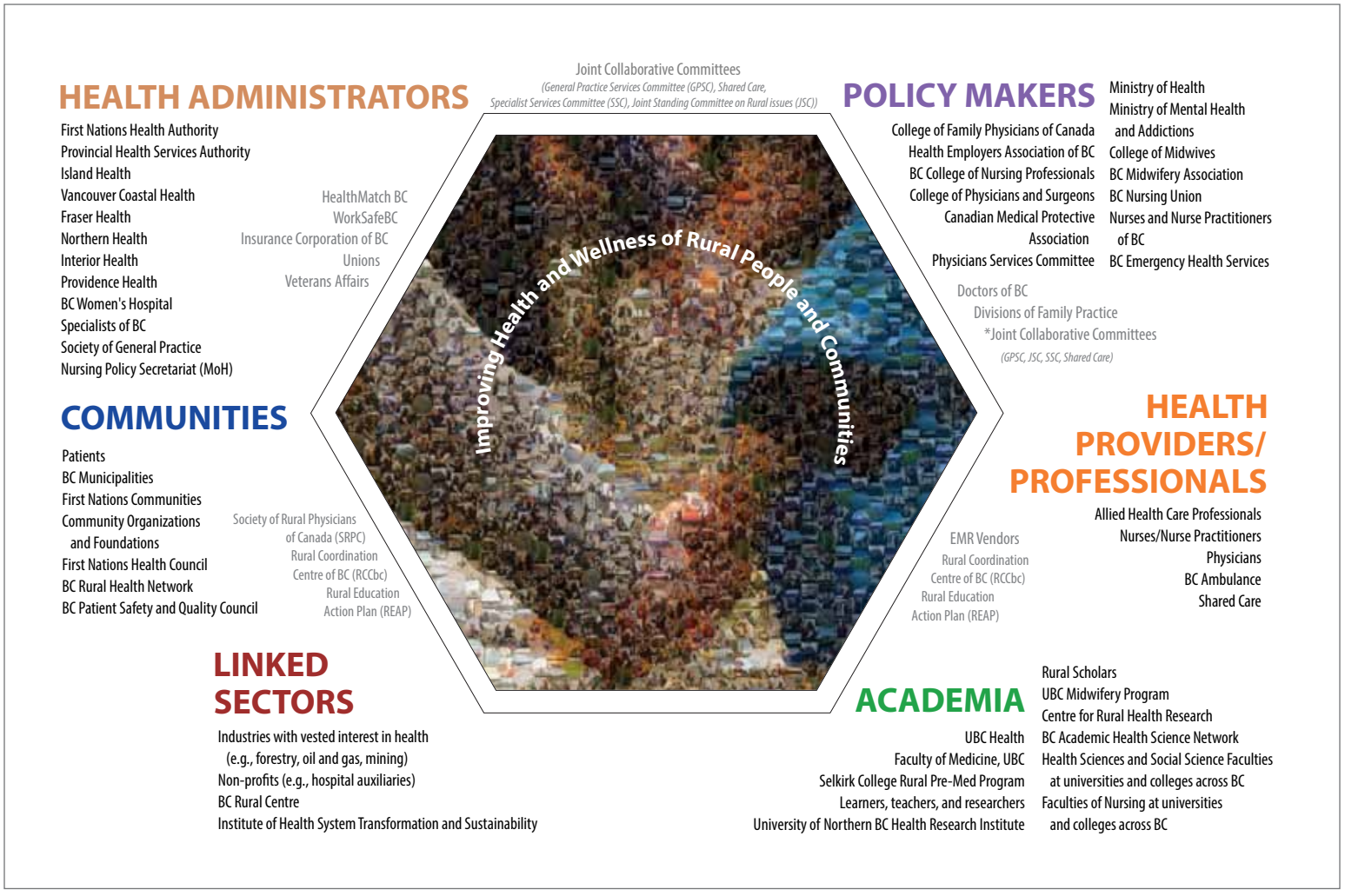

FIGURE 1. Partnership Pentagram+ model. (Source: Rural Coordination Centre of BC).

effective route to positive systems change."[7] It expands on Boelen's Partnership Pentagram by including the linked sector, defined as not-for-profits and organizations involved in building healthy communities.[2] By aligning with the Partnership Pentagram+ model, health care system partners of the North could work together to move dialogue and planning away from the typical, colonized, top-down approach to workshop design toward an appreciative inquiry[1] approach rooted in participation, inclusion, and knowledge sharing.

Two-eyed seeing[8] was also used to guide the workshop design, meaning that the methodology strongly focused on centring activities on traditional wellness practice and access to care provided by Indigenous traditional wellness practitioners while still valuing Western perspectives.

The Partnership Pentagram+ model was one important facet to participatory planning; using an equity-focused, intersectional approach was also imperative. Historically, people who identify as men have dominated the health leadership space;[9,10] however, women represent 80% of health service sector workers.[11] Additionally, First Nations people experience disproportionally negative health outcomes due to systemic barriers, such as racism, in health care,[12,13] and First Nations health leaders are frequently not included in the planning processes, or are included in a tokenistic way.[14]

To address these inequities, Indigenous female health leaders were intentionally at the forefront of all workshop planning processes to ensure that gender and racial power imbalances were addressed and the planning work was grounded in appreciation and respect for Indigenous ways of knowing and being. A working group was formed, which facilitated preworkshop engagement activities, including interviews, First Nations community engagement, and an environmental scan.

Based on the information obtained from the preworkshop engagement process, a preliminary agenda was formed, and five priority areas were established:

Catchment and patient flow: understanding the pattern of patient-doctor usage, the level of engagement with doctors across different geographical locations in Northern BC, and whether services provided across the region are equitable.

First Nations engagement: including First Nations as part of the integrated health care system team, and ensuring that health care is culturally safe and integrates traditional healers and engages Elders.

First Nations people experience disproportionally negative health outcomes due to systemic barriers, such as racism, in health care, and First Nations health leaders are frequently not included in the planning processes, or are included in a tokenistic way.

Health and human resource needs and development directions: including a focus on the potential for collaboration among partners to address ongoing human resource shortages in the North.

Team-based care: moving away from the conventional health care system to a new integrated, team-based system of care.

Stakeholder engagement: understanding the different roles in team-based care and the most appropriate level of involvement to avoid burnout.

The agenda was sent to all workshop invitees, and an opportunity to share feedback was provided to allow for the maintenance of transparency and to guarantee that all participants had the same information prior to the workshop. To further enable meaningful collaboration, a range of supports, such as honorariums and travel assistance, were offered to reduce participation barriers and facilitate inclusion at the workshop.

Workshop event

By engaging in an intentional workshop development process that centred on diverse perspectives, social accountability, cultural safety, and relationship building, the stage was set for collaborative work and systems change. More than 70 participants attended the gathering throughout the 2-day event, including partners from Northern Health, the First Nations Health Authority, northern divisions of family practice, medical staff associations, the Ministry of Health, academia, First Nations communities, and the community at large.

The first day of the event was led and facilitated entirely by female leaders from the First Nations Health Authority. As a result, a strong presence of traditional medicine and ways of healing were incorporated into the workshop to exemplify a way to shift from the existing colonized health care system toward a more culturally safe system of care. For instance, at the workshop entrance, there was a table with a thoughtful curation of medicines of the region, such as cedar and sage, and an ethnography—*Our Box Was Full*—which explores the struggle of the Gitxsan and Wet'suwet'en peoples to "prove they existed." By sharing *Our Box Was Full* with participants, workshop organizers were respectfully honoring the land on which the workshop was being held, and were inviting the participants to recognize the pathways to wellness and health that the Wet'suwet'en First Nation and Gitxsan Nation have been practising since time immemorial on their territories. Participants were also invited to partake in traditional wellness sessions with traditional healers from the Adah'Dene Cultural Healing Camp Society. Workshop participants expressed gratitude for this opportunity to experience traditional healing and be shown how traditional medicine can be a part of a holistic health care system. In the words of one participant, "It was an honor to be able to directly access traditional wellness care in the context of our workshop. It helped me better understand how this care can be offered alongside traditional primary care. It also helped me relax and get grounded in positive ways."

During the opening remarks, the First Nations Health Authority ensured that the event would be framed with an Indigenous worldview and perspective by inviting an ongoing dialogue about cultural safety and humility.[4] Everyone was encouraged to partake in a cultural safety and humility pledge in order to meaningfully participate in the work **[Figure 2]**.

A series of presentations followed, which were equally connected to Indigenous ways of being, knowing, and doing. Information was shared about First Nations Health Authority operations, traditional wellness practices in health care, and cultural safety, humility, and trauma-informed care.

The second day focused on partnership-based dialogue using the Breathing and Weaving model **[Figure 3]**, an adaptation of the appreciative inquiry method, to discuss the five key priority areas that were identified before the workshop (catchment and patient flow, First Nations engagement, health and human resources, team-based care, and stakeholder engagement). Four dialogue rounds were held:

1. Discover (partners): What does success look like now in regard to the given priority area? What does success look like for patients and community care? How do we build on this success?
2. Dream (peers): What are the implications of dialogue round 1 for your work moving forward?
3. Design (partners): What short-term practical actions can we perform to help us make progress toward our destination in 1 to 2 years?

FIGURE 2. Cultural safety and humility pledge. (Photo by the Rural Coordination Centre of BC).

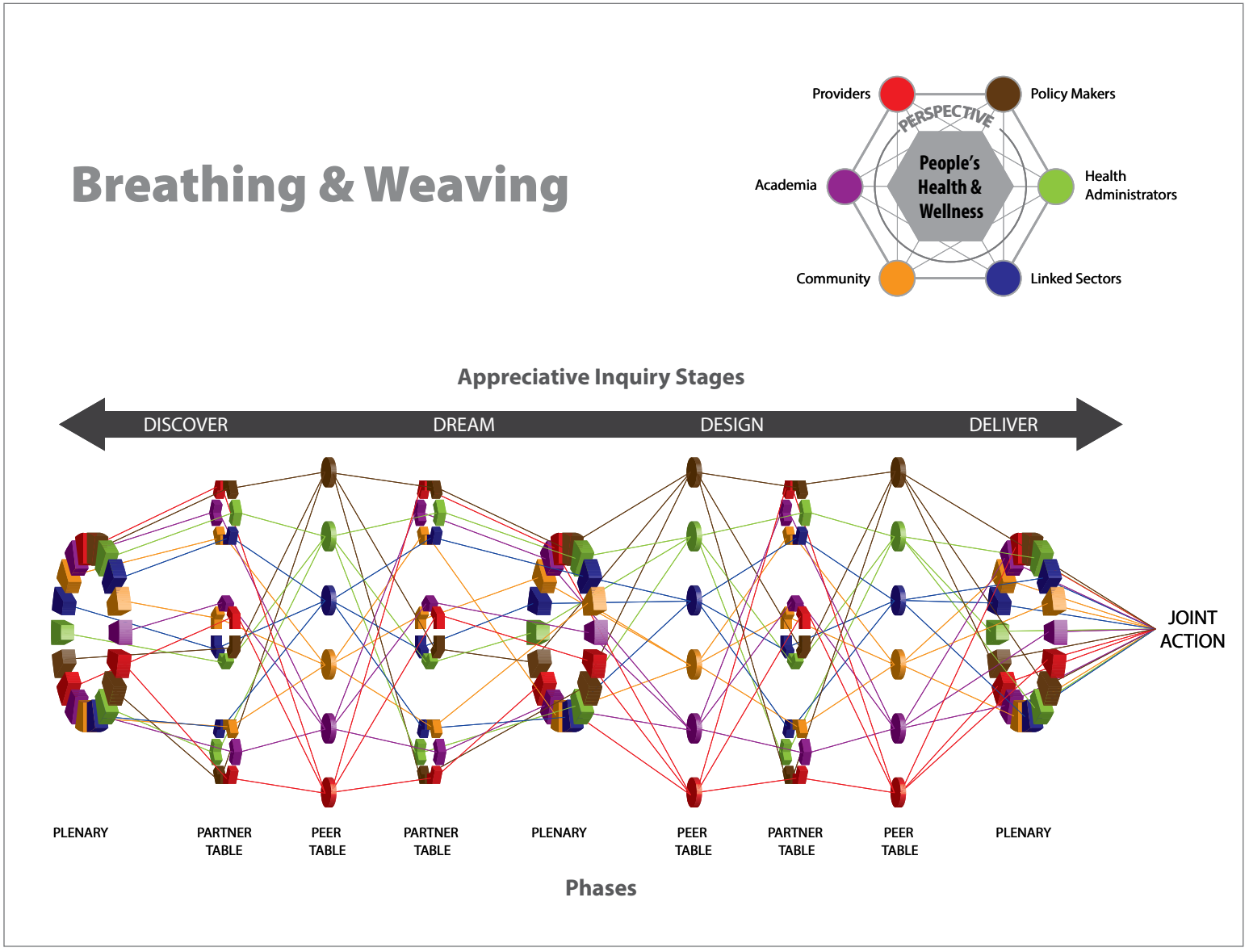

FIGURE 3. Illustration of the Breathing and Weaving model, an adaptation of the appreciative inquiry method. (Source: Rural Coordination Centre of BC)

4. Deliver (peers): What can we commit to doing that will contribute to implementing the actions identified in dialogue round 3?

Each round was supplemented with episodic whole group discussions. The conversations alternated between discussing priority areas for partnership group and peer group commitments/priority action items. Partnership groups consisted of people from different organizations or groups coming together to discuss one of the five priority areas. Peer groups involved only people from the same organization or group to narrate and theorize about each priority area. The four rounds of dialogue started and ended with plenary sessions, and were completed in 1 day.

Each of the six peer groups assigned peer members to attend one of the five priority partnership discussions to ensure that peers from across the six groups participated in each priority area **[Figure 3]**. Peers then reported on the discussions of each priority area partnership group and had a specific peer-based discussion about possible action items and commitments.

From these conversations, goals were developed, and short-term practical actions were created by both partnership groups and peer groups. By mixing the groups for generative dialogue and then coming back together for organizational, specific, peer-based discussions, the commitments made included the diverse perspectives across stakeholder groups.

TABLE 1. Evaluation questions related to partnership development.

Question	Average score		Improvement
	Before	After	
Rate your overall knowledge of what work other partners are engaged in before and after the workshop	2.83	1.75	-1.08 Poor ➡ very good/good
Rate your overall interest in working with other partners before and after the workshop	1.76	1.20	-0.56 Good ➡ very good

TABLE 2. Evaluation questions related to workshop process.

Question	Average score	Overall ranking
How did we do in meeting the workshop purposes: a. Engaging in dialogue and deliberation about health system improvements.	1.61	Very good/good
b. Building relationships among health system partners.	1.44	Very good/good
c. Advancing priority areas regarding health system transformation.	1.95	Good
How would you rate the overall facilitation?	1.46	Very good/good
Overall, how would you rate this gathering?	1.41	Very good/good

Outcomes

Relationship development

The primary focus and outcome of the event was relationship development. Workshop participants shared that by coming together in a socially accountable way, relationships were built on trust, mutual understanding, and respect. This resulted in partners feeling excited to continue the collaboration process, and led to the creation of additional workshops focused on establishing a holistic system of care.

Upon workshop completion, participants (n = 41) were asked to rate their partnership development experience before and after the workshop on a scale of 1 to 5, with 1 being very good and 5 being very poor. There was a marked increase in average scores for both questions, which indicated an increase in knowledge of the work other partners were engaged in and an increased interest in working with other partners **[Table 1]**.

The workshop also supported positive developments in several health care system partner relationships, especially between the First Nations Health Authority and the Rural Coordination Centre of BC. The gathering helped set the groundwork for a signed Memorandum of Understanding, which has facilitated a deepening of service collaboration, especially in virtual services across the province. Moreover, the First Nations Health Authority also invited the Rural Coordination Centre of BC to its Northern Regional Caucus meetings as an expression of inclusion and new collaboration. Because of the workshop, these relationships have established a foundation based on reciprocity and respect that continues to support innovation for enhanced social accountability to First Nations rural patients and providers.

Increased valuing of participatory, decolonized workshop design

Prior to the workshop, participants across stakeholder groups in Northern BC had not come together in a participatory and decolonized way. The event helped establish increased valuing and appreciation of participatory workshop design that includes traditional healing. System partners had the opportunity to experience traditional wellness approaches, and developed a new appreciation for the power of traditional medicine, ceremony, and healing practices. This outcome would not have been possible without intentionally developing a cross-sectoral working group to design the event.

In order to measure the value of coming together collaboratively, participants (n = 41) were asked to rate their experiences on a scale of 1 to 5, with 1 being very good and 5 being very poor **[Table 2]**. Each category was rated very good or good. This indicated to the organizers that the workshop design and process

was successful; therefore, it was used to guide the creation of future partnership development workshops.

Commitments to ongoing collaboration and health care system transformation

Each peer group made a commitment to continue engaging in health care system transformation. While the capacity to work toward health care system transformation varied, each commitment was rooted in developing a holistic care system that is socially accountable, culturally safe, and relationship based.

Because each peer group committed to continuing the work in a good way, the foundation was set for future gatherings to flourish. Since the first event in 2018, two other system-wide workshops have taken place: one in Vancouver (2019), and one virtually (2020). The results of these collaborative efforts included the following:

- Establishment of the First Nations Primary Care Initiative, which was created by the First Nations Health Authority and Ministry of Health, and involves setting up 15 First Nations–led primary care centres.
- Establishment of the Real Time Virtual Services, including the full suite of virtual provider support services, the First Nations Virtual Doctor of the Day, and the First Nations Virtual Substance Use and Psychiatry Services.
- Commitment to conduct ongoing collaborative planning sessions among regional health authorities, Divisions of Family Practice, the Ministry of Health, the Rural Coordination Centre of BC, academic partners, the First Nations Health Authority, and First Nations representatives.

Conclusions

The workshop provided an opportunity for key stakeholders to work toward developing partnerships and strategies to transform health care systems in Northern BC. There was momentum to transform the relationship between the colonized health care system and First Nations; however, the organizers are not blind to the fact that there is still long way to go. Because this work is a lifelong commitment, there will always be more work to be done.

The workshop provided an opportunity for key stakeholders to work toward developing partnerships and strategies to transform health care systems in Northern BC.

By illuminating to others the process being undertaken in the North, there is hope that health care system partners across BC will be better equipped to engage in health care system transformation that is based on diverse perspectives and is grounded in appreciation and respect for Indigenous ways of knowing, being, and doing. ■

Competing interests

None declared.

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Mohammed Abdelmalek, BSc, Desmond A. Nunez, MBBS, MD, FRCSC

Active squamous chronic otitis media and labyrinthine fistula: The importance of vertigo symptoms

Two clinical cases demonstrate the need for physicians to maintain their vigilance for chronic otitis media and its complications, which can be life threatening, even in patients who do not have poor determinants of health, and to provide early intervention.

ABSTRACT: Chronic otitis media is a persistent middle ear inflammatory disease. One form of the disease, squamous chronic otitis media, features an accumulation of keratinizing squamous epithelium in the middle ear, known as a cholesteatoma, which can result in erosion of the ear's bony structures. Labyrinthine erosion leads to vertigo and permanent sensorineural hearing loss. In this study, two patients in their mid-80s presented with hearing loss and vertigo. In the first case, the patient was treated for osteomyelitis but later reported additional symptoms. An urgent tympanomastoidectomy improved his vertigo symptoms, but mastoid cavity related otorrhea requires repeated treatment with topical antibiotic ear drops and cleaning of the mastoid cavity. In the second case, the patient was first referred to a neurotologist when she developed symptoms of vertigo. An urgent tympanomastoidectomy relieved her vertigo, but her hearing was unchanged. Given that a chronic otitis media diagnosis is seldom considered by many clinicians in more economically developed countries, despite the disease's potential to cause life-changing complications or death, physicians are encouraged to consider it as a diagnosis in patients presenting with hearing loss, vertigo, and other features of ear disease.

Mr Abdelmalek is a medical student undertaking research in the Division of Otolaryngology, Head and Neck Surgery, Faculty of Medicine, University of British Columbia. Dr Nunez is an associate professor in the Division of Otolaryngology, Head and Neck Surgery, Faculty of Medicine, University of British Columbia, and an attending surgeon in the Division of Otolaryngology, Head and Neck Surgery, Vancouver General Hospital.

This article has been peer reviewed.

Otitis media, inflammation of the middle ear, comprises a spectrum of diseases, the most common of which affects children within their first 5 years of life.[1] Otitis media can be broadly categorized as acute or chronic, or otitis media with effusion.[2] Chronic otitis media is differentiated from the others by the presence of long-term tympanic membrane changes, such as a perforation or retraction pocket.[3] *Pseudomonas*, *Proteus*, and other anaerobes are the common bacteriological isolates in chronic otitis media. Risk factors for its development include low socioeconomic status, tobacco smoke exposure, malnutrition, and family history.[4] Chronic otitis media is significantly less prevalent in non-Indigenous populations in more economically developed countries such as Canada relative to less economically developed countries.[1] The prevalence varies from 2% to 4% in low-prevalence populations to 43% in high-prevalence populations.[2,5,6]

The common presenting features of chronic otitis media are hearing loss and otorrhea.[1] The World Health Organization Department of Child and Adolescent Health and Development and Team for Prevention of Blindness and Deafness recommends that patients with chronic otitis media who present with a newly discharging untreated ear or persistently discharging ear despite initial treatment can be managed in primary care with topical antibiotics for 2 to 4 weeks. They also recommend that the diagnosis be confirmed by a trained otoscopist.[6] Topical quinolones like ciprofloxacin are the preferred first-line antibiotics.[4] Antibiotic treatment should be initiated at the first consultation, providing that patients clean their ears prior to applying the medication. In cases of persistent or recurrent otorrhea, antibiotic resistance should be considered, and a bacterial culture should be obtained if available.[6]

Patients who present with a discharging ear accompanied by symptoms of headache, fever, and dizziness or other danger signs require urgent otolaryngology referral for consideration of mastoidectomy because of the possibility of intra- or extracranial disease extension.[6] Untreated chronic

otitis media can lead to several complications, including life-threatening intracranial abscesses and meningitis, as well as life-changing facial paralysis and labyrinthitis due to permanent sensorineural hearing loss.[7-9] The disease is subclassified into mucosal and cholesteatoma (squamous) associated subtypes. A cholesteatoma is an abnormal growth of keratinized squamous epithelium in the middle ear or mastoid.[10,11] The pathogenesis of cholesteatomas is uncertain; however, one explanation suggests that they form from retraction pockets of the pars flaccida that accumulate desquamated keratin.[12] Cholesteatomas erode bone by upregulating osteoclast-activation pathways, and by pressure necrosis, among other mechanisms, thereby leading to labyrinthine facial nerve bony canal and skull base erosions.[13-15] Progressive labyrinthine bone erosion can ultimately result in a labyrinthine fistula that presents classically with symptoms of hearing loss, vertigo, and disequilibrium. Nystagmus elicited by the fistula test, which stimulates vestibular receptors by applying intermittent positive pressure to the outer ear canal, is one sign of a labyrinthine fistula.[3] Facial nerve bony canal erosion by cholesteatoma can present with facial weakness, and some authors recommend limited surgical decompression of the canal in addition to cholesteatoma removal.[9] Severe otalgia or headache in a patient with otorrhea is particularly ominous because it is suggestive of skull base erosion with intracranial complications.[16]

Initially, squamous chronic otitis media can be asymptomatic or mildly symptomatic, resulting in missed early diagnoses. It is diagnosed by the typical appearance of a keratin collection in the pars flaccida on otoscopy and supported by CT temporal bone imaging. It can be easy for the clinician who is unfamiliar with the otoscopic appearance of an attic cholesteatoma to miss the diagnosis either through failing to visualize the entire pars flaccida of the tympanic membrane and adjacent deep ear canal bone or to underestimate the importance of crusting in this region. The cholesteatoma can be obscured by a superficial layer of what looks like simple ear wax **[Figure 1]**. The presence of opacification in the middle ear and mastoid with focal areas of bony erosion such as the scutum on CT scan is diagnostic of chronic otitis media with cholesteatoma.[6,11]

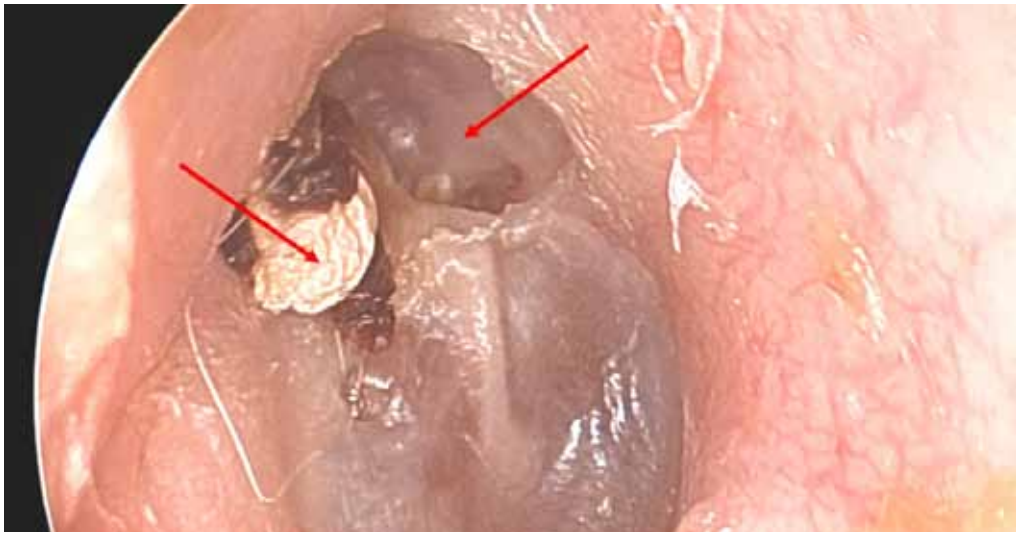

FIGURE 1. Otoscopic image demonstrating an extensive defect in the pars flaccida and pearly white keratin of a cholesteatoma obscured in part by what appears as simple ear wax.

Surgery is the mainstay of treatment of squamous chronic otitis media. Traditionally, mastoidectomy has been the procedure of choice and can be categorized into canal wall up (also known as intact canal wall) surgery, which preserves the posterior bony wall of the external ear canal, or canal wall down mastoidectomy surgery, which partially or completely sacrifices the posterior bony wall of the external ear canal.[10] Expanded endoscopic tympanoplasty is increasingly advocated for cholesteatomas with limited attic extension.[17,18] The surgical procedure selected depends on patient, disease, and surgical factors, including expertise in the range of available procedures.

We report two cases of a labyrinthine fistula complicating squamous chronic otitis media in patients who were not considered to be at risk of suffering from the disease. In both cases, the correct diagnosis was not made until dizziness or vertigo had developed secondary to semicircular canal erosion. We highlight the need for physicians to make a timely diagnosis of chronic otitis media and initiate treatment early to prevent the development of complications of the disease.

Case data

Case 1

An 82-year-old male presented to the emergency department with right-sided hearing loss and rhythmic oscillation of objects to the right in his visual field, accompanied by a "side-to-side rocking sensation." His medical history included a similar episode 2 years earlier of visual symptoms and right-sided hearing loss, though with right otorrhea, tinnitus, fever, lassitude, and decreased appetite. A course of antibiotics at that time resolved his symptoms except for the right-sided hearing loss and intermittent tinnitus. A head CT scan with contrast demonstrated opacification of the right mastoid air cells, and a diagnosis of osteomyelitis was made by an infectious diseases specialist. The patient was prescribed a 6-week course of clindamycin and ciprofloxacin and was referred to an otolaryngology clinic following its completion.

When seen in the otolaryngology clinic, he reported gradual resolution of the initial symptoms but new onset mild morning headaches, momentary dizziness on turning his head to the right, and unsteadiness when standing solely on his right leg. On otoscopy, the right ear demonstrated a cholesteatoma filling the attic, while the rest of the tympanic membrane appeared intact. Halmagyi-Curthoys head impulse and fistula tests were negative. Tuning fork testing at 512 Hz showed a positive bilateral Rinne response and Weber lateralization to the right. A temporal bone CT scan was ordered and demonstrated opacification of the right attic and mastoid air cell system, and erosion of the scutum, ossicular chain, lateral semicircular canal, and bone over the tympanic segment of

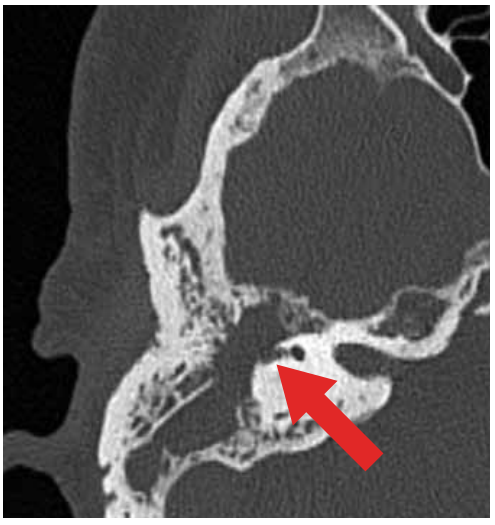

FIGURE 2. Head CT scan axial view showing opacification of the right mastoid air cells and erosion of the right lateral semicircular canal.

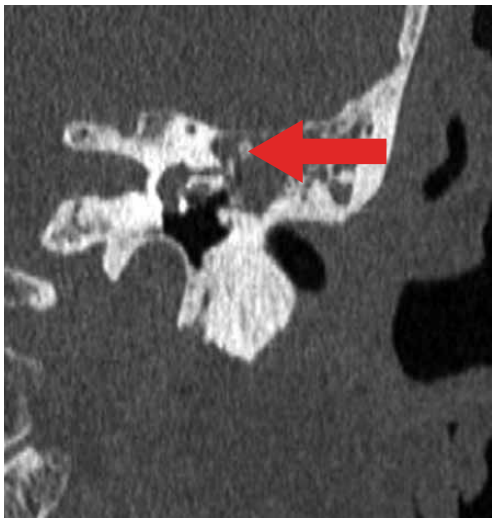

FIGURE 3. Temporal bone CT scan coronal view showing erosion of the left lateral semicircular canal. There is evidence of a previous cortical mastoidectomy, presumably performed in childhood, as the patient denies a previous operation.

the facial nerve canal, in keeping with chronic otitis media with cholesteatoma **[Figure 2]**. The patient was scheduled for an urgent tympanomastoidectomy. At surgery, a canal wall down mastoidectomy exposed a cholesteatoma. The head of the malleus and body of the incus bones were removed. Cholesteatoma was cleared from the mastoid air cells along with the cholesteatoma sac, including that covering the lateral semicircular bony canal dehiscence. The canal dehiscence was repaired with perichondrium. Harvested temporalis fascia, cartilage, and perichondrium were used to line the mastoid cavity and reconstruct the tympanic membrane. The patient was discharged the same day with no complications.

Seven months following the surgery, the patient reported slight improvement in his balance, no change in the hearing in his right ear, and only occasional right-sided tinnitus. He still experienced right otorrhea, which required topical antibiotic ear drops and repeat attendance for cleaning of the mastoid cavity.

Case 2

An 83-year-old female presented to a general otolaryngologist head and neck surgeon with a 5-year history of bilateral hearing loss and 1-month history of intermittent left-sided tinnitus. Additionally, she reported two episodes of vertigo in the previous month, described as a sudden tilt of the environment triggered by having the left ear syringed or by undergoing a hearing test. The patient had presented 2 years previously to the same otolaryngologist, who identified a moderate to severe left conductive hearing loss and mild to moderate right sensorineural hearing loss with a normal left pars flaccida. A left myringotomy and tympanostomy tube placement were undertaken at that time when polypoid tissue was found to be filling the middle ear space. On follow-up, the middle ear had returned to normal, though a residual tympanic membrane perforation persisted. A hearing aid was prescribed.

Otoscopy on the patient's current presentation demonstrated an attic retraction pocket of the left tympanic membrane with granulation tissue. A temporal bone CT scan was done, which identified soft tissue in the epitympanum, erosion of the left lateral semicircular canal, and possible erosion of the bone overlying the horizontal segment of the facial nerve canal and the mastoid bone adjacent to the middle and posterior fossa dura. The left mastoid air cells were opacified **[Figure 3]**. The patient was urgently referred to an otologist/neurotologist for consideration of surgery.

Otomicroscopy in the otology clinic demonstrated a left attic retraction pocket with granulation tissue, cholesteatoma, and discharge, along with a less than 5% perforation of the posterior inferior quadrant of the left tympanic membrane. The patient was scheduled for an urgent tympanomastoidectomy. Preoperative masked bone conduction pure tone audiometry demonstrated a mild to moderate downward sloping sensorineural hearing loss in the right ear. The hearing loss was mixed and moderate to severe in the left ear, with bone conduction thresholds identical to those in the right ear, but there was an added air-bone gap. Tympanometry recorded a Jerger type A tympanogram in the right ear and type B in the left ear, with ear canal volumes within the normal range bilaterally.

At surgery, an extensive cholesteatoma was removed via an intact canal wall tympanomastoidectomy. The skull base was eroded, which exposed dura in the tegmen of the middle ear and mastoid. The lateral and superior semicircular canals were partly eroded. Harvested temporalis fascia and bone chips were used to repair the canal dehiscences. The patient was observed as an inpatient for 24 hours, then was discharged home without complication.

Six months following the surgery, the patient had no otorrhea or vertigo. An audiogram confirmed that her hearing was unchanged. Her left tympanic membrane was intact. Follow-up imaging, including a temporal bone CT scan, at 1 year demonstrated a resolution of the middle ear and mastoid opacification **[Figure 4]**.

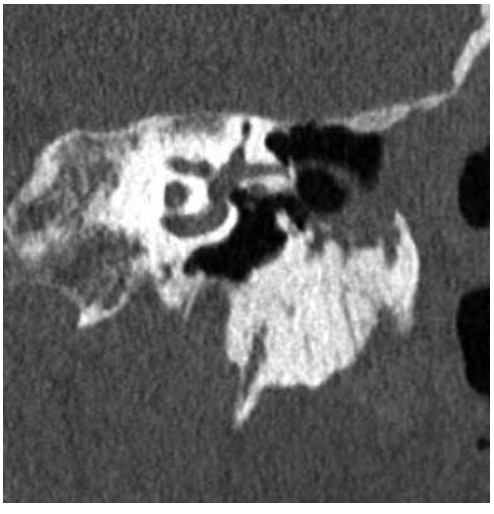

FIGURE 4. Postoperative temporal bone CT scan coronal view showing a normally aerated left middle ear and mastoid.

Discussion

In Case 1, the patient initially presented to the emergency department with symptoms suggestive of vestibular complications of chronic otitis media. In particular, the patient reported hearing loss and otorrhea, the primary diagnostic symptoms of chronic otitis media, and symptoms suggestive of nystagmus, which he reported as a perception of jerking motions when he looked at objects. The new onset of symptoms of nystagmus, coupled with a background of long-standing hearing loss and intermittent otorrhea, was indicative of a lateral semicircular canal fistula complication of squamous chronic otitis media. The patient was ultimately referred to an otolaryngology clinic, where microotoscopic examination confirmed a diagnosis of chronic squamous otitis media, and high-resolution temporal bone CT scan images better delineated the lateral semicircular canal fistula that was evident on the initial head CT scan. The lateral semicircular canal fistula was previously interpreted to be due to skull base osteomyelitis. This case highlights the importance of thorough otoscopic evaluation, including microotoscopy, in the workup of patients with features of ear discharge and hearing loss. Early identification of the characteristic otoscopic findings of squamous chronic otitis media would have expedited appropriate treatment.

In Case 2, the new onset of vertigo triggered by pressure change in the outer ear was highly suggestive of a labyrinthine fistula, as confirmed by the temporal bone CT scan. Canal wall down mastoidectomy with cholesteatoma removal but preservation of the cholesteatoma matrix over the area of eroded lateral semicircular canal bone is the traditional surgical management of a middle ear and mastoid cholesteatoma complicated by a lateral canal fistula.[19] Advancements in MRI techniques and the established safety of controlled removal of the cholesteatoma matrix with preservation of inner ear function makes it unnecessary to undertake canal wall down mastoidectomy routinely in lateral canal fistula cases.[20,21] Follow-up imaging at 1 year in Case 2 demonstrated the safety of an intact canal wall mastoidectomy approach.

The literature shows that chronic otitis media is more prevalent in less economically developed countries and among more marginalized segments of the population in more economically developed countries. These two cases illustrate the need for physicians to watch for this disease and its complications, even in patients who do not have poor determinants of health. The complications of chronic otitis media are still life threatening or life changing, and require early intervention.

Maintaining a high degree of vigilance will help ensure that patients with complications are identified early, and the required surgical interventions are expedited to achieve satisfactory patient outcomes.

Summary

Chronic otitis media can occur in economically developed countries in patients who have no significant comorbidities or poor determinants of health. Given the disease's ability to cause severe complications, including death, competent otoscopic evaluation, including microotoscopy, should be undertaken or arranged urgently in patients with the characteristic symptoms of otorrhea and hearing loss who present with features of complications such as nystagmus and vertigo. Maintaining a high degree of vigilance will help ensure that patients with complications are identified early, and the required surgical interventions are expedited to achieve satisfactory patient outcomes. ■

Competing interests

Dr Nunez receives remuneration for providing independent medical expert neurotological opinions. Mr Abdelmalek has declared no competing interests.

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Pacemaker and defibrillator management in medical assistance in dying: Review for the primary care provider

Development of an interdisciplinary, collaborative, patient-focused care plan is vital for successful medical assistance in dying for patients with pacemakers or implantable cardioverter defibrillators.

ABSTRACT: Cardiovascular conditions are highly prevalent in patients who are eligible for medical assistance in dying. Within this population, cardiac implantable electronic devices are common. Thus, there is a need to understand the physiological effects of these devices in patients who choose medical assistance in dying, and the role and scope of reprogramming, deactivation, and other management strategies for the devices. The drugs used in medical assistance in dying result in a cascade of physiological effects that result in loss of myocardial contractility. The cardiac implantable electronic device may continue to electrically activate the heart, but a contraction will not result, and the heart will not effectively pump blood. These devices have adjustable parameters to optimize performance, which may be changed with special computers or can be reprogrammed with unique magnets. At the time of medical assistance in dying, a permanent pacemaker will electrically stimulate the heart, but eventually, the myocardium will no longer contract. Placing a magnet over an implantable cardioverter defibrillator disables the device's ability to detect ventricular arrhythmia and helps avoid any defibrillation during dying. Understanding the consequences of deactivating the defibrillating function of the device is important. If it is deactivated prematurely, the patient may die prior to their planned time and location. The process and options regarding cardiac implantable electronic devices deactivation or reprogramming, and potential manifestations at the time of medical assistance in dying should be discussed with the recipient, with the advice and support from the medical assistance in dying provider and cardiac implantable electronic devices clinic team member.

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In June 2016, the Parliament of Canada passed federal legislation that allows eligible Canadian adults to request medical assistance in dying (MAID). In Canada, two methods of assisted dying are available: self-administration and ingestion of oral medications that cause death, or more commonly, clinician administration of prescribed intravenous medications that cause death. At least 13 946 Canadians have received MAID since Quebec law and the federal legislation was introduced.[1] The number of reported cases increased 26.1% between 2018 and 2019, and all provinces have experienced a steady year-over-year increase in numbers since the law was introduced in 2016.[1]

Cardiovascular conditions are present in 10.1% of individuals in Canada who are eligible for medical assistance in dying. Within this population, cardiac implantable electronic devices (CIEDs) such as permanent pacemakers and implantable cardioverter defibrillators (ICDs) are common: more than 200 000 of these patients are currently living with such a device.[2]

Every year, approximately 30 000 Canadians receive a new pacemaker or ICD, resulting in a significant cumulative number of individuals living with CIEDs, especially in the 55 to 80 year age group, which also constitutes the largest proportion of medically assisted deaths. Thus, there is a need to understand the physiological effects of these devices in

patients who choose medical assistance in dying. There is also a need to understand the role and scope of reprogramming, deactivation, and other management strategies for pacemakers and defibrillators in this group of patients.

Throughout Canada, provincial laws outline individuals' rights in relation to health care decision making and consent, including the right to accept or refuse health care treatments. Individuals who are capable of making decisions have a legal right to refuse health care treatments. This includes the discontinuation or withdrawal of medical treatments or interventions, even if it results in natural death. A CIED constitutes medical treatment, and thus can be discontinued, regardless of the nature of illness and whether the device prevents natural death from the underlying pathology.

Pacemaker deactivation is a withdrawal of therapy, not a mechanism of assisted dying. If a person who has requested medical assistance in dying also specifically asks to have their permanent pacemaker deactivated, this decision/conversation should be explored as a parallel process, which is typically defined by a region or pacemaker clinic. The Heart Rhythm Society outlined the process of deactivating ICDs and pacemakers,[3] and the Canadian Heart Rhythm Society recently embarked on a process to define pacemaker deactivation, which is expected to be completed in the near future.

We review CIEDs for primary care providers and any other provider who is involved in the care planning and management of patients who are seeking an assisted death. An explanation of the physiological implications of pacemakers and ICDs in the context of assisted dying is reviewed. Device deactivation, reprogramming, and other management issues for these devices are also explicated. Our goals are to:

1. Focus on the patient-centred management of patients with pacemakers and ICDs who are seeking medical assistance in dying.
2. Define the scope and role of the cardiology and device care teams in providing support to the MAID recipient, primary care providers, and MAID provider(s).
3. Provide a management scheme to guide the primary care and MAID provider team in caring for a patient who is pursing medical assistance in dying and who has a pacemaker or ICD.

Overview of cardiac implantable electronic devices

Cardiac implantable electronic devices are a group of regulatory therapies that support cardiac function by restoring the body's homeostatic equilibrium. They include implantable cardioverter defibrillators, which correct life-threatening arrhythmias. Other devices provide constitutive therapies that help restore lost function but do not replace the original organ or body part. They include permanent pacemakers, which restore or back up a patient's heart rate to normal range.

We review cardiac implantable electronic devices for primary care providers and any other provider who is involved in the care planning and management of patients who are seeking an assisted death.

CIEDs, which are surgically implanted and managed by specialized cardiology teams, are used to improve and extend the patient's quality and duration of life by preventing or treating arrhythmia-related sudden death. Conversely, medical assistance in dying is a life-ending procedure. Therefore, it is vital to have a collaborative approach between the patient, primary care, cardiology, and MAID program team members.

Pacemakers

Permanent pacemakers are cardiac implantable electronic devices that correct pathological bradycardia. A pacemaker works primarily by increasing the heart rate by delivering a small electric energy pulse of typically short duration (0.4 to 1.0 millisecond) to activate the myocardium to contract.

Of the various types of pacemakers, implantable ones are the most commonly used to correct symptomatic bradycardia. Other pacemakers function as cardiac resynchronization therapy pacemakers, which can improve heart failure in select patients in the presence or absence of a symptomatic bradycardia.

Most patients who receive pacemakers have an intrinsic underlying heart rhythm. In one study, 59% of patients who were deemed to be pacemaker "dependent" during follow-up had some form of an underlying electrical cardiac rhythm.[4] When the pacemaker was temporarily deactivated, only 13% of patients had a true dependency on the device. Those patients had no intrinsic heart rate at all, and the pacemaker provided complete circulatory support; that is, constitutive replacement therapy.[4]

Implantable cardioverter defibrillators

Implantable cardioverter defibrillators are cardiac implantable electronic devices that deliver a defibrillation shock to the heart during a life-threatening ventricular arrhythmia, such as ventricular tachycardia or ventricular fibrillation. The defibrillators are implanted in patients who have a high risk of cardiac arrest, or after resuscitation from life-threatening ventricular arrhythmias. Most ICDs also have cardiac pacing capability; therefore, they can provide simultaneous treatment of bradycardia. However, the uncommon subcutaneous ICD does not have traditional pacing capability. Some ICD recipients also have bradycardia or heart failure and use the ICD pacemaker or resynchronization function.

Physiological response to pharmaceuticals used in medically assisted deaths

A medically assisted death involves administration or ingestion of medications that induce several physiological effects that result in sedation and amnesia, then complete loss of consciousness and deep coma, followed by paralysis, subsequent cardiorespiratory arrest, and ultimately, death.

In clinician-administered medical assistance in dying, a provider administers various medications intravenously. The goal of these medications is to induce coma, neuromuscular muscle paralysis, and cardiac arrest while also

providing the recipient complete loss of consciousness. Medications include a sedative and amnesic (e.g., midazolam), a coma-inducing agent (e.g., propofol) or a barbiturate (e.g., phenobarbital), followed by a neuromuscular blocking agent (e.g., rocuronium or cisatracurium). Self-administered medical assistance in dying involves the ingestion of oral medications that result in a deep coma and eventually cardiopulmonary arrest.

The pharmacological impacts of the drugs used in medical assistance in dying result in a cascade of physiological effects that occur in a very predictable order. Following the onset of deep coma, subsequent respiratory depression and ultimately apnea produce severe acidosis and hypoxemia with resultant loss of myocardial contractility. With the loss of the physiological ability to achieve myocardial contraction, any electrical pacing impulse delivered via pacemaker or ICD will fail to achieve myocardial contraction with cardiac output, with or without pulseless electrical activity or cardiac electromechanical dissociation.[5] That is, the CIED may continue to electrically activate the heart, but a contraction will not result, and the heart will not effectively pump blood.

Propofol can cause hypotension, which does not affect CIED function. Ingested barbiturates reduce mean arterial pressures, venous tone, and cardiac output but usually do not have direct myocardial effects. However, in the dose administered, they result in respiratory depression with severe hypoxemia and acidosis, with the consequent effect on the myocardium. In certain instances, bupivacaine has been used to induce asystole in medical assistance in dying.

In general, neuromuscular blocking agents have no discernible cardiovascular effects in the dosages used.

Deactivating and reprogramming cardiac devices

All cardiac implantable electronic devices have adjustable parameters to optimize performance, which may be changed with special computers (programmers) **[Figure 1]**. These are usually available in pacemaker clinics, emergency rooms, or inpatient settings in specialized hospitals that offer the CIED clinic services.

Pacemakers and ICDs can also be temporarily reprogrammed with unique CIED magnets **[Figure 2]**, which are available in emergency departments, pacemaker clinics, and resuscitation crash carts. The magnets influence the electronic circuits of the CIED when held close to the device. They are usually applied directly on the skin that overlies the CIED, which is typically implanted in the infra-clavicular area but may be implanted in the axillary or subcostal region in some individuals **[Figure 3]**.

Pacemakers

Placing a device magnet over a pacemaker does not deactivate the device but makes it deliver pacing at a fast rate of 80 to100 beats per minute due to temporary reprogramming. Pacemakers do not give any alerts when a magnet is applied to them.

At the time of medical assistance in dying, the permanent pacemaker will electrically stimulate the heart with or without temporary reprogramming by a magnet, but eventually, the myocardium will no longer contract.

FIGURE 1. Permanent pacemaker/implantable cardioverter defibrillator programmer.

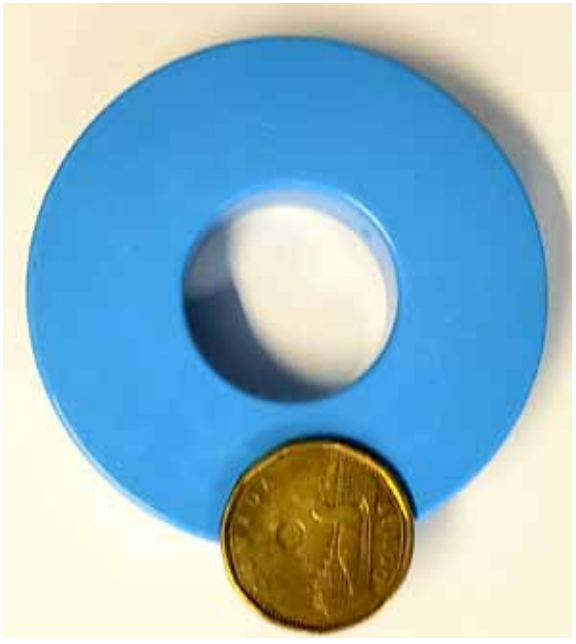

FIGURE 2. Cardiac implantable electronic device magnet (shown at actual size, $1 coin for size reference).

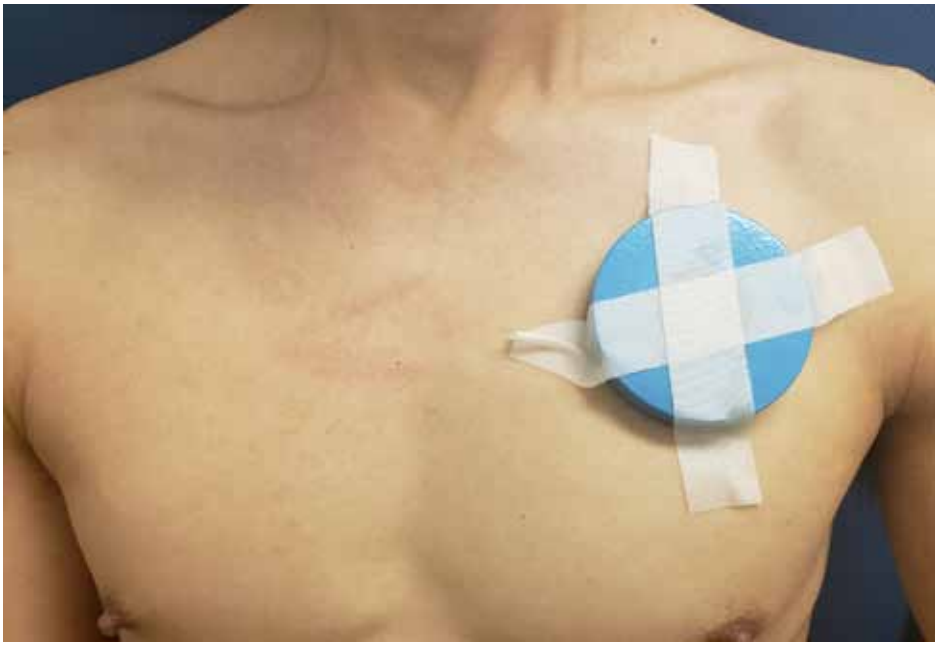

FIGURE 3. Magnet taped over cardiac implantable electronic device.

Consequently, the use of a magnet is not indicated in a patient with an existing permanent pacemaker who undergoes a medical assistance in dying procedure.

Implantable cardioverter defibrillators

Placing a magnet over an implantable cardioverter defibrillator disables the device's ability to detect ventricular arrhythmia, thus inactivating the function while keeping the pacing programming active. On establishing contact with the magnet, the ICD responds with an alert (auditory beep or vibration). Thus, a key implication for supporting dying patients who have these defibrillators is to ensure that all persons involved are aware that a beep may be audible, which will stop after several seconds. The defibrillation function stays off as long as the magnet remains on the defibrillator. At the moment the magnet is removed, the defibrillation function will resume. Taping the magnet will ensure it remains in place and will help avoid any defibrillation during dying.

Several mechanisms may cause cardiac arrest during medical assistance in dying: severe bradycardia/asystole, loss of myocardial contractility with intact electrical activation (pulseless electrical activation), or rapid ventricular arrhythmia. If ICD shock therapy is not deactivated, the device will deliver multiple defibrillation shocks to the heart when there is a ventricular arrhythmia-related cardiac arrest, which may be disturbing to all who are present. After ICD shock therapy has been deactivated, the pacemaker function of the defibrillator may try to pace the heart but eventually will not be able to activate the heart muscle as medical assistance in dying is being completed.

Understanding the consequences of deactivating the defibrillating function of the ICD is important. Should the defibrillator be deactivated prematurely, the patient who has requested medical assistance in dying may experience a ventricular arrhythmia (for which the ICD was originally placed) and suffer death prior to their planned time and location. Consequently, a balance must be achieved between deactivating the defibrillator too early and too late. One option is to wait until the patient experiences unconsciousness but prior to the establishment of deep coma during the medical assistance in dying procedure, at which time the magnet would be applied. Once the defibrillator is deactivated (audile beep), the remainder of the MAID medications may be administered to complete the medical assistance in dying procedure.

Patient experience during medical assistance in dying

Most patients do not experience or sense any pacemaker activity during dying. The MAID provider may note a steady pulse initially, but the loss of myocardial perfusion and contraction will result in pulselessness. Others present at the time of death will also not experience or sense any activity from a permanent pacemaker. At the time of cardiac arrest, the pacemaker may attempt to pace the myocardium if bradycardia/asystole is part of the mechanism, but it will not create a cardiac contraction. Depending on the heart rhythm, the permanent pacemaker may also enter into standby mode during a cardiac arrest.

In an active implantable cardioverter defibrillator, multiple defibrillation shocks are delivered after detection of ventricular arrhythmias. In a dying person who is awake or semiconscious, these shocks would be distressing. A patient who is semiconscious or in a deep coma is not likely to experience physical sensations. However, shocks are visible to others because defibrillation causes multiple chest wall movements, which may be disturbing. Anyone touching a patient's skin during an ICD shock might also receive a small shock. After ICD

shock therapy has been deactivated, as long as the magnet is in place, the device will not deliver shocks, and neither the patient nor anyone present will feel any discomfort.

Care after death

Funeral homes follow protocols for all patients who die with a pacemaker or ICD in situ. If the patient's plan is to be cremated, it is important to inform the funeral home about the existence of the device. If a pacemaker or ICD is not removed prior to cremation, it could explode.

Regulatory bodies such as the College of Physicians and Surgeons of Ontario have identified effective referral requirements for providers who may wish to opt out of providing care to individuals who are planning to receive medical assistance in dying. Cardiologists and pacemaker clinics should understand existing professional and legal obligations and their duty to refer if the provider has a conscientious or religious objection to providing any health care service.

Practice points

- Every person deemed eligible for medical assistance in dying who has a pacemaker or ICD should be provided with a review process, and their management plan should be coordinated in advance with the primary care provider and the designated CIED treating team.
- All CIED clinics should develop local standard operating procedures to support patients who are capable of requesting device deactivation. Effective communication and collaboration is necessary for effective planning among involved stakeholders (e.g., patients, palliative care teams, CIED clinicians, MAID providers, and/or MAID care coordination service).
- The timing of deactivation of an implantable cardioverter defibrillator should be discussed with the patient and caregivers to determine whether the device will be deactivated in a clinic before MAID or at the time of MAID with a CIED magnet. Deactivation in a clinic may expose the patient to risk of fatal arrhythmia before their desired time and location of death.

Medical assistance in dying is an emerging and evolving area in health care that affects virtually every Canadian health care sector, including primary care.

- Pacemaker function may be reprogrammed to deliver essential treatment for bradycardia, but this is typically unnecessary and places the patient at risk of non-life-threatening bradycardic symptoms.
- The process and options regarding CIED deactivation or reprogramming, and potential manifestations at the time of medical assistance in dying, should be discussed with the recipient with the advice and support from the MAID provider and CIED clinic team member.

Summary

Medical assistance in dying is an emerging and evolving area in health care that affects virtually every Canadian health care sector, including primary care. An interdisciplinary, collaborative, patient-focused care plan is vital for successful medical assistance in dying, especially for patients with pacemakers or implantable cardioverter defibrillators. Locally adaptable device management protocols should be implemented for seamless and timely care of patients who request medical assistance in dying. ■

Competing interests

None declared.

Acknowledgments

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Type 2 diabetes: Turning management into remission

Like type 1 diabetes, type 2 diabetes has long been considered a progressive, incurable condition in which the optimal goal after diagnosis is tight glycemic control and risk factor management to prevent vascular disease and neuropathy.[1] The assumption that type 2 diabetes is irreversible is supported by the strong association with genetics, the high prevalence of microvascular complications, and the loss of beta cell mass and function frequently present at diagnosis.

The typical impact on morbidity and mortality for those with type 2 diabetes is rather grim and in excess of many cancers. The average 10-year survival rates for breast cancer and non-Hodgkin lymphoma are 84% and 55%, respectively; the average 10-year lifespan for type 2 diabetes is 50%.[2] While the goal for most patients with cancer is remission, the patient with type 2 diabetes is taught that they need to live with this incurable disease. This need not be the case.

Increasing evidence points to the ability of patients to not only halt the onset of type 2 diabetes, but also to enter remission after a type 2 diabetes diagnosis. Bariatric surgery (RYGB, BPD) has been shown to result in durable remission in the majority of patients with type 2 diabetes,[3] and research has demonstrated that counseling patients to engage in modest caloric reduction using portion control and limited use of meal replacements resulted in roughly 10% of patients experiencing remission after 2 years.[4]

The Diabetes Remission Clinical Trial (DiRECT) in particular provides compelling evidence for the efficacy of structured, diet-induced weight loss on type 2 diabetes remission outcomes.[5] The randomized controlled trial's intervention consisted of withdrawal of antidiabetic/antihypertensive drugs, total diet replacement for 12 to 20 weeks, stepped food reintroduction (2 to 8 weeks), and then structured support for weight-loss maintenance. At 24 months, 36% of intervention group participants had remission of diabetes, lower weight (average 8 kg), lower blood pressure, a 50% reduction in cardiovascular disease risk, lower health care costs, and better quality of life. Post-hoc analysis of patients experiencing remission found a return to normal pancreas volume, morphology, and beta cell capacity.[6] Importantly, the trial was conducted entirely in primary care practices, assisted by nurses and dietitians.

Increasing evidence points to the ability of patients to not only halt the onset of type 2 diabetes, but also to enter remission after a type 2 diabetes diagnosis.

The evidence shows us that we can do better than simply managing type 2 diabetes. With sustained, diet-induced weight loss programs in patients who are willing to engage in substantial lifestyle modifications, remission of type 2 diabetes is possible. While such an outcome requires significant commitment from both patients and health care providers, the benefits of increasing type 2 diabetes remission rates to patients, the health care system, and society as a whole are impossible to ignore. ■

—Michael Lyon, MD, ABOM

This article is the opinion of the Nutrition Committee, a subcommittee of Doctors of BC's Council on Health Promotion, and is not necessarily the opinion of Doctors of BC. This article has not been peer reviewed by the BCMJ *Editorial Board.*

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Impact of COVID-19 response on childhood immunization: What can we do to catch up?

Historically, response to pandemics has affected routine immunization coverage, as exemplified in the BC childhood immunization programs during the 2009 A/H1N1 influenza pandemic. In March and April 2020, BC health authorities observed that while immunization services were being offered, parents were canceling appointments for fear of contracting SARS-CoV-2. As many routine services were canceled or deferred and physicians moved to providing virtual care, opportunities for in-person visits were further curtailed. Other jurisdictions have seen declines in childhood immunization, and international health agencies have issued a call for efforts to ensure continuity of immunization against childhood vaccine-preventable diseases.[1-4]

What has been observed in BC?

On-time immunization (defined as receipt of the recommended dose within 30 days of the milestone) of infants and toddlers was immediately affected in BC, with the greatest impact on receipt of the 12- and 18-month doses, and less effect on the infant series beginning at 2 months of age. Regions most affected by COVID-19, including the Lower Mainland, saw the greatest declines in on-time receipt of childhood vaccines, with reductions as great as 40% for the 12-month dose compared to the prior year. Also impacted were school-based immunization programs for children and youth in grades 6 and 9 in the first and second school year of the COVID-19 response, with only 27.5% of grade 6 girls and boys completing the HPV two-dose series by 30 June 2020, a decline from 67% in recent prior years.

Why is this a problem?

Priority during the COVID-19 response has been on the continued delivery of the primary DPT-containing series and other vaccines in infancy.[5] Doses given beginning at 18 months and at school entry are booster doses, and deferral is not expected to result in short-term resurgence of vaccine-preventable diseases. In adolescence, the critical new vaccines are HPV, scheduled in grade 6, and meningococcal quadrivalent conjugate vaccine, given in grade 9 prior to entry into a higher-risk age group for invasive meningococcal disease.

While BC experienced declines in vaccine-preventable diseases with the onset of travel restrictions and other COVID-19 prevention measures in place, now that these are lifting, unvaccinated and undervaccinated children will be at risk for infections.

While BC experienced declines in vaccine-preventable diseases with the onset of travel restrictions and other COVID-19 prevention measures in place, now that these are lifting, unvaccinated and undervaccinated children will be at risk for infections. Diseases like measles, which are associated with importation, will be on the rise because of global immunization being interrupted. As we enter the third school year with COVID-19 among us, with several cohorts of children needing to catch up, it will be important to track vaccination completion by June 2022. Children who were in grade 9 in the 2019/20 school year will be starting grade 12 in September 2022. Once youth graduate from high school, opportunities to track whether they completed their vaccines are often lost.

What can physicians do to catch up children who are behind on vaccinations?

Use every opportunity to review and update child and adolescent vaccinations as these patients present for services. If you are the immunization service provider for infants and young children for your patient population, issue reminders to those who are delayed to get them caught up. Immunization records of children and youth under 19 are viewable in CareConnect as recorded in the provincial immunization registry (PIR), including the recommended forecast for that child based on their PIR record and the BC immunization schedule. A project to interface electronic medical records with the PIR is underway, but for now physicians should continue to report all doses administered to those under 19 years to their local health unit so that the PIR record can be updated. ■

—Monika Naus, MD, MHSc, FRCPC, FACPM
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Physician wellness: Doctors taking care of doctors

The four Joint Collaborative Committees (JCCs), a partnership of Doctors of BC and the BC government, work collaboratively to lead system change. The committees—General Practice Services Committee, Specialist Services Committee, Shared Care Committee, and the Joint Standing Committee on Rural Issues—are unique partnerships in Canada. Physicians partner with government and work closely with health authorities to make system change while strengthening the role of physicians as leaders in innovation at provincial, regional, and community levels.

Physician health and wellness is paramount, and every day the JCCs work toward reducing the burdens that contribute to physician burnout and stress, but there is much more work to do. The strong relationships developed at these committees, and through divisions of family practice and medical staff associations (MSAs), have helped to realize significant changes that have improved doctors' lives by tackling some long-standing organizational-level issues. Rates of physician burnout and moral distress were rising before the COVID-19 pandemic, and they continue to rise due to increasing demands on physician time and resources in a complex and, at times, constrained health care system that involves heavy workloads and clinical practice requirements, inefficient system processes, and evolving technology. However, this burden is not experienced equally by all. Sponsored by a JCC initiative, a 2020 physician-led study found that emotional exhaustion and feelings of low personal accomplishment were higher in physicians who identify as a woman or a person of color.[1] Physicians in rural communities have also felt a higher level of professional and personal isolation during this challenging time.

This article is the opinion of the Joint Collaborative Committees (JCCs) and has not been peer reviewed by the BCMJ *Editorial Board.*

During the pandemic, the JCCs supported BC's quick pivot to ensure equitable access to health care for all patients by initiating virtual care fees, funding and deploying Zoom licences, and ensuring access to free personal protective equipment for community physicians. In 2021, the JCCs partnered with the Physician Health Program of BC to start developing and supporting provincial resources, including:

- Networks of trained physicians offering their colleagues one-to-one peer support.
- Services to match physicians with their own family physician to support their primary care needs.
- Core cognitive behavioral skills training for physicians to support their health and wellness.

Physicians continue to lead a spectrum of quality improvement initiatives to stimulate better practice environments.

Through the JCCs, physicians continue to lead a spectrum of quality improvement initiatives to energize and stimulate better practice environments for other physicians.

Breaking down systemic and organizational barriers and burdens

Vancouver Coastal Health and the Vancouver Physician Staff Association have joined forces to address physician wellness and are encouraging department-level solutions. They polled members to assess the complexity of factors contributing to physician burnout. Guided by these insights and supported by JCC engagement funding, department and division heads are further discovering specific impediments, developing interventions, and identifying trusted and respected wellness champions from within the profession.

For example, at the Vancouver General Hospital Emergency Department, four physicians are now part of an interdisciplinary wellness team and have identified improvements such as new radiology processes, outpatient clinics, and shift scheduling. They are also exploring space optimization and deeper systemic issues such as clinical and administrative workloads.

Managing immediate impacts to support resilience and balance

Through the Rural Coordination Centre of BC (RCCbc)–led Real-Time Virtual Support (RTVS) pathways, 150 physician colleagues (referred to as virtual physicians) now provide rural health care providers with on-demand, 24/7 clinical support via video or telephone. RTVS offers three patient-facing pathways and four peer-to-peer pathways that enhance health equity in rural, remote, and First Nations communities across BC. The program has facilitated more than 40 000 encounters/calls since April 2020. The peer-to-peer pathways in particular have seen significant, steady use by clinically courageous physicians[2] in low-resource settings across 91 communities. Participants report that this helps build communities of practice and stronger interprofessional and collegial relationships, and promotes and enhances practitioner recruitment and retention. In addition to improving access to patient-centred care and reduced out-of-pocket costs for patients, participating end users have also expressed that the RTVS strengthens core competencies, clinical skills, and confidence; reduces feelings of isolation, loneliness, and stress; and improves psychological well-being.

Many practical, meaningful efforts have been organized to foster a culture of collegial appreciation and respect to help maintain and restore physician health and wellness, such as the following examples:

- The Campbell River Spirit Awards honoring local physician peers and community heroes who keep the community healthy.

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Supporting injured workers with PTSD

Most Canadians will be exposed to at least one traumatic event in their lifetime. Nevertheless, as the lifetime prevalence of posttraumatic stress disorder (PTSD) is reported to be 9.2% in Canada, the majority of persons exposed to trauma do not develop PTSD but rather have a normal response to an abnormal situation.[1-3] Yet the significant impact of repetitive trauma exposure on Canada's workforce clearly takes a toll. Rates of PTSD are greater in specific populations, such as first responders, than in the general population,[1] and compensable mental health injuries in BC are common. In 2019 and 2020, 641 and 555 injured workers, respectively, had claims accepted for PTSD by WorkSafeBC.

Implications for treating physicians

First-line treatment for PTSD is trauma-focused psychotherapy, which includes exposure-based and/or cognitive restructuring interventions such as prolonged exposure, cognitive processing therapy, eye movement desensitization and reprocessing, and trauma-focused cognitive-behavioral therapy (CBT).[3-6] Although these therapies differ in their methods and protocols, each uses a cognitive or behavioral technique to assist the affected individual in processing the index trauma and to mitigate its illness-inducing appraisal. These interventions are available through WorkSafeBC and are provided by contracted mental health care providers (psychologists, clinical counselors, and/or occupational therapists). These providers are located throughout the province to assist injured workers as close to their home community as possible. Services are currently provided in person or virtually, and online CBT educational programs are also available. Referrals can be made to comprehensive outpatient and residential interdisciplinary programs when indicated. Expedited referrals to specific WorkSafeBC-contracted psychiatrists are also available.

Rates of PTSD are greater in specific populations, such as first responders, than in the general population.

Pharmacotherapy can also be helpful, particularly in injured workers who do not wish to engage in psychotherapy, in those with more severe presentations, or to target specific symptoms. To date, selective serotonin reuptake inhibitors (fluoxetine, sertraline, and paroxetine have the strongest evidence) and venlafaxine are the recommended first-line interventions.[4,6] A host of other agents have been used as mono- or augmentation therapy when first-line pharmacotherapy is ineffective. The use of benzodiazepines merits particular comment. These are frequently prescribed for injured workers exposed to trauma, although most treatment guidelines either question their usefulness or recommend avoiding them altogether.[7] In addition to general concerns about dependency and adverse side effects, more specific concerns revolve around their potential role in reducing the efficacy of exposure interventions (although a 2017 review[7] has questioned the evidence for this finding) and increasing the severity of symptoms that can be present in patients with PTSD.[4,8] As long-term use raises increasing concerns of dependency and loss of efficacy, WorkSafeBC normally limits financial coverage of benzodiazepines to a maximum of 2 weeks postinjury.

Other selective comments regarding pharmacotherapy for PTSD are as follows:

- Prazosin is frequently prescribed for PTSD-related nightmares with reported good effect, although one commonly used guideline suggests there is still insufficient evidence regarding its efficacy.[4]
- Cannabis or cannabis derivatives are not currently recommended due to the lack of evidence-established efficacy as well as potential adverse effects.[4]

Treating physicians are encouraged to consult recent clinical practice guidelines[4-6] for further details and to follow the emerging literature related to cannabis and psychedelics for PTSD.[4,9,10] Ultimately, treatment decisions need to be made on a case-by-case basis.

Finally, treating physicians may also wish to discuss posttraumatic growth—positive personal growth and resiliency after exposure to adversity—to normalize the experience and prevent pathology.[11,12] This is not to minimize the significant impact of trauma exposure on workers who continue to provide invaluable service to our communities, particularly during recent global challenges.

For further assistance

Contact WorkSafeBC's RACE line/app Monday to Friday 8 a.m. to 5 p.m., billable under accepted or pending claims (billing code 19930). ■

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

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- A dedicated space for physicians' children at smaller division meetings and supervised child-friendly activities/play stations at larger events hosted by the Thompson Region Division of Family Practice to help support member attendance and engagement.
- A new healthy snack program at Powell River General Hospital introduced by the Powell River Division of Family Practice after learning that some of its members felt unsafe to leave the facility to get meals while challenged with managing patient loads.

Doctors are encouraged to connect with their division, MSA, or RCCbc to learn more about supports for physician wellness in their area. For resources from the JCCs, visit www.collaborateonhealthbc.ca. ■

—Ahmer Karimuddin, MD

—Alan Ruddiman, MB BCh

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Obituaries

We welcome original tributes of less than 500 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 David Paul Wiseman
1946–2021

Kind, caring, funny, compassionate, empathetic, warm, gentle, giving, considerate of others, unconcerned about status, huge heart for all, smiling, humanitarian, genius, enthusiastic adventurer, explorer, searcher open to new ideas, great ability to argue the contrary position, an exceptional human being, a special doctor. David made a difference.

These are just some of the words of remembrance used by David's classmates from the UBC MD Class of '69 after learning of David's unexpected death.

David was born in Vernon and, from age 12, was raised and educated in North Vancouver before attending UBC, where he excelled and was admitted to the Faculty of Medicine at age 19. He interned in Montreal, began a pediatrics residency, then transferred to the London School of Tropical Medicine to complete a diploma in tropical medicine. David then spent 3 years in Kenya, initially in a Canadian-sponsored program, and 1½ years in Nepal establishing and providing maternal and child health care programs. He later also achieved a diploma in traditional Chinese medicine.

David met Joan while in Kenya and they returned from Nepal to BC when expecting their first child. They settled and remained on Hornby Island, where they raised their sons, Elliot and Colin. David provided medical care to his beloved community until 20 years ago when he retired, unwillingly, from his home-based (and subsequently government clinic) practice. David had little choice as new government policies put him in an untenable position with no regard to his personal well-being. That time was very difficult for David as he tried, unsuccessfully, along with other rural physicians, to come to a workable agreement with the government.

David then provided locum care throughout BC, particularly in Clearwater and numerous other remote communities, including several in the Northwest Territories and Nunavut. Joan and he together worked 3-month contracts in the Arctic during the winter, experiences they found intense and fascinating. With his knowledge of family and emergency medicine, David also served as a ship's physician and was again able to travel afar including two ecological journeys to Antarctica. He also volunteered in Guatemala.

David was part of the Hornby Island community in many respects. He was an avid tennis player and loved working in theatre, organizing the Fall Fair parades, coaching student sports, and singing with the men's a capella group. David had a vast musical knowledge and was a deejay for many years on two local radio programs—one classical and the other a weekly themed show, aptly named Slipped Disks. He was also chair of emergency preparedness for the island and worked diligently in conservancy.

David was just beginning a new path in his life. Tragically, he was to be remarried only days after his sudden death, and family thus gathered to grieve, not celebrate. His fiancée, Deb; siblings, Marjorie and Bruce; sons, Elliot and Colin; Joan; the people of Hornby Island; as well as his many friends, will miss him terribly.

David exemplified what it is to be a physician. He was described as a missionary without a religion, and the people of many BC and Northern communities benefited from his care.

—Vera Frinton, MD
Vancouver

—Joan Harris, RN, MACP
Hornby Island

—Jean Swenerton, MD
Vancouver

Dr Kathleen Vaughan Perry
1939–2021

Dr Kathleen V. Perry (née Evans), a 1963 graduate of the Welsh National School of Medicine, died recently in West Vancouver. Dr Perry emigrated to Canada with her husband, Dr John W. Perry, a fellow graduate, in December 1965, and entered general practice in Innisfail, Alberta, until relocating to West Vancouver in 1974. There, her interest in maternity and child care developed and sustained her for the rest of her life. Over the last 2 years Kathleen suffered with the many side effects of myelofibrosis and passed away peacefully in the presence of her family on 27 July 2021.

—John W. Perry, MD, and family
West Vancouver

CME calendar

Rates: $75 for up to 1000 characters (maximum) plus GST per month; there is no partial rate. If the course or event is over before an issue of the *BCMJ* comes out, there is no discount. **Deadlines:** ONLINE: Every Thursday (listings are posted every Friday). PRINT: The first of the month 1 month prior to the issue in which you want your notice to appear; e.g., 1 February for the March issue. The *BCMJ* is distributed by second-class mail in the second week of each month except January and August. **Planning your CME listing:** Advertising your CME event several months in advance can help improve attendance; we suggest that your ad be posted 2 to 4 months prior to the event. **Ordering:** Place your ad at www.bcmj.org/cme-advertising. You will be invoiced upon publication. Payment is accepted by Visa or MasterCard on our secure online payment site.

PSYCHOLOGICAL PPE, PEER SUPPORT BEYOND COVID-19

Online (Wednesdays)

In response to physician feedback, the Physician Health Program's drop-in online peer-support sessions, established in April 2020, are now permanently scheduled for Wednesdays at noon. The weekly sessions are co-facilitated by psychiatrist Dr Jennifer Russel, and manager of clinical services Roxanne Joyce, and are drop-in with no commitment required. The focus is peer support, not psychiatric care. All participants have the option to join anonymously. To learn more about the sessions and the program, visit www.bcmj.org/news-covid-19/psychological-ppe-peer-support-beyond-covid-19. Email peersupport@physicianhealth.com for the link to join by phone or video.

CME ON THE RUN—DERMATOLOGY AND ALLERGY SEASON

Online (Friday afternoons)

The CME on the Run! sessions are offered online. Registrants will receive an email on how to get to the online virtual portal before each session. Each session runs on Friday afternoon from 1–5 p.m. and includes great speakers and learning materials. The session topics and dates: 21 January 2022 (Dermatology & Allergy). Topics include: Potpourri of Seasonal Allergy Treatments, Why Do These Hives Keep Coming Back? Chronic Idiopathic Urticaria, The Strife of Hair Loss, Periorifical Dermatitis vs Perioral Acne—A Stubborn Menace, The Acne Algorithm, Bad Chemistry: When Food and Pollen Don' Mix—Oral Allergy Syndrome, AK/BCC/SCC An Office Approach, and The Fungus Among Us. The next sessions are: 8 April (Prenatal/Peds/Adolescent) and 3 June (Internal Medicine). Learn more and register at https://bit.ly/cotr2021-2022 or email cpd.info@ubc.ca.

MINDFULNESS IN MEDICINE WORKSHOPS AND RETREATS

Various dates and locations

Mindfulness in Medicine workshops and retreats: Physician Heal Thyself. Join Dr Mark Sherman and your community of colleagues for a transformative workshop or retreat. The workshops focus on the theory and practice of mindfulness and meditation, reviewing clinical evidence/neuroscience, and introducing key foundational meditation practices. The meditation retreats are an opportunity to delve deeply into an immersive contemplative practice in order to recharge, heal, and reconnect. Each workshop is accredited for 16 Mainpro+ group learning credits and has a 30-person limit, so please register today! Contact us at hello@livingthismoment.ca, or check out www.livingthismoment.ca/events for more information on these retreats: Foundations of Theory and Practice Workshop for Physicians and Their Partners, which will be held 14–16 January 2022 and 22–25 April 2022 at Long Beach Lodge Resort in Tofino, and Mindfulness in Medicine meditation retreat, which will be held 5–10 January 2022 in Nanaimo and 29 May to 3 June 2022 on Cortes Island.

OPTIMIZING CARE FOR GAY, BISEXUAL, AND OTHER MEN WHO HAVE SEX WITH MEN

Online

This is a short online CME course designed for family physicians and primary care providers in Canada. This course will introduce you to gbMSM health issues and implications with the intent to provide you with the knowledge and skills to improve the care of your gbMSM patients. Designed in partnership by UBC CPD and Community-Based Research Centre, Health Initiative for Men, Interior Health, Island Health, Fraser Health, Northern Health, Men's Health Initiative, Providence Health Care, and Vancouver Coastal Health. This course can be taken anytime and is divided into four lessons: 1) Social and Political Context of gbMSM health, 2) Epidemiology & Life Course, 3) Safer Spaces, Language, and Communication, and 4) Case Studies. For more information visit https://ubccpd.ca/course/gbmsm-online.

ANATOMY-BASED BOTULINUM TOXIN TRAINING

3 June 2021–30 Sept 2022

Expand your practice with injectables. Learn both the therapeutic (migraines/headaches) and aesthetic (fine facial lines and wrinkles) applications. PTIFA offers anatomy-based training (20+ hours) and training recognized by the highest standard of practice in Canada. Receive the most clinically based training, including the opportunity to inject 8+ patients. Courses held monthly on UBC Campus in Vancouver. Start today with the online Level 1 - Advanced Anatomy course (20 CME). Save $500. Use code "BCMJonline" before 31 December 2021. Register now at PTIFA.com.

Classifieds

Advertisements are limited to 700 characters. Rates: Doctors of BC members: $50 + GST per month for each insertion of up to 350 characters. $75 + GST for insertions of 351 to 700 characters. Nonmembers: $60 + GST per month for each insertion of up to 350 characters. $90 + GST for insertions of 351 to 700 characters. **Deadlines:** Ads must be submitted or canceled by the first of the month preceding the month of publication, e.g., by 1 November for December publication. Visit www.bcmj.org/classified-advertising for more information. **Ordering:** Place your classified ad online at www.bcmj.org/classified-advertising. Payment is required at the time that you place the ad.

PRACTICES AVAILABLE

REAL ESTATE AND MEDICAL PRACTICE

Amazing opportunity to own centrally located real estate office in Whistler. Towne Plaza Medical was established in 1996. We have serviced our lovely local population as well as many international travelers over the years and have an established relationship with the tourist industry. Location on the village stroll with drive-up drop-off space. Contact Andy Baines at andy@andybaines.com, or call 604 318-3983.

EMPLOYMENT

ACROSS CANADA—PHYSICIANS FOR YOU—MATCHING DOCTORS WITH CLINICS

Are you are a physician looking for work across Canada? Or a medical facility requiring physicians? Our specialized recruitment team can help. We work with independently licensed physicians in Canada and CFPC/RCPSC-eligible international medical graduates. Our strong reputation is built on exceptional service and results. Check out our website for reviews and current job postings, and call Canada's trusted recruitment company today. Website www.physiciansforyou.com, email info@physiciansforyou.com, or call 1 778 475-7995.

BC—PART-TIME VIRTUAL PHYSICIANS, BERNSTEIN DIET AND HEALTH CLINIC

For over 40 years, Dr Bernstein has been helping people lose weight safely and quickly using his 100% medically supervised program. In working through the pandemic, we have evolved the model of our patient care program into a virtual environment. We are looking for physicians to join our team for a rewarding change of pace. With our dedicated and streamlined approach to patient care, the convenience of regular working hours that meet your schedules, and attractive compensation, we present a lifestyle opportunity for today's doctors. Contact Michael McGuire at michael@drbdiet.com, or 416 447-3438 (ext. 2232).

BURNABY/METROTOWN—SPECIALISTS TO JOIN OUR RAPIDLY GROWING TEAM

Join our eight GPs and two internists at Imperial Medical Clinic. Flexible F/T or P/T schedules to suit your needs with in-person and/or virtual consults. Patient base of over 15 000 and growing. Young, progressive, collegial team. Brand new clinic. Great place to start practice without the cost of opening your own office. All specialties considered. Call Dr Pav Kaliray at 778 822-1981.

CALGARY, AB—FAMILY PHYSICIAN NEEDED

We have an immediate, exciting opening for a family physician and specialist physician to join our brand new modern clinic. We have a dedicated and well-trained staff to help our physicians. We also take serious precautions during COVID-19 in the clinic. Our focus is on providing dedicated and exceptional health care to all our patients. We will provide support for those who are new graduates so they feel comfortable and safe while they build their practice. We guarantee our involvement and support to build the patient population or roster the physician needs in order for them to succeed. We are located in a very busy location. Income around 650K. Contact us at info@santimedclinic.com.

DENMAN ISLAND—PRACTICE FAMILY MEDICINE ON A WEST COAST GULF ISLAND

Denman Island Clinic (just south of Courtenay, Vancouver Island) is a primary care network clinic providing care for a broad demographic of 1200 residents that swells to 1600 in summer. Currently, three part-time FPs share one FTE; the available slot is 2 to 4 days as desired. Fee-for-service. Allied health including social worker, pharmacist, physiotherapist, medical lab nurse, home care, and counseling. Eligible for additional remuneration under the Rural Subsidiary Agreement. Start: 1 January 2022. Contact Lyndsey Jennings at ljennings@divisionsbc.ca or visit the webpage for more info (https://divisionsbc.ca/comox-valley/live-work-play/physician-postings/permanent/denman-medical-clinic-denman-island).

FORT LANGLEY—EXCITING OPPORTUNITY IN AESTHETIC MEDICINE

Expanding established physician-run aesthetic clinic in beautiful Fort Langley would like to add a physician to the team. We are looking for someone who is interested in a part-time practice with a focus on aesthetic medicine. Excellent team-based work environment with flexible hours and no overhead. Lucrative remuneration including wage, commission structure, and percentage of gross. Visit our website at www.skinsecrets.ca and contact us at md@skinsecrets.ca.

NANAIMO—GP

The Caledonian Clinic has availability for a general practitioner (locum or permanent position). We are a well-established, very busy clinic with 23 general practitioners, one first-year resident, one second-year resident, a podiatrist, a geriatrician/internist, and an orthopaedic surgeon. Our EMR is Profile by Intrahealth. We are located in a modern, new clinic

in the Nanaimo North Town Centre. Lab and pharmacy services are on site within the centre. Contact Lisa Wall at 250 716-5360 or email lisa.wall@caledonianclinic.ca. Visit our website at www.caledonianclinic.ca.

NANAIMO—PSYCHIATRIST LOCUM, EHN CANADA, FEB/MAR 2022

After 100 years of collective experience in addiction medicine, EHN, Canada's dedicated treatment team, takes the time to understand each client personally. We are seeking an addictions psychiatrist locum for 4 to 5 days per week for February and March 2022. Duties include evaluation and treatment in residential addiction setting, particularly with clients presenting with mood and anxiety, PTSD, personality disorders, and substance use disorders. Knowledge and experience with the psychological and physical symptoms associated with withdrawal and trauma required. Contact human resources at staffing@edgewood.ca. Competitive salary options available.

NORTH VAN—FP LOCUM

Flexible hours and vacation time with no call. In-office and/or telehealth options available with great MOA support staff and a new competitive split; 100% to doctors for optional hospital visits, nursing home visits, medical-legal letters, etc., or sessional work. For further information contact Kim at 604 987-0918 or kimgraffi@hotmail.com.

POWELL RIVER—LOCUM

The Medical Clinic Associates is looking for short- and long-term locums. The medical community offers excellent specialist backup and has a well-equipped 33-bed hospital. This beautiful community offers outstanding outdoor recreation. For more information contact Laurie Fuller: 604 485-3927, email: clinic@tmca-pr.ca, website: powellrivermedicalclinic.ca.

RICHMOND—FAMILY PHYSICIAN REQUIRED

Family physician wanted to work part-time at the Ultima Airport Medical Clinic. This is an opportunity to work in our beautifully appointed medical clinic located at Vancouver International Airport. This is a busy, well-established family and occupational medical practice, providing comprehensive health care to the airport community, including visitors, employees in the aviation industry, and travelers. We are open 5 days per week, from 8:00 a.m. to 4:30 p.m. Excellent income opportunity with both MSP and private remuneration. Great support staff. Please contact Dr Videsh Kapoor at airportclinic@ultimamedical.com to discuss further or arrange a visit.

RICHMOND—OCCUPATIONAL MEDICINE

Physicians interested in occupational medicine wanted for part-time or possibly full-time position. Ultima Medical Services Occupational Medical Clinic is a well-established Occupational Health Clinic close to Vancouver Airport providing an extensive range of occupational health services to multiple industries including the

aviation, marine, law enforcement, and fire protection occupations. We have a dedicated and experienced team of occupational health professionals providing employers and employees with the best workplace health program available. Competitive compensation, experienced support staff, and very pleasant scenic office setting. Experience in aviation and marine medical medicine would be an asset. Please contact Pat Cuffe (Ultima director of operations) at pcuffe@ultimamedical.com to discuss further or arrange a visit.

SOUTH SURREY/WHITE ROCK—FP

Busy family/walk-in practice in South Surrey requires GP to build family practice. The community is growing rapidly and there is great need for family physicians. Close to beaches and recreational areas of Metro Vancouver. OSCAR EMR, nurses/MOAs on all shifts. CDM support available. Competitive split. Please contact Carol at Peninsulamedical@live.com or 604 916-2050.

SURREY—FAMILY PHYSICIAN

Family physician in Fleetwood immediately looking for a part-time/full-time associate/locum. Busy family medicine clinic with mostly South Asian patients, flexible hours, OSCAR EMR, well equipped with modern facility, four examination rooms, and experienced staff. Punjabi speaking an asset. Call 604 585-9696 or contact drsohal@shaw.ca.

SURREY (BEAR CREEK AND NEWTON)—FAMILY PRACTICE

We are looking for part-time/full-time physicians for walk-ins/family practice to work on flexible shifts between 9 a.m. and 6 p.m.; option to work 7 or 5 days per week. Clinic with eight exam rooms, two physio rooms, and pharmacy on site. Competitive split. For more information please contact Anand at wecaremedicalclinic2021@gmail.com or 778 888-7588.

SURREY/DELTA/ABBOTSFORD—GPS/SPECIALISTS

Considering a change of practice style or location? Or selling your practice? Group of seven locations has opportunities for family, walk-in, or specialists. Full-time, part-time, or locum doctors guaranteed to be busy. We provide administrative support. Paul Foster, 604 572-4558 or pfoster@denninghealth.ca.

VANCOUVER—FP/GYNECOLOGIST/PEDIATRICIAN/SPECIALIST, AND RMT

Cross Roads Clinics: Opportunity to join our large multidisciplinary clinic with excellent support focusing on family health, preventive health, and the care of women and children. Virtual care, extended flexible hours/scheduling, and vacation friendly. Modern 9000 sq. ft. facility with 34 patient rooms and gymnasium. Physiotherapy, massage therapy, naturopathic medicine, acupuncture, dermatology, minor surgery, pediatrics, women's health, infertility, contraception, menopause, and incontinence clinic on site. No need to build your practice as we have patients immediately available to you. Potential service contract for family medicine. Great opportunity to focus on patient care, whether new to practice or semiretiring; allow us to manage the rest. Please contact admin@crossroadsclinics.com.

VANCOUVER/RICHMOND—FP/SPECIALIST

We welcome all physicians, from new graduates to semiretired, part-time or full-time. Virtual, walk-in, or full-service family medicine and all specialties. Excellent splits at the busy South Vancouver and Richmond Superstore medical clinics. Efficient and customizable Oscar EMR. Well-organized clinics. Contact Winnie at medicalclinicbc@gmail.com.

VANCOUVER/UBC—UBC STUDENT HEALTH SERVICES SEEKING PSYCHIATRISTS

UBC Point Grey campus is seeking P/T psychiatrists to join its multidisciplinary team of GPs, NPs, mental health nurses, nurses, psychologists, counselors, and health promotion specialists to work in providing exceptional health services to UBC students. We are also an active teaching site for medical residents. Applicants must have FRCPC and be eligible for full licensure with CPSBC. Input health EMR and office space available. Open Mon to Sat. For further information please contact Eliza Magnaye at eliza.magnaye@ubc.ca.

MEDICAL OFFICE SPACE

NANAIMO AND VANCOUVER—SHARED OFFICE SPACE FOR RENT

Premium paperless medical offices available in Nanaimo or Vancouver. Private rooms feature height-adjustable desks, ergonomic chairs, exam tables. Full kitchen and admin-staff space. One to two other medical doctors share office. We are an easygoing group! Near VGH and NRGH. Call 236 521-4108 or visit halenmedical.com and www.islandphysiatry.com for info.

SOUTH SURREY—MEDICAL OFFICE SPACE FOR LEASE

Custom-built, exceptionally clean medical office (947 sq. ft.) with high-grade millwork, cork flooring, and decor in a modern professional building. Spacious reception desk with granite countertop. Waiting area has decorative rock wall with furnished high-end seating. Waiting room and exam rooms with high-definition televisions for patients. Private bathroom and kitchen. Building has a large parking lot (free parking for patients). Ideal for the discerning specialist. Full-time MOA available. Located in Croydon Business Centre, a professional building home to medical and dental offices. By Morgan Crossing Shopping Outlet, a European-style shopping outlet with many shopping and eating establishments. If interested, contact dmjones01@shaw.ca.

MISCELLANEOUS

CANADA-WIDE—MED TRANSCRIPTION

Medical transcription specialists since 2002, Canada-wide. Excellent quality and turnaround. All specialties, family practice, and IME reports. Telephone or digital recorder. Fully confidential, PIPEDA compliant. Dictation tips at www.2ascribe.com/tips. Contact us at www.2ascribe.com, info@2ascribe.com, or toll free at 1 866 503-4003.

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PATIENT RECORD STORAGE—FREE
Retiring, moving, or closing your family or general practice, physician's estate? DOCUdavit Medical Solutions provides free storage for your active paper or electronic patient records with no hidden costs, including a patient mailing and doctor's web page. Contact Sid Soil at DOCUdavit Solutions today at 1 888 781-9083, ext. 105, or email ssoil@docudavit.com. We also provide great rates for closing specialists.

VANCOUVER—TAX & ACCOUNTING SERVICES
Rod McNeil, CPA, CGA: Tax, accounting, and business solutions for medical and health professionals (corporate and personal). Specializing in health professionals for the past 11 years, and the tax and financial issues facing them at various career and professional stages. The tax area is complex, and practitioners are often not aware of solutions available to them, or which avenues to take. My goal is to help you navigate and keep more of what you earn by minimizing overall tax burdens where possible, while at the same time providing you with personalized service. Website: www.rwmcga.com, email: rodney@rwmcga.com, phone: 778 552-0229.

VANCOUVER—VIOLIN TEACHER RECOMMENDATION
I would like to recommend a violin teacher, Mansoon Bow, graduate of the Royal Academy of Music in London and winner of an international violin award at age 17. Attending my 18-year-old son's music lessons made me feel like I was back at the Academy of Music in Vienna, Austria. Located on W. 4th Ave in Vancouver, contact 778-881-8955.

Guidelines for authors

The *British Columbia Medical Journal* is a general medical journal that seeks to continue the education of physicians through review articles, scientific research, and updates on contemporary clinical practices while providing a forum for medical debate. Several times a year, the *BCMJ* presents a theme issue devoted to a particular discipline or disease entity.

We welcome letters, blog posts, articles, and scientific manuscripts from physicians in British Columbia and elsewhere. Manuscripts should not have been submitted to any other publication. Articles are subject to copyediting and editorial revisions, but authors remain responsible for statements in the work, including editorial changes; for accuracy of references; and for obtaining permissions. The corresponding author of scientific articles will be asked to check page proofs for accuracy.

The *BCMJ* endorses the "Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals" by the International Committee of Medical Journal Editors (updated December 2019), and encourages authors to review the complete text of that document at www.icmje.org.

All materials must be submitted electronically, preferably in Word, to:

The Editor
BC Medical Journal
Email: journal@doctorsofbc.ca
Tel: 604 638-2815
Web: www.bcmj.org

Editorial process

Letters to the editor, articles, and scientific manuscripts must be reviewed and accepted by the *BCMJ*'s eight-member Editorial Board prior to publication. The Board normally meets on the last Friday of most months, at which time submissions are distributed for review the following month. We do not acknowledge receipt of submissions; the editor will contact authors of articles by email once the submission has been reviewed by the Board (usually within 8 to 10 weeks of submission). The general criteria for acceptance include accuracy, relevance to practising BC physicians, validity, originality, and clarity. The editor contacts authors to inform them whether the manuscript has been rejected, conditionally accepted (that is, accepted with revisions), or accepted as submitted. Authors of letters are contacted only if the letter is accepted and editorial staff need further information. Scientific manuscripts and other articles typically take 5 to 10 months from the date of receipt to publication, depending on how quickly authors provide revisions and on the backlog of manuscripts scheduled for publication. Access to the *BCMJ* is available for free on our website.

For all submissions

- ☐ Avoid unnecessary formatting, as we strip all formatting from manuscripts.
- ☐ Double-space all parts of all submissions.
- ☐ Include your name, relevant degrees, email address, and phone number.
- ☐ Number all pages consecutively.

Opinions

BCMD2B (medical student page). An article on any medicine-related topic by a BC physician-in-training. Less than 2000 words. The *BCMJ* also welcomes student submissions of letters and scientific/clinical articles. BCMD2B and student-written clinical articles are eligible for an annual $1000 medical student writing prize.

Blog. A short, timely piece for online publication on www.bcmj.org. Less than 500 words. Submissions on any health-related topic will be considered. Should be current, contain links to related and source content, and be written in a conversational tone.

The Good Doctor. A biographical feature of a living BC physician. Less than 2000 words.

Letters. All letters must be signed, and may be edited for brevity. Letters not addressed to the Editor of the *BCMJ* (that is, letters copied to us) will not be published. Letters commenting on an article or letter published in the *BCMJ* must reach us within 6 months of the article or letter's appearance. No more than three authors. Less than 500 words.

Point-Counterpoint. Essays presenting two opposing viewpoints; at least one is usually solicited by the *BCMJ*. Less than 2000 words each.

Premise. Essays on any medicine-related topic; may or may not be referenced. Less than 2000 words.

Proust for Physicians. A brief questionnaire. Submit responses online or print a PDF copy from the *BCMJ* website at www.bcmj.org/submit-proust-questionnaire, or contact journal@doctorsofbc.ca or 604 638-2815.

Special Feature. Articles, stories, history, or any narrative that doesn't fit elsewhere in the *BCMJ*. Less than 2000 words.

Departments

Obituaries. Include birth and death dates, full name and name deceased was best known by, key hospital and professional affiliations, relevant biographical data, and photo. Less than 500 words.

News. A miscellany of short news items, notices, announcements, requests for study participants, and so on. Submit suggestions or text to journal@doctorsofbc.ca or call 604 638-2858 to discuss. Less than 500 words.

Clinical articles/case reports/survey studies

Manuscripts of scientific/clinical articles and case reports should be 2000 to 4000 words in length, including tables and references. The first page of the manuscript should carry the following:

- ☐ Title, and subtitle, if any.
- ☐ Preferred given name or initials and last name for each author, with relevant academic degrees.
- ☐ All authors' professional/institutional affiliations, sufficient to provide the basis for an author note such as: "Dr Sang is an associate professor in the Department of Obstetrics and Gynaecology at the University of British Columbia and a staff gynecologist at Vancouver Hospital."
- ☐ A structured or unstructured abstract of no more than 150 words. If structured, the preferred headings are "Background," "Methods," "Results," and "Conclusions."
- ☐ Three key words or short phrases to assist in indexing.
- ☐ Competing interests, if any.
- ☐ Name, address, telephone number, and email address of corresponding author.

Survey studies must have a response rate of at least 50% in order for the manuscript to be reviewed for publication consideration. Manuscripts with less than this response rate will not be reviewed by the *BCMJ* Editorial Board. We recognize that it is not always possible to achieve this rate, so you may ask the Editor in advance to waive this rule, and if the circumstances warrant it, the Editor may agree to have the manuscript reviewed.

Authorship, copyright, and disclosure form

When submitting a clinical/scientific/review manuscript, all authors must complete the *BCMJ*'s three-part "Authorship, copyright, and disclosure" form, available at www.bcmj.org/authorship-copyright-disclosure-form.

1. **Authorship.** All authors must certify that they qualify as an author of the manuscript. To be considered an author, an individual must meet these three conditions:
   - ☐ Made substantial contributions to the conception and design, acquisition of data, or analysis and interpretation of data, and

- ☐ Drafted the article or revised it critically for important intellectual content, and
- ☐ Given final approval of the version to be published.

Order of authorship is decided by the co-authors.

2. **Copyright.** All authors must agree to have their manuscript published in the *BCMJ* in accordance with the Creative Commons Attribution Non-Commercial No Derivatives (CC BY-NC-ND 4.0) license. Copyright of published manuscripts will be held by the article's authors or their institutions.
3. **Disclosure.** All authors must disclose if they have accepted any of the benefits listed on the form related to the content of the manuscript. Disclosure represents a commitment to transparency, helps reviewers determine whether the manuscript will be accepted for publication, and may be used for a note to accompany the text.

Note: Consent. If the manuscript is a case report or if an individual patient is described, written consent from the patient (or their legal guardian or substitute decision maker) must also be obtained on the "Patient consent" form, available at www.bcmj.org/submit-article.

Manuscripts will not be reviewed without these documents.

References to published material

Try to keep references to fewer than 30. Authors are responsible for reference accuracy. References must be numbered consecutively in the order in which they appear in the text. Avoid using auto-numbering as this can cause problems during production.

Include all relevant details regarding publication, including correct abbreviation of journal titles, as in Index Medicus; year, volume number, and inclusive page numbers; full names and locations of book publishers; inclusive page numbers of relevant source material; full web address of the document, not just the host page, and date the page was accessed. Examples:

1. Gilsanz V, Gibbons DT, Roe TF, et al. Vertebral bone density in children: Effect of puberty. Radiology 2017; 166:847-850.

(NB: List up to four authors or editors; for five and more, list first three and use et al.)

2. Mollison PL. Blood Transfusion in Clinical Medicine. Oxford, UK: Blackwell Scientific Publications; 2020. p. 78-80.
3. O'Reilly RA. Vitamin K antagonists. In: Colman RW, Hirsh J, Marder VJ, et al. (eds). Hemostasis and Thrombosis. Philadelphia, PA: JB Lippincott Co; 2015. p. 1367-1372.
4. Health Canada. Canadian STD Guidelines, 2017. Accessed 15 July 2021. www.hc-sc.gc.ca/hpb/lcdc/publicat/std98/index.html.

(NB: The access date is the date the author consulted the source.)

A book cited in full, without page number citations, should be listed separately under Additional or Suggested reading. Such a list should contain no more than five items.

References to unpublished material

These may include articles that have been read at a meeting or symposium but have not been published, or material accepted for publication but not yet published (in press). Examples:

1. Maurice WL, Sheps SB, Schechter MT. Sexual activity with patients: A survey of BC physicians. Presented at the 52nd Annual Meeting of the Canadian Psychiatric Association, Winnipeg, MB, 5 October 2018.
2. Kim-Sing C, Kutynec C, Harris S, et al. Breast cancer and risk reduction: Diet, physical activity, and chemoprevention. CMAJ. In press.

Personal communications are not included in the reference list, but may be cited in the text, with type of communication (oral or written), communicant's full name, affiliation, and date (e.g., oral communication with H.E. Marmon, director, BC Centre for Disease Control, 12 November 2021).

Material submitted for publication but not accepted should not be included.

Permissions

It is the author's responsibility to obtain written permission from both author and publisher for material, including figures and tables, taken or adapted from other sources. Permissions should accompany the article when submitted.

Scientific misconduct

Should possible scientific misconduct or dishonesty in research submitted for review by the *BCMJ* be suspected or alleged, we reserve the right to forward any submitted manuscript to the sponsoring or funding institution or other appropriate authority for investigation. We recognize our responsibility to ensure that the question is appropriately pursued, but do not undertake the actual investigation or make determinations of misconduct.

Tables and figures

Tables and figures should supplement the text, not duplicate it. Keep length and number of tables and figures to a minimum. Include a descriptive title and units of measure for each table and figure. Obtain permission and acknowledge the source fully if you use data or figures from another published or unpublished source.

Tables. Please adhere to the following guidelines:

- ☐ Submit tables electronically as Word or Excel files so that they may be formatted for style.
- ☐ Number tables consecutively in the order of their first citation in the text and supply a brief title for each.
- ☐ Place explanatory matter in footnotes, not in the heading.
- ☐ Explain all nonstandard abbreviations in footnotes.
- ☐ Ensure each table is cited in the text.

Figures (illustrations). Please adhere to the following guidelines:

- ☐ Images must be high resolution; if unsure, send highest resolution possible and we will advise if necessary.
- ☐ Number figures consecutively in the order of their first citation in the text and supply a brief title for each.
- ☐ Place titles and explanations in legends, not in or on the illustrations themselves.
- ☐ Provide internal scale markers for photomicrographs.
- ☐ Ensure each figure is cited in the text.

Units

Report measurements of length, height, weight, and volume in metric units. Give temperatures in degrees Celsius and blood pressures in millimetres of mercury. Report hematologic and clinical chemistry measurements in the metric system according to the International System of Units (SI).

Abbreviations

Except for units of measure, we discourage abbreviations. However, if a small number are necessary, use standard abbreviations only, preceded by the full name at first mention, e.g., in vitro fertilization (IVF). Avoid abbreviations in the title and abstract.

Drug names

Use generic drug names. Use lowercase for generic names, uppercase for brand names, e.g., venlafaxine hydrochloride (Effexor). Drugs not yet available in Canada should be so noted.

Manuscript submission checklist

Before you submit your manuscript, please ensure you have completed the following, or your manuscript may be returned:

- ☐ "Authorship, copyright, and disclosure" form is completed online (available at www.bcmj.org/authorship-copyright-disclosure-form).
- ☐ Abstract is provided.
- ☐ Three key words are provided.
- ☐ Author information is provided for all authors.
- ☐ References in text are in correct numerical order.
- ☐ Reference list is in correct numerical order and is complete.
- ☐ References are in the style described above.
- ☐ All figures and tables are supplied.
- ☐ Permissions letters are included.

Our path toward a more

equitable, diverse, and inclusive

Doctors of BC

BC doctors are a diverse group comprised of different genders, racial backgrounds, religious affiliations, sexual orientations, ages, specialties, practice locations, and more. As physicians, our members also serve a patient population that is equally as diverse in their backgrounds and in their health care needs.

Meaningful work continues to take place on our path to ensuring Doctors of BC is **representative and inclusive of the diversity of our members**, and to supporting our members in contributing to efforts to **ensure BC's health care system is culturally safe, equitable, and inclusive** for providers and patients alike.

For more information visit our updated Equity, Diversity & Inclusion webpage which includes a newly developed vision statement, information on the recently created Diversity and Inclusion Advisory Working Group, details on our ongoing work advancing Indigenous cultural safety and humility, and much more.

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The informed consent paradox

The complexities presented when an essential feature of ethical medical practice is confronted by those with cognitive decline.

George Szasz, CM, MD

Obtaining informed consent from patients undergoing various medical procedures is an essential feature of ethical medical practice. In the context of requesting medical assistance in dying (MAID), a primary requirement is that the applicant fully understands what is going to happen.

I was mulling over this requirement when I celebrated my 66th wedding anniversary on my own. My lifelong partner was biologically alive, bedridden in the full grip of amnesia, agnosia, aphasia, and apraxia at the time, until she recently passed away. It was about 8 years ago when she began her slide into one of the dementias—it's still not clear which one. She slept, or as we interpreted it, she was "totally out of it," much of the day. We didn't know if she could see, and if so, what she saw. She may or may not have heard, but she did not respond. She could not turn or adjust her position in bed. She was incontinent of bladder and bowel. Her skin was fragile and broke down easily. She had skin problems in her sacral area, which were difficult to manage. She sometimes screamed or yelled in a defensive manner even when she was just being gently attended by her kind caregivers. During the night, even with some sedatives, she tended to scratch her eyes or face vehemently while emitting to us meaningless sounds. She chewed and chewed her pureed, pasty food, offered to her by the half teaspoon. Eventually, she would swallow.

We cared for my very much loved wife at home until recently, when she was moved to a long-term care facility, essentially in a vegetative state. Knowing her, I believed that, if she could consider it, she would have preferred to be on a rocket to another planet. But because she existed only on a basic biological level, it was impossible for her to ask for or give consent to a medically assisted exit from Earth. And therein lies the paradox of the informed consent requirement when applied to those with cognitive decline.

On one hand, the present rules are that neither representation agreements nor power of attorney arrangements could speak on her behalf in her situation. On the other hand, her care, or more precisely, the care of her body, had been taken over by caregivers and medical specialists without her consent. In her predementia life, she was a very private person and would never give consent to some of the well-meaning but intimate, invasive care. Ironically, that humanitarian, loving care likely prolonged her vegetative state and even robbed her of a chance for an earlier, natural death.

Oddly enough there *is* a widely accepted provision in certain medical situations that potentially provides exit from life without informed consent. For the last number of years, ambulance crews entering a house first look for a document that is supposed to be displayed on household refrigerators. If signed, the document certifies that the person named declines to give permission for resuscitation procedures, even if they might prolong life. The signature implies that, if it comes to it, death would be accepted as preferable to a postresuscitation-related chronic physical or cognitive decline. This scenario resembles the concerns of many well persons anxious about their future in case of the onset of a cognitive decline.

Following the principle of the no-resuscitation instruction on a piece of signed paper attached to the refrigerator, it would be logical to accept the formal, registered, bona fide request of a still well-functioning person in the presence of a physician: "I wish to receive medical assistance in dying if or when I reach a such and such stage of dementia." The statement should be formally supported by significant family members. This prestated request could then be called upon by the family at the agreed-upon exit point, and when the time came, it could be accepted as informed consent and honored with understanding and love.

As things are today, Canada's MAID law is under revision to include people with mental illness in the future. That will be an important step forward, but dementia is a brain disorder with devastating physical consequences, and persons with severely declining cognitive function need to be given special consideration. ■

Dr Szasz is a member of the Order of Canada and professor emeritus at the UBC Faculty of Medicine. Throughout his career he practised on the North Shore and worked for the UBC Faculty of Medicine in numerous positions. After retiring from UBC, he was a member and chair of the Medical Advisory Committee of the Library of the BC College of Physicians and Surgeons. Now in his 93rd year, he continues rowing at the Vancouver Rowing Club and writing for the BCMJ *blog.*

This article has been peer reviewed.

Dr Ramneek Dosanjh

Dr Dosanjh answers the Proust Questionnaire, telling us a bit about her life and what drives her.

What profession might you have pursued if not medicine?
Human rights activist.

Which talent would you most like to have?
To be able to heal the world.

What do you consider your greatest achievement?
Defying the odds by regaining function after being paralyzed.

Who are your heroes?
My parents because of all the sacrifices they made and the spirits they embody. Abolitionists. Colleagues. Humans who continually sacrifice to serve humanity or fight injustice.

What is your idea of perfect happiness?
Spending time with loved ones in the sun, sand, ocean.

What is your greatest fear?
Not honoring my spirit and not living my purpose. My children not living their fullest expression of themselves.

What characteristics do your favorite patients share?
Honesty, grace, kindness.

What are your favorite activities?
Traveling, cooking, and dancing with my three daughters.

Where would you most like to practise?
Places with limited access to health care, with marginalized populations.

What do you most value in your colleagues?
Camaraderie, integrity, intelligence, vulnerability.

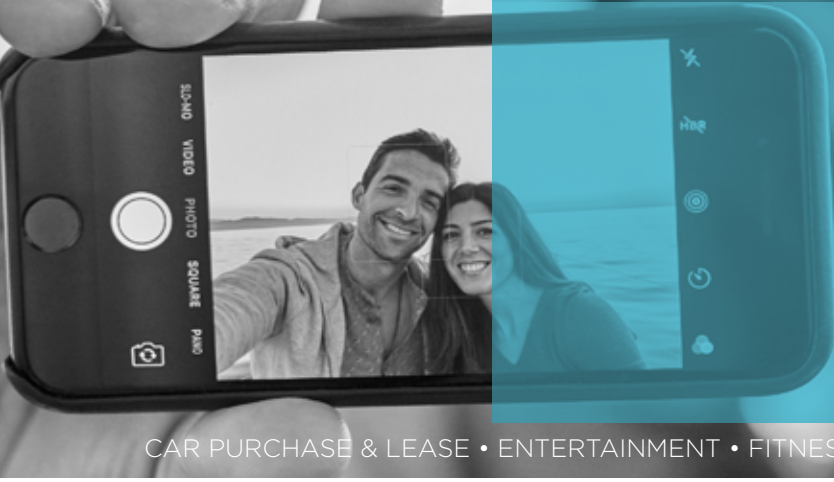
What are your favorite books?
I Know Why the Caged Bird Sings, by Maya Angelou. *A Man's Search for Meaning,* by Dr Viktor Frankl. *The Power of Now,* by Eckhart Tolle. *The Conscious Parent,* by Shefali Tsabary. *When Breath Becomes Air,* by Dr Paul Kalanithi.

How would you like to die?
Peacefully alongside my loved ones, knowing I had lived my life to the fullest.

What is your greatest regret?
Staying in situations that did not honor my spirit. ■

Dr Dosanjh is a family physician, hospitalist, and child and youth mental health advocate in White Rock and is the current president-elect of Doctors of BC, becoming president in January.

Submit a Proust questionnaire
Online: www.bcmj.org/submit-proust-questionnaire
Email: journal@doctorsofbc.ca. We'll send you a Word document to complete and email back to us.



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