BC CANCER
Provincial Health Services Authority

THE CLINICAL CHRONICLE

New for 2019:

A series on BC Cancer's provincial clinical programs

What are the big issues?

Get to know a colleague!

Inside the numbers: what you need to know!

Surgery is an essential component of the cancer care system in B.C.

Surgery is the main treatment modality in 60 per cent of solid organ malignancies and plays a significant role in the management of many other cancers, when used in combination with chemotherapy and radiation. The vast majority of cancer surgery is performed within the confines and budget of the regional health authorities. Fifteen per cent of all surgical procedures in B.C. are related to cancer management, but given the high resource intensity of many of these procedures, cancer surgery consumes a significant proportion of the surgical service budgets allocated to hospitals for patient care. Surgical oncology services administered and delivered within a multidisciplinary framework allow for a more patient-centred approach, improve the quality of care delivered, and ensure appropriateness and cost-effectiveness. With a new mandate to coordinate cancer services in B.C., ensuring that high quality surgical care is available to cancer patients across B.C. is a key initiative in the Cancer Plan.

In this inaugural edition of The Clinical Chronicle Dr. Carl Brown, our provincial lead for surgery at BC Cancer, discusses his vision and plan for the future.

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On the second morning of last November’s BC Cancer Summit, Dr. Carl Brown took part in a panel that addressed achievements, milestones and initiatives that have an impact on cancer care across the province.

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Dr. Brown, BC Cancer’s first provincial lead for surgery, has a vision and is on a mission. While he was pleased to appear in front of an audience at the Sheraton Wall Centre, he believes everyone at BC Cancer needs to know there’s a bold plan.

Shorter wait times and incentives for hospitals that can deliver them. Higher standards for surgery, backed by much-needed data, and ongoing education for surgeons. More integrated, multi-disciplinary care. And patient-centred treatment that will improve everyone’s experience.

By Jonathan McDonald, Director, Office of the President, BC Cancer

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We would love to hear from you!
Email us at **comms@bccancer.bc.ca** with your feedback.

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“We’ve realized this is not a solo sport, it’s a team sport,” says Dr. Brown, who has been a colorectal surgical oncologist at St. Paul’s for the past 12 years and has seen change happen, albeit slowly.

“We spend a lot of time saying, ‘Should we do chemo, followed by surgery? Surgery followed by radiation? How shall we work together to introduce all these elements in the right sequence, which optimizes the care of the patient?’”

It wasn’t that long after Dr. Brown arrived from Toronto that PricewaterhouseCoopers delivered a report that pointed out the need to improve cancer care in a system where two of the three pillars of cancer treatment – medical and radiation oncology – were largely being handled within the walls of BC Cancer, while cancer surgery was separate, performed at dozens of hospitals across the province without any true oversight. While pathologists would dictate their reports, and the information would show up on a patient’s chart, there was no organized effort to collect the data. No coordinated way to evaluate outcomes. No true understanding of the difference in success rates between a surgeon at one hospital and another surgeon at a different one.

That’s starting to happen.

“Surgery is very important in the treatment of cancer,” says Dr. Brown, whose proposal, *Cancer Surgery in British Columbia – Current State and a Way Forward*, is before the Ministry of Health. “In fact, it’s probably the most important thing. If the surgery isn’t done

properly, you can't salvage that situation with any amount of chemotherapy.

"Without effective surgery, a lot of cancers – breast, colorectal, stomach, liver – won't be cured."

While Dr. Brown's plan is expected to receive plenty of attention in 2019, he knows there's one aspect of effective surgery – wait times – that must be dealt with as soon as possible. Dr. Brown proposes incentivizing cancer surgeries for participating hospitals; providing funding to speed up surgeries and related activities. In order to receive funding for incremental cases, they'd need to a) perform cancer-related surgeries within their wait-time target, which in most cases is 28 days from diagnosis; b) report on the pathology using an electronic system, so that the data can be collected for the purpose of improving surgical care; and c) submit the pathology within 28 days of surgery, to enable further, timely, adjuvant treatment of the patient.

Currently, hospitals tend to lump all surgeries together – and the initial focus of the surgical strategy has been on doing something about reducing the longest waits for surgery, no matter the type.

"If a cancer patient is waiting just one more week, going from four to five weeks, maybe that doesn't seem like a big deal," says Dr. Brown. "You might say, 'Let them wait another week and we'll do this hernia, that's been waiting a year, or a half-year.' Sounds reasonable on some fundamental level of numbers, but from a patient experience perspective, if you have a hernia and you've been waiting 26 weeks, or you wait 27 weeks, you don't care that much. You're upset, but it's a hernia. It's not going to kill you.

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Inside the Numbers

27,000

The number of cancer-related surgeries performed in B.C. in 2017

1,300:

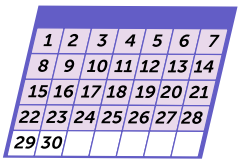
The approximate number of surgeons who performed those procedures

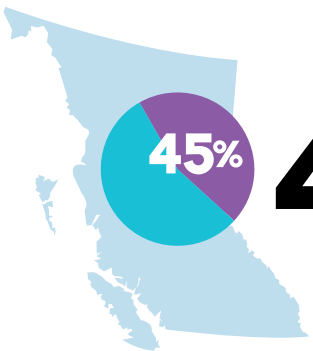
58:

The number of B.C. hospitals where those surgeries took place

The approximate percentage of cancer patients who need at least one surgery

28: The targeted number of days recommended between diagnosis and surgery





45: The percentage of cancer patients in B.C. waiting longer than 28 days for surgery

In Dr. Carl Brown's Words

Why data will improve cancer care:

"When we actually take the data we do have, and we first did this with breast and colorectal a couple of years ago, we're looking at the quality of care provided across the province. Not surprisingly, when we looked hospital to hospital, the level of care provided to patients was quite variable. Imagine someone you know gets stomach cancer. He goes to hospital A, vs. hospital B, for no other reason than luck of where he lives, because that is generally what dictates which hospital a person goes to. At hospital A, the patient sees a surgeon who manages one or two stomach cancer patients per year. The surgeon removes the stomach, but may not remove an adequate number of lymph nodes. Meanwhile, another patient in the same situation goes to hospital B, and has surgery by a dedicated stomach cancer surgeon who sees stomach cancer patients every month of the year and gets an objectively better operation. That second patient, according to a recently published Dutch study, has a 13 per cent better chance of surviving the cancer. We know that by seeing these variances in quality of care in just those two areas, that there have to be those same problems in all areas where

cancer surgery is provided. We're hoping to provide a solution to that variance while still ensuring most cancer surgery is provided at the hospital closest to the patient's home."

On creating new models of care: "We're looking to create clinics where a patient will come to see all the relevant disciplines, but need the space to support that. If you're the patient, you come into the hospital and the surgeon, the radiation doctor and medical oncology doctor would all be there. You'd see them in sequence, there would be hallway conversations, we say here's what should be done, you leave with a plan. That plan has been vetted by everybody who matters, and the patient comes out confident and well-treated. While it's complicated – seeing three people in one clinic is not easy to organize – we are trying to not only improve the patient's outcome, but their entire experience."

How the surgical plan can change outcomes: "I feel good about my job. But you can only help so many people on a day-to-day basis. What excites me about this is there could be people dying of cancer in B.C. right now just because of these subtle differences that could be improved with little nudges. If we can do that I will help more people in one year than I can help in my entire career as a surgeon. Just through advocacy and hard work."

Why the plan will excite people: "The worst-kept secret for a decade is that surgery needs some attention. There is now great interest and support from the Ministry of Health and all the health authorities to improve cancer surgery in B.C."

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Four questions for Dr. Andrea MacNeill

Andrea MacNeill is a surgical oncologist and general surgeon who plies her trade at Vancouver General Hospital. The Oxford grad, who did her general surgery residency at UBC and fellowship in surgical oncology at the University of Toronto, is also the author of a study that showed the extraordinary, unsettling carbon footprint that surgical suites leave. Dr. MacNeill tells us more in this quick Q&A.

Q. In your surgical oncology training, you spent time working with surgeons in Toronto, Milan and London (England). What lessons did you learn, and how can patients in B.C. benefit from that experience?

A. You might think that surgery is highly uniform but in fact there are many variations in surgical technique, and tips and tricks that experienced, senior surgeons have picked up over their careers. Working with master surgeons in the fields of sarcoma and peritoneal malignancies provided exposure to these technical nuances and allowed me to synthesize my own composite approach from all of their pearls of wisdom. I was very fortunate to work with global thought leaders in both of these fields and participate in their academic endeavours, which has connected me to the international communities of care. This allows me to ensure that I am practising to the highest standards and staying abreast of new developments in the field, and opens up opportunities for patients in B.C. to participate in international collaboratives.

Q. You work with a group of cancer-focused surgeons at VGH. How does this teamwork impact patient care?

A. I have amazing colleagues at VGH who are committed to providing the best possible

patient care while also supporting each other, as optimal patient care requires healthy providers. We collaborate on difficult decision-making and operative planning, capitalizing on the collective wisdom of the group and providing mutual moral support. We also operate together on a regular basis, which is not only fun but also stimulating in the opportunity for continual technical refinement. Our team extends far beyond just our surgical group, however, and we are lucky to have incredible colleagues in pathology, gastro-enterology and other disciplines who all go above and beyond to provide excellent cancer care.

Q. What inspired you to make cancer surgery the focus of your clinical career?

A. I love the technical challenge of sarcoma and peritoneal malignancy surgery. It requires a certain artistry as no two cases are ever the same. Cancer surgery is inherently multidisciplinary and the close collaboration with our colleagues in medical and radiation oncology is both fun and rewarding. Above all, the opportunity to impact someone's life by taking out their cancer, or to offer them some relief during the darkest days of their life, is the most meaningful career I can imagine.

Q. Finally, a year ago, the Lancet Planetary Health journal published your study regarding the carbon footprint of surgical suites at three hospitals in England, the U.S. and here in Vancouver, which found that anaesthetic gases used in surgery contribute significantly to greenhouse gas emissions. In the seven years since you did the research, VGH has listened loud and clear and made changes. What inspired you to do this work – not your normal cancer research – how do you feel about what's happened, and what more can be done?

A. I was struck by the visible waste within the system and the paradox of a health care system that creates conditions which lead to increasing disease burden while purporting to restore health. Cancer is one of the leading environmentally mediated diseases, so climate change mitigation can easily be considered a form of cancer research. I feel incredibly fortunate to work in a hospital and a culture that is engaged in this work as the enthusiasm is infectious and it is very meaningful to effect real world change. There is endless work to be done in this realm: On a provincial level we need green building standards for new hospital construction and facilities operations; we need a complete overhaul of hospital food to reduce waste, food miles, as well as improve nutritional value; we need health systems to be redesigned to eliminate unnecessary investigations and treatment; and we need to prioritize environmental sustainability and ethical procurement in our supply chain. As a provincial structure, BC Cancer is well positioned to design clinical pathways for optimal resource use which will lead to cost and carbon savings, expedite care and minimize patient travel, and improve the patient experience of their cancer journey. Environmental sustainability is not a competing priority to the core mandate of health care, but rather a fundamental prerequisite for health – and the greatest public health issue of the modern era.

In the next Clinical Chronicle:

What you need to know about BC Cancer's psychiatry program, with Dr. Alan Bates