Foundations

BUILDING EXCELLENCE IN REGIONAL HEALTH CARE



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Jean's husband suffered an unthinkable accident just before Christmas. She has found family and comfort in the days since becoming a guest at JoeAnna's House.











"There comes a point where we need to stop just pulling people out of the river. We need to go upstream and find out why they're falling in."

Desmond Tutu, South African Anglican Cleric and Theologian



MESSAGE FROM THE CEO

GOING UPSTREAM

Our health care system consists of many rivers, many patients caught in the current, needing help. Medicine, like good folks on the river banks, can save them. But science compels us to pause, ask questions, and investigate the nature of the problem. The answers to these questions are essential. It is where science and medicine meet.

Implementing health systems research is like going upstream to determine what kind of bridge would prevent people from falling into the river in the first place. Hospitals with established, well-funded research networks become some of the best globally, attracting the brightest talent from across medical specialties. These are just some of the reasons why funding health systems research and innovation

at Kelowna General Hospital is so exciting. The idea of going upriver to investigate and generate systemic change is important.

A regional referral hospital like KGH that serves patients from across a large, diverse geographic area has unique challenges and opportunities. Our exceptional medical staff at KGH are blazing the trail forward and putting our hospital on the map as a centre for health care excellence. More and more, their work is being buoyed by forward-thinking donors willing to walk alongside them as they journey upstream.

In this special 'Research & Innovation' edition of Foundations, we take you into the labs, under the microscope, and into the fascinating minds of some of KGH's

best and brightest. We also share an update on our stroke campaign and a remarkable story of one very special JoeAnna's House quest.

Each story shares a common thread – you. Visionary and curious individuals making innovation and progress possible for the ultimate benefit of all who call the southern interior of B.C. home.

Despite the pandemic, we move forward. There is no shortage of good news to share.

Because giving changes everything.

Doug Rankmore

CEO, KGH Foundation

ADVANCING STATE-OF-THE-ART CARE

WHY DOES RESEARCH MATTER?



By: Dr. Devin HarrisExecutive Medical Director, Quality and Patient Safety, Interior Health

In the past, health research was considered only to occur in large academic centers. Further, medical research was primarily focused on medication trials or intervention trials, like testing types of surgery. We now know that research needs to be much broader in scope and embedded in care to improve overall health.

So, we have moved upstream, away from an acute-care and event-focused health care and research agenda, to shift to early diagnosis, early treatment, and prevention and management of chronic diseases.

Health research has broadened - knowing the significant impact that socioeconomic, demographic, cultural, psychological, environmental, and behavioural aspects have on an individual's health and health care experience. The priority in health research is shifting to favour health services research or implementation science research. In other words, this means focusing on research questions with potential outcomes that have a direct

impact on the quality and effectiveness of health services and can be put into practice immediately.

Today, the most important perspective is what matters to patients and families. We've asked them what drives them most, as research questions or as outcomes, and what matters to them concerning results from medications or surgeries or quality of life. Most importantly to the patients and families that call the southern interior home. we must answer questions that other sites and centers, like Vancouver, don't prioritize. We grapple with added challenges of geography, winter roads, and remote cities and towns. All patients deserve worldclass care. What innovations will make this possible? How might these solutions be applicable in other health regions with similar challenges? Rural and remote health services research is a priority. We are ideally situated here in Kelowna to investigate this.

The pandemic has illuminated other priorities, like accelerating research into virtual care. We are asking questions such as, 'What kind of education in self-management and virtual care will help keep patients in the comfort of their own homes to treat their chronic conditions? Can monitoring of vital signs, such as heart rate and oxygen saturation, be supported at home through technology? Could virtual platforms promote better access and equity of specialist care, especially for rural and remote areas?"

When every moment matters, can ambulance-delivered experimental medication for acute stroke be given immediately by paramedics, reducing the impact of stroke and effectively saving lives? Could the use of virtual reality

improve mood and activity in post-stroke rehabilitation patients?

The priorities for health research and the need for rapid innovation and change within the health care system have never been more evident. Our population is aging, and Kelowna (and Interior Health) is older than the rest of the province – answering questions about chronic disease management, frailty, and end-of-life care are being prioritized.

The answers to these questions represent the future of care in our region.

More than ever, the research agenda is driven in partnership with patients and families. The most pressing research questions come from those who have experienced care, who see the gaps and opportunities, and have the passion for being a champion of change through research.

Research needs experts – those with the training and experience – but research needs our community, as partners and as part of our team. Kelowna General Hospital has the potential to be internationally renowned and continue to attract the best and brightest. Together, if we dream big, the work being done at KGH and in the southern interior of B.C. can inform other jurisdictions nationally and internationally.

Unlocking the answers to some of the biggest questions we face in health care today isn't a matter of how.

It's only a matter of when.





GASTROINTESTINAL RESEARCH AT KGH

GUT INSTINCT

"Thanks to donors' commitment to funding research and innovation, in addition to bricks and mortar or equipment, KGH is being recognized as a centre of health care excellence - in our province, nationally and internationally."

Dr. Adrian Bak, Gastroenterologist, Kelowna General Hospital

Over the last several years, KGH
Gastroenterologist and UBC Clinical
Assistant Professor of Gastroenterology,
Dr. Adrian Bak and a team of top
KGH gastroenterologists, surgeons,
anesthesiologists, medical students and
nurses have dedicated time to work that
takes them out of the procedure rooms
and into the role of clinician-researchers.
Specifically, Dr. Bak has led three major
research projects to enhance the quality of
care for patients by improving the safety of
endoscopic procedures and increasing the
early detection of colon cancer.

As a gastroenterologist, Dr. Bak focuses on the health of the digestive system or the gastrointestinal (GI) tract. The GI system is responsible for the digestion of food, absorption of nutrients, and removal of waste from the body. Gastroenterologists diagnose and treat diseases that occur in the GI system, often using endoscopy, a diagnostic tool that allows them to examine the interior of an organ or body cavity, in this case, the stomach, intestines, and colon. Examples of common GI endoscopic procedures include sigmoidoscopy, gastroscopy, and colonoscopy. Dr. Bak also performs Endoscopic Retrograde Cholangiopancreatography or ERCP, a specialized endoscopic procedure to diagnose and treat problems in the liver, gallbladder, bile ducts, and pancreas.

Dr. Bak's research projects involve a partnership between himself, the KGH Foundation, and ongoing support from medical students and the UBC Southern Medical program.

The water exchange randomized control study is focused on improving colon cancer screening practices by exploring an innovative method of colonoscope insertion using water as opposed to gas that reduces patient discomfort and improves diagnostic performance. Colorectal cancer is the third most common type of cancer in Canada, and screening is key in preventing colon cancer by finding and removing polyps before they turn into cancer or by detecting cancers earlier. Early identification means more treatment options and better outcomes.

The water exchange after failed colonoscopy study uses the same technique of water colonoscope insertion. The technique allows for a successful colonoscopy in patients that previously had an incomplete colonoscopy, which is critical in the detection and prevention of polyps, cancers, and other GI abnormalities.

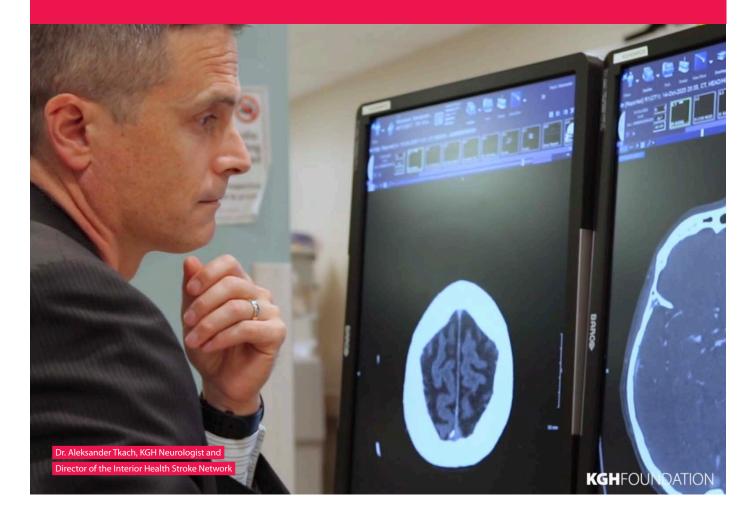
The third study involves researching the impact of transitioning to full anesthesia care for the performance of ERCP and looks to quantify the improvements that come with performing ERCP under anesthetic

care as opposed to the previous practice of sedation without anesthesia assistance. The study examines patient outcomes and efficiencies, and its findings will help direct further improvements to patient safety and reduce complications related to the procedure. KGH performs approximately 1,000 ERCP procedures each year and is the first hospital in British Columbia to transition to full time anesthesia care for ERCP.

In October 2019, hoping to continue to build additional capacity for these crucial projects, Dr. Bak approached the KGH Foundation to see if partnership was possible in funding GI innovation and/or research being conducted right here at KGH. Indeed, there was already a local donor who had expressed interest.

"Not only does this allow us to advance care for our own patients, but it helps attract the top physicians from around the world," says Dr. Bak. "Thanks to donors' commitment to funding research and innovation, in addition to bricks and mortar or equipment, KGH is being recognized as a centre of health care excellence - in our province, nationally and internationally."

Dr. Bak's research team is now publishing their research findings and speaking at conferences to disseminate their findings to other institutions across Canada.



FUNDING THE FUTURE

RESEARCH & INNOVATION IN REGIONAL STROKE CARE

This past March, the KGH Foundation officially launched the Every Moment Matters campaign – a commitment to raising \$8 million to support advanced stroke care at Kelowna General Hospital as the hub for a network of stroke care. The fundraising approach is unique.

Acquiring the most advanced equipment and improving access to specialist care for all patients in Interior Health is paramount to advancing stroke care in the region. The campaign will provide \$4.6 million to fund Endovascular Thrombectomy (EVT) at KGH, a procedure in which interventional radiologists, with the guidance of neurologists, pull a blood clot out of a stroke patient's artery to restore blood flow to the brain.

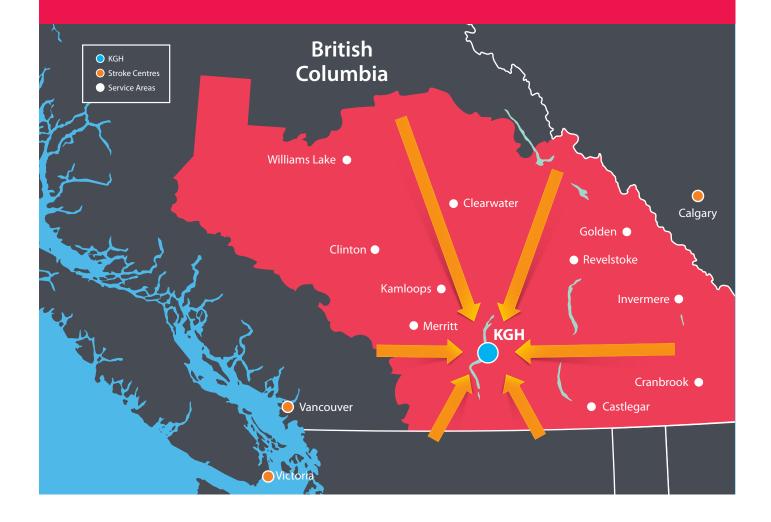
Funding the future of stroke care in the southern interior region of B.C. extends far beyond acquiring this life-saving specialized medical equipment. Bright minds at KGH and throughout the health authority have been working together to address some of the health system's biggest challenges.

The Interior Health Stroke Network, directed by **Cory Bendall**, is dedicated to expanding its research 'reach' within the health authority, teaming up with several vital departments (emergency, diagnostic imaging, acute care, and rehabilitation) to make this possible. Research funding provided by the campaign will expand the opportunity for patients from across the region, not just in Kelowna, to



participate in studies and clinical trials. This is so very important for equity of care and advancing practice.

Interior Health is already fast becoming an industry leader in remote telehealth. This exciting field allows rural patients to access world-class physicians, specialists, and diagnostics from their home communities, increasing the chances



Research funding provided by the campaign will expand the

opportunity for patients from across the region, not just Kelowna

of the right patient getting the proper treatment as quickly as possible.

Multiple studies have demonstrated that hospitals with access to a neurologist provide better and faster care if they are efficient at using the telehealth system when taking care of acute stroke patients. The stroke campaign aims to fund the expansion of telehealth service throughout the region, with \$2.2 million earmarked specifically for continued innovation in stroke telehealth and rural/remote system development and quality of care improvement opportunities.

Unfortunately, simply placing a camera and a screen in a hospital does little to help people on its own. Instead,

relationships must be forged at each site to truly understand the unique nature of care in the local community. Needed most is the time and resources to go to each site and collaborate alongside local health care team colleagues to achieve the goal of excellent stroke care for all patients regardless of location.

Finally, the development of a \$1 million Strategic Innovation Stroke Fund aims to advance leading-edge initiatives and support projects to reduce the impact of stroke for those living in the Interior Health region, mainly rural, remote, and Indigenous communities.

With a focus on early intervention for acute stroke, rehabilitation, community-

based care, and the reduction of disability and recurrent stroke for stroke survivors, projects would benefit the patient population within Interior Health. Additionally, it would enable and inform other jurisdictions in health system planning for improved stroke care. A robust evaluation strategy is intended to present, publish, and disseminate knowledge from initiatives and share with the world.



INNOVATION IN BLADDER CANCER DIAGNOSTICS

THE POWER OF BLUE

"With only a handful of Canadian hospitals offering this technology and none in the B.C. interior, we know how fortunate we are. Blue Light Cystoscopy saves lives."

Dr. Joshua Wiesenthal, Urologist, Kelowna General Hospital

This year alone, over 12,000 people in Canada will be diagnosed with bladder cancer. It is the fifth most common cancer in the country, is difficult and expensive to treat, and comes with a daunting 60-70% recurrence rate.

Physicians worldwide have been exploring new treatments and technologies to improve outcomes for bladder cancer patients. One of the most exciting innovations is Blue Light Cystoscopy. This powerful diagnostic tool allows urologists to improve tumor detection at the time of surgery vastly and subsequently reduce the risk of cancer recurrence. In British Columbia, donors have been primarily responsible for funding this life-saving, innovative technology; therefore, it was only

available in three hospitals - Vancouver, Victoria, and Surrey. So when **Dr. Joshua Wiesenthal**, a top urologist at Kelowna General Hospital learned that a donor had come forward to fund Blue Light Cystoscopy at KGH, he was thrilled.

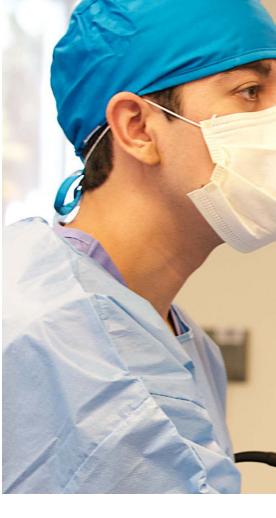
Dr. Wiesenthal explains how the procedure works;

"About an hour before the bladder tumour resection, a special solution called Cysview is inserted into the bladder. This agent is preferentially absorbed by the tumour, essentially highlighting it when viewed under a blue light filter. The procedure enhances the detection and visualization of non-muscle, invasive bladder cancer to help ensure the complete surgical removal of all suspicious lesions. It reveals lesions that

may not be seen with a standard white light during the surgical procedure."

In addition to standard procedures, Blue Light Cystoscopy can reduce the recurrence of tumours by 12-43%, depending on the type of bladder tumour, resulting in an immediate impact for patients from across the southern interior.

Patients like David Tufts, who had his first surgery to remove cancerous bladder tumours in September 2020 are having positive outcomes. Despite ongoing treatment to prevent a recurrence, Mr. Tufts found himself to be a patient of Dr. Wiesenthal's once again in the spring of 2021. He would be the first patient at KGH to receive the newly funded Blue Light Cystoscopy. The diagnostics revealed





high-grade cancer that was not visible under white light. Dr. Wiesenthal found and removed four tumors that would not have been seen until they had advanced, had it not been for this new procedure.

"The blue light diagnostic saved me several months of additional treatments and surgeries," says Mr. Tufts. "By finding the tumors early, we have prevented the cancer from growing and spreading."

Dr. Wiesenthal says, "I was excited. The technology is remarkable! We discovered four tumors that were undetectable under white light. I am incredibly grateful to the donors that made this acquisition possible for KGH."

Blue Light Cystoscopy was made possible at Kelowna General Hospital by **Peter and**

Donna Harco and their company HAL Industries Inc. The Surrey residents had already funded the equipment at Surrey Memorial Hospital. In recent years, the Harcos have been spending more time at their property in the Okanagan, and so, in March 2019, Peter reached out to the KGH Foundation to inquire about bringing Blue Light technology to KGH.

"Bladder cancer is very common, but rarely talked about," says Mr. Harco. "A Blue Light exam of the bladder finds cancer before it has time to grow large and more serious. My goal in making these gifts is to help patients fight cancer in every way possible. The hard and dedicated work of our employees ultimately makes this and other donations possible."



DESIGNATE YOUR GIFT

If there is a certain area of care that is meaningful to you, please reach out. Leadership gifts have created opportunities that wouldn't otherwise be available – community partners like you can help to transform healthcare in our region.

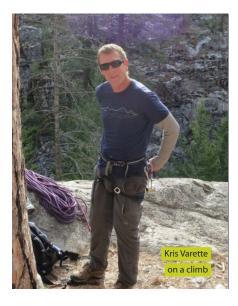
Learn more at **kghfoundation.com/ make-a-major-gift**

CARDIAC RESEARCH - SAVE BC PROJECT

HEART MATTERS







It was the sudden loss of their son,
Kris, to a heart attack that compelled
Cam Kourany and Sharon Varette to
ask questions. Kris was young, fit, and
seemingly healthy. Cardiac arrest isn't
supposed to happen to young men in
the prime of their life. It turns out, though,
increasingly, it does; fathers, friends,
neighbours, and colleagues, passing
suddenly in the locker room after a hockey
game, or in the middle of a run they've
done a hundred times before.

In the spring of 2018, the couple reached out to the KGH Foundation and the Interior Health (IH) Research Department with the hope of answering their questions. What started with a small exploratory project to better understand the issues surrounding premature atherosclerotic cardiac events, soon became the foundation for a provincial partnership and an opportunity to join SAVE BC: The Study to Avoid Cardiovascular Events in British Columbia.

The overall goal of SAVE BC is to establish a screening program for people at risk of premature cardiovascular disease. The study looks at risk factors, medication use, cardiovascular events, and health

care costs in these individuals to help determine how best to identify and support people at risk for premature cardiovascular disease (CVD) – in terms of prevention and treatment – now and in the future.

With the support of Cam, Sharon, and KGH Cardiologist, **Dr. Frank Halperin**, Kelowna General Hospital was added as a site for the study in March 2019, joining the original two Vancouver hospitals. In November of 2020, the recruitment for 25 participants from the interior region with extremely premature cardiovascular disease had begun.

The longitudinal study will be conducted over several decades. When compared to other studies investigating premature CVD around the world, the SAVE BC program is unique in terms of its proposed scale and the definition of age – (defined as under 50 years in men and 55 years in women) of disease onset.

Holly Buhler, IH Regional Practice Lead, Research & Knowledge Translation, says, "As far as we are aware, the SAVE BC program is the first of its kind in the world. Its structure allows for large-scale, high-quality data to be collected from a population at the greatest risk of CVD. This should enable the identification of novel disease markers and predictors, and ultimately, inform preventative and therapeutic opportunities for patients and families across BC."

For Cam and Sharon, however, the goal is more personal. "Our hope is that this study will eventually spare other families the heartache of losing a loved one far too soon," says Sharon. "Being able to honour Kris' memory by taking action in support of other men and women just like him has been healing for us. We know this research will save lives. And that's what truly matters."

The overall goal of

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EVERY MOMENT MATTERS - ADVANCING STROKE CARE AT KGH

STROKE CAMPAIGN UPDATE



By Allison Ramchuk Chief Development Officer

It was ready to go. The public launch of the Every Moment Matters campaign was planned for March 14, 2020, the very day B.C. was officially instructed to 'go home' and isolate from the pressing threat of a global pandemic. In light of the evolving health crisis, the \$8 million campaign for advanced stroke care was quietly paused.

In the meantime, we had to reimagine what fundraising would look like when inperson meetings and large gatherings were no longer possible. We had to innovate, explore new strategies using technology, and lean on tried and true communications, like calling folks on the phone. Like us, our donors and community were starved for connection, even if mediated. Though we hadn't launched publicly, our faithful partners remained resolute in their

commitment to advancing stroke care for al who call the southern interior of B.C. home. Like us, our community adapted and found unique ways to show support; our friends at the **Kelowna Nordic Club** launched an online fundraiser hoping to raise \$20,000 and proceeded to blow their goal out of the... snow... raising a whopping \$51,685.

Nearly one year later, on March 11, 2021, the campaign was officially unveiled, along with the biggest' mother of all billboards' ever to grace the exterior of Kelowna General Hospital. But was the community ready? The definitive answer came on April 22, the fifth annual KGH Foundation Day of Giving.

A record-breaking total of \$1,052,648 was raised. **Five generous local families** agreed to match all gifts up to \$500,000. As the end of the day drew near, it became clear that the threshold was in sight. Another incredible family stepped up, and as a result, all 1,208 gifts (another record-breaker) were matched.

We also re-envisioned what in-person giving would look like on Day of Giving. A drive-thru donation station was set up, allowing people the opportunity to (safely) give in person while still maintaining provincial health guidelines. COVID silver linings have been much of the talk this past year, and this was one of ours.

REALTORS, financial advisors, and lawyers showed up to challenge each other. Local businesses also stepped up, alongside folks from all over the Okanagan, making the trip to KGH. In a time of uncertainty, it is times like this that remind me why I love fundraising for health care so much; the generosity, stories, connections, gratitude, laughs, tears, and our shared mission – better health care for all, right here at home.

The following day, the team received an email from **Dr. Aleksander Tkach**, KGH Neurologist and Director of the Interior Health Stroke Network, a friend and partner in this campaign from the very beginning.

"So many reasons to be so grateful and feel so humble. With the help of this campaign, we are becoming leaders not only in B.C. and Canada but beyond. This fundraiser is part of a cultural change. Where once there were feelings of helplessness, we now see empowerment. This goes beyond KGH and even beyond stroke care. We all share in this new vision for the future, where we are all partners. There are no words to express how grateful I am."

Now, the question I get asked most is... how much do we have left? Together, including Day of Giving, we have already raised \$6.6 million. \$1.4 million to go and I have no doubt we will get there.

With gratitude for the continued support and partnership of the local **Bell radio stations** – **Virgin 99.9, MOVE 101.5** and **AM 1150** – the on-air personalities, producers and promotions teams for their critical role in the success of the Day of Giving fundraising effort.

JOEANNA'S HOUSE | GEORGE & JEAN'S STORY

151 REASONS AND COUNTING TO BE GRATEFUL

It was December 23, 2020. The holidays were drawing near. George prepared a care package of cookies and headed out, hoping to catch the local garbage man as he made his weekly route in their hometown of Creston, B.C. His wife, Jean, was in the kitchen preparing for the upcoming holiday festivities. After some time, she sensed that George had been gone too long.

Jean walked out of the house and saw flashing lights. As she approached the scene, a passerby stopped her. The woman said, "He told us your name was Jean when he was still awake. Come sit in my car, he's very injured."

As Jean sat in the car, she saw an emergency worker walk by with an object in his hands, covered by a blanket. "I knew it was his arm," said Jean.

George, with his bundle of cookies, had been accidentally run over by the giant garbage truck.

George was transported to the Creston Valley Hospital, where Jean would soon learn the gravity of his injuries. His arm was severed, he'd lost a lot of blood, his right leg was severely damaged, and his pelvis was broken.

Indeed, traumatic accidents do not yield for pandemics. In their wake, families and loved ones from across the southern interior of B.C. find themselves at the door of JoeAnna's House.

The plane arrived to take George to Kelowna General Hospital. There he would receive the specialized, advanced care he needed from teams of specialists - vascular, orthopedic, and plastic surgeons; specialized nursing for wound and enterostomal care; an internist, hospitalist, and physiotherapist, to name a few. It would be a long haul.

Jean arrived, alone, at JoeAnna's House on January 1. In the 151 days (and counting) since, she has become family. She is hoping that she and George, both in their seventies, can go home sometime this June.

"I couldn't have done this without JoeAnna's House. I am incredibly grateful," says Jean. "I have been here for over 100 days. Had I stayed in a hotel by myself, at \$100 per night, it would have been unaffordable and unbearably lonely. I would have had to go back home and leave George. He would not have improved as quickly as he has. There is a group of us long-timers here. We have helped one another so much."

Meanwhile, all things considered, George is in great spirits. He calls his arm "Stumpy".

JoeAnna's House has remained open to receiving families in need through the pandemic. Thanks to the continued generosity of donors, people like Jean have a beautiful, safe home-away-fromhome and a family to welcome them in.









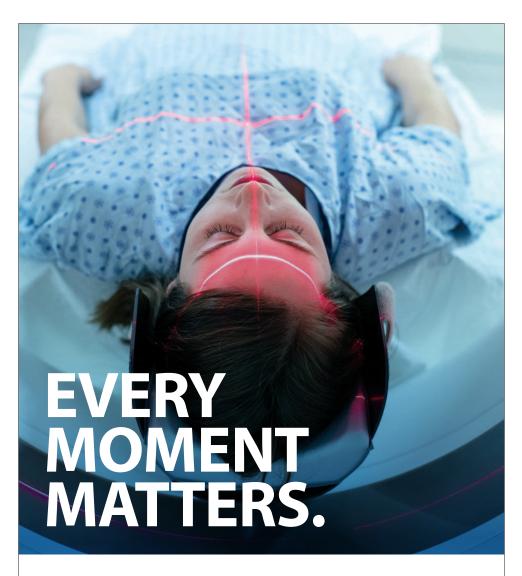




CARE FOR GUESTS OF JOEANNA'S HOUSE

Travelling for health care purposes doesn't stop for a pandemic. JoeAnna's House has been operating steadily at 75% capacity and continues to provide a safe space for families needing to come to Kelowna for care. Your gift will help to provide relief in a time when stress is already so escalated.

Learn more at joeannashouse.com



Stroke. One of the most devastating medical challenges we face. But there's hope.

Help us raise \$8 million to transform stroke care for all who call the southern interior home. When every moment matters, we can be ready.

Please visit www.kghfoundation.com to learn more.



KGHFOUNDATION GOOD NEWS

The KGH Foundation's e-newsletter keeps you informed on the latest fundraising initiatives, special events, patient stories, volunteers and hospital updates.

To sign up, visit **kghfoundation.com**

Giving Changes Everything.

KGHFOUNDATION

