SPOTLIGHT ON CARDIAC SCIENCES

Cardiac Care Through the Eyes of a Patient

Crafting a Cardiac Centre of Excellence

A World Class Team in Cardiac Sciences

Cardiac Care Based on Urgency, Logic

WINTER WEATHER SAFETY
Dr. Alan Menkis was once one of the busiest heart transplant doctors in Canada. He assisted on the first artificial heart implant in the country, was a member of the surgical team that was among the first to introduce a pediatric heart transplant program and another that pioneered robotic heart surgery.

Menkis probably could have taken his celebrated skills and experience anywhere in the world, so he chose the place he believes will soon be the model for cardiac care excellence around the world—the Winnipeg Regional Health Authority’s (WRHA) Cardiac Sciences Program.

“Responding to the Koshal Report, the Regional Health Authority committed to creating a cardiac sciences program comprised of cardiology, cardiac surgery, cardiac anaesthesia, cardiac critical care and cardiac rehabilitation, all under one umbrella with a separate budget, a designated cardiac intensive care unit and consolidation of most services at one hospital.” says Menkis, Medical Director of the WRHA's Cardiac Sciences Program and its Medical Director of Cardiac Surgery. “That plan sets the stage for the development and delivery of a world class system of cardiac care in the province of Manitoba. The timing was right to come here. I am Canadian and wanted to stay in this country. Winnipeg afforded a great opportunity to build an exceptional cardiac team.”

Menkis says the decision to centralize cardiac services contributes to patient care excellence because it promotes teamwork, better communication and good working relationships among the Cardiac Sciences staff. Improved communication is also vital for program’s development including planning and quality research.

“Emphasizing teamwork is a real core value for what we’re trying to do as a program,” says Menkis. “Teamwork is absolutely essential to our success.”

Menkis’s past experience in pilot training helped him see the analogy between the cockpit and the operating room.

“They were actually very similar—the interaction of people and technology to achieve a common goal,” says Menkis, noting everyone, from physicians to support staff, have something to contribute to the team. “We work hard to empower team members to focus on the patient as
the centre of activity, recognizing that we’re all here to make sure the job gets done properly and safely—nothing less.”

The program’s $50 million program budget plus a multi-million capital investment, reflects the strong commitment from the WRHA, St. Boniface General Hospital and Research Foundation and the Province of Manitoba to realizing a true cardiac centre of excellence.

“The rapid pace of programs and development has been impressive by even the most demanding healthcare standards,” says Menkis.

Strategic recruitment of some of the finest cardiac physicians in Canada has been a key element in the Cardiac Sciences Program development to date. Menkis notes the staff currently includes no less than three surgeons who are not only proficient in cardiac care but are also PhDs, offering a level of research expertise unparalleled anywhere else in the country. The Program’s cardiac surgeons have trained at the best facilities in the world and have brought these highly specialized skills back to Winnipeg. A large contingent of dedicated, cardiac care nurses, under the guidance of Program Director Francis LaBossière, is also integral to quality care delivery.

Several of the program’s cardiac anaesthetists are considered world leaders, proficient in pre- and post-operative care, but also bring expertise in sophisticated echocardiography, a procedure that involves

the use of a sonar device that allows the surgical team to see the heart functioning in real time during an operation.

“These people are extremely well trained, have been doing this for many years and their combined expertise is a real asset that few other heart centres can boast,” says Menkis.

The WRHA’s cardiac anaesthesia team proved itself to be among the most progressive in Canada through the strides made in fast-tracking patients from surgery to post-surgical rehabilitation. Menkis says their expertise allows 65 to 80 per cent of their patients to come out of the operating room, not hooked up to a breathing machine, but sitting up and talking to the clinical team. Staff work together to have post-surgical patients sitting on the side of their beds just a few hours after surgery, walking down the hallway within 24 hours, and discharged from the hospital in about four to five days.

“All of this is rehabilitation and the whole program philosophy is really a wellness model,” says Menkis. “Often after surgery, the patient’s health is actually better than it was before, so why treat them like they are worse?”

The WRHA’s Critical Care Program has a long, solid reputation for quality care and efficiency and the new cardiac critical care model has only strengthened that service. Nursing staff and attending staff physicians look after patients 24/7, 365 days a year, so patients can be assured their care is in the hands of the most experienced people in the system.

Menkis says the results of the consolidation are already encouraging, crystallizing the team’s shared vision that the Cardiac Sciences Program in the Winnipeg health region will ultimately be the model that other jurisdictions will want to copy.

“I truly believe ours will be the best cardiac care program in the world,” says Menkis. “And we’re getting there—in leaps and bounds.”
Sharing a spirit of progress and innovation, the Winnipeg Regional Health Authority’s (WRHA) Cardiac Sciences Program team members continue to foster a true centre of cardiac care excellence. Equally as significant to their work as science and technology is the human touch—the dedication, skill, knowledge and camaraderie of staff in each section of this unique service model.

The Cardiac Sciences Program consists of four main areas of care—Cardiology, Cardiac Anaesthesiology, Cardiac Surgery and Cardiac Intensive Care—as well as Cardiac Rehabilitation services on-site and in the community. Located on the St. Boniface General Hospital campus, the newly constructed $23 million Bergen Cardiac Care Centre houses cardiology services and will soon include select cardiac surgery and nursing components. Plans are also underway to relocate the Cardiac Intensive Care Unit, the Cardiac Surgery Inpatient Unit and other outpatient activities in the adjacent Asper Institute building.

Leading the charge are accomplished people with uncommon expertise and a shared vision—that Winnipeg is on its way to becoming one of the most admired and respected cardiac care centres in the world.

**Cardiac Surgery & Cardiac Sciences Program Medical Director**

A world-renowned surgeon, Dr. Alan Menkis has the dual responsibilities as Cardiac Sciences Program Medical Director and Medical Director of Cardiac Surgery. The unit is responsible for all of the heart surgeries previously divided between St. Boniface General Hospital (SBGH) and the Health Sciences Centre. Having the surgeries at one location, with easy access to a wide range of highly specialized cardiac services available, ensures patients get the best care possible. Menkis says patients are usually referred for care from either primary, secondary or tertiary care providers.

Patients who’ve been admitted to hospital awaiting surgery usually have surgery in a matter of days, with the time leading up to their operations used to properly prepare them for the surgery and help ensure the best outcome. Menkis says 42 per cent of the unit’s patients have their surgeries without leaving hospital, never registering in official wait list statistics. Logic, urgency and negotiation are involved in deciding when it’s most appropriate for each patient to have their surgery but Menkis assures that “the program’s experts work hard to ensure that patients receive the treatment they require when they need it.”

**Cardiac Sciences Team Program Director**

As Regional Program Director for Cardiac Sciences and the St. Boniface General Hospital (SBGH) Site Director for Cardiac Sciences, Francis LaBossière works with the Program’s Leadership Team in planning for the resources and services of the Cardiac Sciences Program in the Winnipeg region. He handles daily operational issues, budget considerations and service quality at the St. Boniface site, in addition to his regional responsibilities. Nurses are vital to the unit’s success, comprising nearly 80 per cent of the labour required to deliver cardiac services in Winnipeg, so LaBossière’s own nursing background serves him well in his staff management role.

“We’re in a very big transition—we’re a program that is only three years old so, with any change, comes upheaval but, also, opportunity,” says LaBossière. “I believe there is a very big opportunity to create a strong centre of excellence; a dynamic academic environment where the people working in our program are also major players in contributing to the development of new knowledge in their areas of expertise. Patients can only gain from that.”

**Cardiology**

Dr. James Tam is the WRHA’s Medical Director of Cardiology. The SBGH is one of two teaching hospitals in Winnipeg, providing practical training for medical students and medical residents, so Dr. Tam leads cardiology-related academic and clinical services.

“As cardiologists, we are the ones responsible for diagnoses and streamlining patient care,” says Tam, of his 18-member staff. “Our role might be simple reassurance or more complex investigation often leading to the performance of tests to underline the scope of the patient’s difficulties.”

These specialized physicians might
prescribe drug treatments or consult with other medical and paramedical service providers, such as cardiac surgeons, psychologists, physiotherapists, or pharmacists, to determine the best course of treatment for the patient.

Cardiac Anaesthesia
The medical specialty of cardiac anaesthesia involves far more than administering medical gases and asking the patient to count backwards from 100.

Anaesthesiologists are medical doctors with five years of additional training in the science and application of anaesthesia. Cardiac anaesthesiologists train for a sixth year, specializing in cardiac care. While most perform general anaesthesia duties, their role in the cardiac sciences program relates to heart surgery—before, during and after.

Dr. Scott MacKenzie is the WRHA’s Medical Director for Cardiac Anaesthesia, responsible for co-ordinating the activities of 14 anaesthesiologists. MacKenzie works in collaboration with Dr. Eric Jacobsohn, Head of Anaesthesia Services for the WRHA. In his work, Jacobsohn recruits, places, and promotes anaesthesiologists in Winnipeg.

“Ideally, we meet with patients in the clinic before their surgeries to examine them and explain our role over the next day or so,” says MacKenzie. “Part of our job is to allay any anxiety patients may have. It’s an opportunity to establish a relationship and make patients feel more comfortable.”

MacKenzie says patients learn about the thorough monitoring that they will receive during and after their surgeries. Their responsibilities are critical to the success of the operation, as they monitor all life support functions, such as breathing and circulation. They provide arterial catheters to measure blood pressure and central venous catheters to measure central venous pressures and intra-venous fluids and medications as needed. As a standard of care, the cardiac anaesthesiologist also performs intra-operative, trans-esophageal echocardiography which involves inserting a small tube down the patient’s throat that provides ultrasound images of the heart’s function during surgery.

The anaesthesiologist’s work continues with patients for another six to eight hours in the post-surgical, cardiac intensive care unit, helping to stabilize patients and help get them on the road to recovery.

The program has been very successful in recruiting extraordinarily talented cardiac anaesthesiologists because they recognize the innovation and potential of the WRHA’s Cardiac Sciences Program.

“The working relationship between the sub-specialties here is very collegial,” says MacKenzie. “We all work together for the benefit of the patient and it’s a very positive work environment.”

Cardiac Intensive Care
As Medical Director of Intensive Care Cardiac Sciences, Dr. Joel Zivot leads a team of about 20 intensivists in the unit, designed specifically for patients recovering from various types of heart surgery. This unit, to be relocated at the Asper Institute, was established in response to the Koshal Report recommendation that cardiac patients should have a designated intensive care unit, separate from the hospital’s general intensive care unit. This way, cardiac patients can get the specialized care and attention they need until they are well enough to proceed to their next phase of recovering, in the cardiac nursing unit.

“There’s a specialty in medicine that most people have never heard of—intensive care medicine,” says Zivot, describing the unit’s physicians. “Colloquially called intensivists, these physicians must be either surgeons, anaesthetists, pediatricians or internists first, before studying this second specialty.”

Zivot says all four sub-sections of the Cardiac Sciences Program are equally critical to the functioning of a comprehensive program and work in collaboration.

“We help each other,” says Zivot. “We decide, as a group, what’s best for our patients and ensure the patients get the care and treatment they need.”
Cardiac Care Through the Eyes of a Patient

Winnipegger Bryan Shore recalls “not feeling like myself” for several days before his wife, wondering if he might have heart trouble, urged him to go where she heard the cardiac care is exemplary—St. Boniface General Hospital (SBGH).

Bryan noticed he would become winded fairly easily for months before, but he was startled when the cardiac unit staff advised him of the reasons for his discomfort. “I entered the hospital where an enzyme test showed only slight elevations. My blood pressure and cholesterol were normal and I am a non-smoker,” says Shore. “However, an angiogram soon revealed three plugged arteries—100, 90 and 80 per cent, respectively—which I was put on medication and sent home to await bypass surgery.”

Shore says his doctors believed the damage may have been caused by a minor heart attack he suffered during treatment for a sciatic nerve problem a few years earlier. He says he was diagnosed and treated in a “reasonable time” and his surgery date changed once in favour of “someone who needed it more than me.”

Dr. Alan Menkis, Medical Director of the Winnipeg Regional Health Authority’s (WRHA) Cardiac Sciences Program, says Shore is a good example of the possible consequences for people who ignore the signs and symptoms of heart disease, though they may be vague but persistent. Menkis says Shore was correct to go to a hospital when the pressure in his chest became uncomfortable, noting many patients describe the sensation as feeling like “someone is sitting on my chest.” It’s a squeezing sensation more than the Hollywood-ized stabbing pain.

“Bryan had those symptoms, went to the hospital, was transferred to the cardiac sciences unit, examined, scheduled for surgery and all went well,” says Menkis. “Symptoms like his could have been overlooked by someone else who might have dismissed them, thinking ‘it’s just gas.’ If an episode lasts more than 10 or 15 minutes, people should go immediately to the hospital.”

Shaken by the severity of his condition and fearful of the prospect of major surgery, Shore said he took the opportunity to get his affairs in order, even drafting his own obituary. But the Cardiac Sciences team was determined to provide the 65-year-old Shore with a far more positive outcome.

Menkis and his team successfully performed Shore’s three-hour triple bypass surgery, essentially giving the Transcona resident a new lease on life. “The care at the hospital was just great,” says Shore, noting he remembers little of the surgical experience because of his heavily medicated state. “I felt very fortunate to have been treated there.”

Shore praised the “wonderful” nursing staff for their outstanding competence and kindness, saying “you just fall in love with every one of them.” He says the entire team was very amicable and professional, from his initial examination and diagnosis through surgery and critical care. He was discharged four days later—on Father’s Day—with medication to help maintain his newfound good health and instructions to attend a physical rehabilitation program at the Reh-Fit Centre.

He says his recovery period was challenging and fraught with emotion at his apparent brush with mortality. With the support of his family and physicians, he reports he is slowly but surely coming around to his “new way of life.” “I have a wife, two grown children and six grandchildren whom I love very much,” says Shore. “I am so grateful to be able to watch the kids grow up a little longer.”
Cardiac Care
Based on Urgency, Logic

Patients urgently requiring cardiac care receive treatment when they need it. That’s what Dr. Alan Menkis, the Winnipeg Regional Health Authority’s (WRHA) Medical Director of the Cardiac Sciences Program says of the program’s triage method of treating patients.

“Cardiac patients who are in the hospital and too ill to go home are, obviously, in the urgent category,” says Menkis. “Patients who come in through emergency with a life-threatening problem receive treatment minutes to hours from their arrival, in the next available operating room.”

People in these patient categories, along with those awaiting surgery, have their surgeries within acceptable timelines, according to established national standards. Menkis notes the WRHA’s Cardiac Sciences Program has consistently met or exceeded the national standards for cardiac wait times.

Often, patients are required to wait for surgery in their own best interests. Menkis says hospitalized patients, whose conditions require stabilization or further investigation, typically wait one to two weeks for surgery.

There are some patients who choose to delay surgery to attend special occasions, such as a family wedding, and those requests are honoured wherever appropriate.

Menkis says the condition of every patient is carefully considered when prioritizing surgery dates. In cases where the patient’s condition unexpectedly worsens, that patient is rescheduled accordingly.

About 42 per cent of all of the Program’s patients receive their surgery as an inpatient during their first hospital visit, and therefore these cases don’t appear in the wait list statistics.

“Patients, who do not need emergency surgery but are in stable condition, may actually be better off to wait five to seven days for surgery, so their bodies can recover from pre-operative therapies, such as blood thinning medications, so they can go to surgery under optimal circumstances,” says Menkis. “We must balance the risks of patients waiting for surgeries against sending them to surgery too soon. The bottom line is that these patients receive their surgery when they need it.”

Heart Health facts

KNOW THE RISK FACTORS

Cardiovascular disease or heart disease is the number one killer in Canada. It is also the most costly disease in Canada, putting the greatest burden on our national health care system.

According to the Heart and Stroke Foundation of Canada, several factors, individually or in combination, can lead to heart disease:

• smoking
• diets rich in saturated fat
• physical inactivity
• stress
• family history of heart disease
• being overweight

Medical conditions such as diabetes, high blood pressure, high blood cholesterol and obesity are also serious risk factors.

BE HEART SMART

FROM THE START

• Don’t smoke.
• Eat a wider variety of foods.
• Get an accumulated 60 minutes of physical activity every day.
• Control your weight, but avoid fad or miracle diets.
• Have regular medical check-ups that include measurement of your blood cholesterol level.

- Information from Health Canada

KNOW THE SIGNS

Dr. Alan Menkis, Medical Director of the WRHA’s Cardiac Sciences Program encourages everyone to know the signs and symptoms of a heart attack:

• sudden, persistent squeezing/pressure feeling in the centre of the chest that may also be felt in the chest, neck, jaw, shoulder, arms or back; the word “angina” means “choking” in Greek
• in women, the pain may feel more vague but affects the same areas
• difficulty breathing
• indigestion
• vomiting
• cool/clammy skin
• increased anxiety

If you have any combination of these symptoms, you should seek medical attention immediately. Call 9-1-1 or ask someone to drive you to a hospital.
Winter Weather Safety

Winter is upon us and to keep you and your family safe and warm, here are some tips for from the Winnipeg Health Region for coping with the cold this season.

• While indoors, try to keep at least one room heated to 20° C. This is especially important for the older adults and small children to prevent hypothermia.

• Avoid fatigue and exhaustion during cold weather. Overexertion, such as shoveling snow or pushing a car, can strain your heart.

• Prescription drugs may increase vulnerability to cold. Check with your doctor or pharmacist.

• Wear layers of warm, dry clothing including hat and gloves outdoors.

• Cover exposed skin surfaces as protection from frostbite (numbness, red-white nose, chin, fingers, forehead, stiff cheeks); warm affected areas gradually by wrapping or placing next to warm skin; do not rub.

• Use particular caution on slippery surfaces during winter weather. Wear winter footwear with good treads; consider using foot traction aids like Yaktrax; use ice picks on canes; and reschedule outings or appointments on days that are particularly slippery. Keep sidewalks and entrances clear and use salt or sand on ice.

• Be aware of hypothermia (body temperature of 35°C/95°F or less). Signs include stiff muscles, puffy face, slurred speech, shivering uncontrollably, slowed breathing, poor physical condition and mental confusion. If these signs are recognized, call 911.

• Be careful when using fireplaces, stoves or space heaters to stay warm. Carbon monoxide poisoning and home fires are very real winter hazards.

• Older adults and the very young should stay indoors as much as possible. Offer to shop for older friends and relatives. Just as with summer heat, it takes some time to get acclimated to cold weather.

EASY WAYS TO GET “IN MOTION” DURING YOUR WORKDAY

Can’t find time to be active? Try adding some physical activity to your workday:
• Get off the bus several stops early and walk the rest of the way
• Take a stretch break at your desk
• Take the stairs instead of the elevator
• Ask a co-worker to join you for a brisk walk during your coffee break or lunch hour

Be sure that you get “in motion” at least 30 minutes every day—it’s good for your health!

For more information, visit winnipeginmotion.ca or call Winnipeg in motion at 940-3648.