

▶ To the hundreds of thousands of people who receive and deliver health care in and around Calgary every day, your gift is an act of kindness.

Thank You!



You have helped so many people in so many ways:

Cardiac Care

Seniors' Health

Urology

Neonatal Intensive Care Unit

Women's Health Programs

Staff Education

Equipment

Cancer Care

State-of-the-art Technology

THANK YOU!



The Calgary Health Trust connects donor passions with health care needs. There are many ways to give and your support makes a difference. Whatever your reason, your gift exemplifies the caring and generous nature of our community.

The stories and updates in this report reflect where and how donor gifts are being utilized in health care facilities in Calgary and surrounding areas.

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Maternal & Women's Health

Preemies breathe easier thanks to donor support

A premature baby's lungs can be as delicate as a butterfly's wings and no bigger than the tip of your index finger. Every breath can be a struggle.

"Preemies lungs' are so fragile that the babies have to be on special equipment or they can die," Terry Holden, Supervisor at the Peter Lougheed Centre's Neonatal Intensive Care Unit, says.

This equipment includes CPAP, or Continuous Positive Airway Pressure, and SiPAP, short for Synchronized non-invasive Positive Airway Pressure, machines. Both deliver oxygen and humidity to babies' lungs without intubation (which involves placing a tube into the trachea either through the mouth or nose). The machines were purchased with funds donated to the Calgary Health Trust.

"Intubating a premature baby can create scar tissue and can lead to issues with breathing and swallowing later on," Holden says.

"The CPAP and SiPAP machines keep babies from having to work so hard—if their breathing is in any way compromised, it causes them to use calories they can't afford to lose and can put stress on their whole system."

The CPAP and SiPAP machines have another major benefit: a greater number of premature babies can remain on the unit. Without the machines, babies with breathing difficulties may have to be transferred to the Foothills Medical Centre.

"Many premature babies are surviving at a much younger age, 23 to 24 weeks gestation, and without the equipment they wouldn't always make it," Holden says.

Holden says her unit's highly specialized equipment, many pieces of which are purchased by donor support, is truly lifesaving.

She adds: "NICU equipment and technology are constantly changing . . . and it's important to have access to these changes so we can give the best care to babies and families."





Did you know...

In 2006-2007, more than 54,000 babies across Canada were born preterm or small for their gestational age.

Of the 21,452 babies born in Southern Alberta in 2007 1,844 were preterm births.

Multiple-birth babies were nearly 17 times as likely to be born preterm as singleton babies.

Advanced Technology

Human patient simulator advances health care

For a new “guy,” Stan is exceptionally popular. In his first week in action, 80 per cent of the Post-Anaesthetic Care Unit (PACU) nursing staff at the Foothills Medical Centre (FMC) turned out for a hands-on simulation session with him.

“Our staff would like to use Stan all the time,” Clinical Nurse Educator Tracy Boivin-Oldale says. She and her colleagues believe Stan is an important educational tool that can simulate a realistic patient.

Stan, whose name is short for standard man, is an \$84,000, computer-controlled, adult human patient simulator or mannequin. Stan not only has a heart beat and breathes, but he really comes to life when he speaks and blinks. All of these actions are generated through a computer which is controlled by the Educator.

Although not the first of his kind in Calgary, this Stan came to FMC through the generosity of hundreds of donors to the Calgary Health Trust.

“We really appreciate having Stan. As our simulation program grows we can see adding other Stans so that simulation can be delivered at one of our labs, at the bedside or in the community through a mobile training program,” says Marlene Donahue, Director of Simulation South for Alberta Health Services Provincial Simulation Program.

Virtually impossible to hurt, Stan offers staff and physicians a safe way to practice clinical skills, communication, teamwork, and crisis resource management for just about any patient situation.

“In past training sessions, we would talk about certain scenarios and our learning would be ‘pretend,’” Clinical Nurse Educator Shelley Jeske says. “Stan allows us to learn about high-risk situations without putting patients at risk.”

Donahue, Boivin-Oldale and Jeske believe simulation is the future for educating health care staff, physicians, and students. By using Stan, realistic and real-time clinical scenarios can be created, bringing Stan to life for more caregivers.

Jeske adds, “Stan is about getting out to the front lines and about learning how we can better care for our patients and meet their needs.”



Staff at the Foothills Medical Centre practice their skills with a hands on simulation session with new “guy” Stan. Above from left to right, Shelley Jeske, SaraBeth Rasmussen, Stan and Tracy Boivin-Oldale.

Cardiac Care

Echo stress test bed improves care

Most hospital beds have wheels. The echo stress test bed, however, has pedals. This specialized \$15,000 piece of equipment is designed for people unable to take standard cardiac echo stress tests on treadmills or exercise bikes. Essentially an exercise bike that is used while lying down, the bed was purchased for the Cardiovascular Lab at the Rockyview General Hospital in the spring of 2009 with funds donated to the Calgary Health Trust.

Clinical Instructor Dal Disler says echo stress tests are used to diagnose a number of cardiac illnesses such as ischemia (blood restriction or blockages), irregular heartbeats and leaking or abnormal valves.

During the test, an ultrasound probe captures images of the heart as it works before, during and after exercise. Throughout the test, an echo sonographer takes ultrasonic images and a cardiology technologist monitors a patient's cardiac rhythm and blood pressure.

Because the bed can also be tilted, it offers the sonographer an even bigger window through which to see the heart and to capture images.

Cardiologist Dr. Sandeep Aggarwal says the pedalling bed is the ideal tool for patients who require an echo stress test, but can't sit or stand, have bad hips or knees, or are unable to undergo more invasive, higher risk stress tests.

"The bed allows patients to exercise comfortably, under medical supervision, at increasing resistance over time," says Karen Sarsfield, supervisor of the Cardiovascular Lab at the Rockyview.

"Our staff has embraced this new technology and eagerly learned how to use it as a team . . . I'm quite proud of them," says Sarsfield.

The team recently completed training with the new equipment and is now testing patients on a regular basis. Use of the echo stress test bed is expected to grow as more physicians learn about its purpose and availability.

Fact

In 2008/2009 over 1600 exercise tests were completed at the Rockyview General Hospital.

Improvements In Patient Care

Slush machine a small pleasure for patients

A slush machine in a hospital may seem like a luxury for patients and staff; however, for patients in the palliative care unit (Unit 47) at Foothills Medical Centre, appetites are small and pleasures are few; a slush is a comfort and a tolerable option to many patients.

“The coolness of the slush provides temporary comfort and pain relief to the mouth and throat of patients – those primarily with head and neck cancers benefit therapeutically from this the most,” says Rhonda Niebrugge, Unit 47 Supervisor. “The coolness and the

texture also seem to be something that is tolerated as a ‘food or caloric source’ by a number of patients when food or other beverages are not as tolerable during their illness.”

Fact

Unit 47 goes through at least 8 litres of slush per week.

Donors like you help make these comforts possible. “Unit staff highly value the slush machine as part of the patient care,” said Niebrugge. “It’s an option they can offer to comfort or put a smile on the faces of their suffering patients.”

Donor dollars help improve patient comfort

Generosity expressed by Calgary Health Trust donors enabled the Lethbridge Dialysis Unit to purchase a Scale Tronix Digital Stand and a Recliner Champion Dialysis 54. Both pieces of equipment are important to patients.

The scale is a piece of equipment that captures precise weights of individuals with kidney disease. This is important because these individuals no longer have full ability to remove fluid (e.g. what they drink) through the same process that individuals with normal kidney

function have. Patients are weighed before each dialysis treatment to determine how much fluid they have gained between treatments and therefore, how much needs to be removed in the course of their treatment.

The recliner chair is used by patients during their dialysis treatment. It is very difficult to stay in one position for great lengths of time and these chairs allow the greatest flexibility in the ability to change positions, while at the same time, allowing for redistribution of the body fluid that is being removed.

“Dialysis is a life-sustaining, blood-cleansing treatment. Donations ultimately enhance the quality of life of individuals who suffer from kidney disease,” said Marilyn Bartoszyk, Southern Alberta Renal Program Manager. “We would like to express sincere thanks and appreciation to our donors for their wonderful work in supporting our patients.”

Fact

Dialysis is generally done only three times per week, for about four hours a treatment; this is in no way comparable to normal kidney function when the kidneys are functioning 24/7.

Fact

The Southern Alberta Renal Program provides service to all areas south of Red Deer and currently has about 870 hemodialysis patients. The Lethbridge Unit currently provides care for about 100 of these patients.

Improvements In Patient Care

Memorial gifts help Neonatal Intensive Care Unit

A memorial gift is one of many ways to give back to the community through the Calgary Health Trust. Gifts to the Kira and Amy Monaghan Memorial Fund helped with the purchase of a Hypothermia Blanketrol for the Neonatal Intensive Care Unit at Foothills Medical Centre.

The Blanketrol is a machine that circulates distilled water through a blanket in order to lower an infant's temperature, which in turn decreases oxygen requirements. It is used as a neuro-protective treatment. Equipment like this is also used on adults in intensive care units and operating rooms.

“Over the past couple of years, research into hypothermia based treatment has shown promising results, the utilization of this type of equipment has become a standard of care at Foothills Medical Centre.”

~ Carrie Massier, Clinical Nurse Educator

“For patients, therapeutic hypothermia applied within six hours of birth to newborns with perinatal asphyxia has shown to be beneficial in reducing mortality and severe neuro-developmental disability,” said Carrie Massier, FMC NICU Clinical Nurse Educator. “Donations through the Calgary Health Trust help us to purchase much needed, potentially life saving, equipment that has far reaching effects on our fragile infants’ and their families.”

Specialized mattress helps provide optimal care

Sarcee Hospice received generous donations to purchase specialized mattresses (PrimeAire Therapy Surfaces).

“A PrimeAire mattress is a technological advancement that provides zoned air cushion sections to aid in the prevention and treatment of pressure ulcers,” says Jennifer Lee, Client Service Manager at Sarcee Hospice. “They provide a combination of layers contouring the individual, providing a comfortable surface for our very ill clients, helping to protect them from skin breakdown or preventing further breakdown. The PrimeAire mattress is a necessity to help us provide optimal care and comfort to our clients.”

Sarcee Hospice is a 15 bed unit and in the 2008/2009 fiscal year 182 clients received care at this facility. The Hospice currently has nine therapeutic surfaces, but the goal is to have a PrimeAire mattress for every bed.

“Donations help make it possible to create a comfortable environment for both our clients and our staff,” says Lee. “Sarcee Hospice is very grateful for the wonderful support we receive.”

Special Projects

The Calgary Health Trust is committed to informing and engaging donors about health care needs that matter to our community. The following updates reflect a few highlights on current special projects that are wholly supported by our gracious donors.

Orthopaedic Arthroscopic Surgery Program

Helping Calgarians who suffer with soft tissue injuries keep active is the goal of the Orthopaedic Arthroscopic Surgery Program at the Peter Lougheed Centre (PLC). The program, which is an orthopaedic subspecialty, focuses on soft tissue repair and reconstruction of joint injuries, including injuries to the wrist, elbow, shoulder, hip, knee, and ankle, related to fitness, work, sports, and leisure activities.

Since 2006, the total number of orthopaedic arthroscopic surgeries provided at the PLC has increased by 12 per cent. For the internationally recognized faculty at the PLC, training and research is an ongoing process. This means technically advanced procedures such as hip, ankle, elbow, and wrist arthroscopies have increased by as much as 40 per cent and expected outcomes for all procedures is continually improving.

To meet this increase in demand and advance the program to the level of providing treatment and care that meets or exceeds world class best practice standards, the Orthopaedic Arthroscopic Surgery Program at the PLC is in need of additional state-of-the-art, arthroscopic surgical equipment.

Approximately \$1.3 million in external funding is required to purchase equipment to help enhance efficiency, decrease wait times, and improve care and optimize outcomes for patients. Contributions to the Orthopaedic Arthroscopic Surgery Campaign will not only help to keep Calgary active, but will also make the program a leading orthopaedic subspecialty program.

Southern Alberta Institute of Urology

The Southern Alberta Institute of Urology, a Daryl (Doc) Seaman and W. Brett Wilson initiative, is being constructed above the new parkade at the Rockyview General Hospital (RGH). The 40,000 square foot centre of excellence will be the largest and most comprehensive urology centre in Canada and the first to offer a multidisciplinary patient-centred approach to urological care.

The Southern Alberta Institute of Urology will be an out-patient facility. Its location at RGH, where in-patient urology care is centred, will allow the diagnosis and treatment of patients with urological conditions at one location maximizing the resources to provide optimal clinical care. The Institute will consolidate a number of already existing urological services as well as diagnostic and treatment facilities for a variety of conditions including prostate, bladder and kidney cancer, kidney stone and urinary tract problems.

To-date over \$23.2 million has been committed toward the total \$26.5 million cost of building the Institute. The Institute is slated to open in 2010.



Thank You!

Your gift makes the difference.



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