New and Novel

The face of healthcare is changing. Hospitals are changing, innovating and evolving to serve their communities and patients better.

The editors of *Healthcare Quarterly* asked hospitals to submit unique ideas they have implemented to improve the quality of service provided and to enhance the patient experience.

Here are the submissions:

RNs Linda Hebert and Kelly Bradley (in front) with patient, Maria Ciaramitaro in the background.

Windsor Regional Hospital

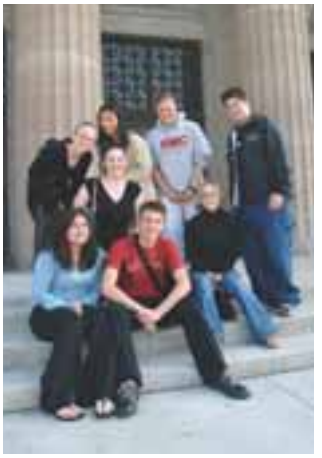
Windsor, ON
PROJECT: Triage Room
PROJECT LEAD: Carol Fraser, Program Manager, The Family Birthing Centre

Windsor Regional Hospital in Windsor Ontario included a "triage room" in the Women's Birthing Centre opened on December 15, 2003. This new addition allows obstetrical triage to occur at the Birthing Centre and avoids emergency room waiting time.

Hamilton Health Sciences

Hamilton, ON
PROJECT: Healthcare Support Services Program
PROJECT LEAD: Linda Carson, Director, Customer Support Services

Hamilton Health Sciences has partnered with Hamilton-Wentworth District School Board to help train and support the next generation of healthcare support services professionals. Students will have an opportunity to learn and develop the skills necessary to succeed in healthcare, while earning four credits toward their Ontario Secondary School Graduation Diploma.



Sherwood High School Grade 11 students chosen for the Healthcare services program.

Food Services attendant Nam Tanh with 2-year-old Morgan MacIntyre.

Children's Hospital of Eastern Ontario

Ottawa, ON
PROJECT: Hotel Room Service
PROJECT LEAD: Bernice Wolf, Manager of Food & Retail Services

Patients or their family members can pick up the phone and order a meal that will be delivered to the room within 20 minutes. Advantages of this new software facilitated process are many, including decrease in food wastage and elimination of duplicate trays for the same patient – not to mention, the freedom to choose the menu.

Dr. Robin Walker

Children's Hospital of Eastern Ontario

Ottawa, ON
PROJECT: Decision Making in Neonatal Intensive Care Unit
PROJECT LEAD: Dr. Robin Walker

Dr. Robin Walker, in cooperation with Dr. Monique Frize and 20 students in systems and computer engineering at both Carleton and Ottawa universities, is developing artificial intelligence tools that will help doctors predict certain medical outcomes in babies.

Chiller pipe being installed at the Queensway-Carleton Hospital.

Queensway-Carleton Hospital

Ottawa, ON
PROJECT: Cogeneration
PROJECT LEAD: Phil Colclough, Chief-Engineer

Taking a lesson from the 2003 blackout, QCH has signed a $5.6 million multi-year contract with Johnson Controls Limited Partnership (JCLP) for facility improvements and services that will result in guaranteed annual utility savings of $520,000.

This photo shows the perpetrator with a hostage at his feet, moments after throwing a smoke bomb in the hospital's main lobby.

The Credit Valley Hospital
Mississauga, ON
PROJECT: Operation White Smoke
PROJECT LEAD: Sharon Hodges, Chairperson, Emergency Measures Committee, and Wendy Johnson, Director, Community Relations and Communications

The Credit Valley Hospital has created a crisis exercise involving hostage-taking (Code 222) and bomb threat (Code Black) incidents. The event,videotaped with several outcomes, assists in a tabletop exercise that is tailored to a variety of hospital personnel.

Credit Valley personnel loading a patient into the helicopter.

The Credit Valley Hospital
Mississauga, ON
PROJECT: Helipad Relocation
PROJECT LEAD: Frank Syer, Project Manager

The Credit Valley Hospital is building a new multimillion-dollar regional cancer and ambulatory care centre. The new heliport was built at the other end of the hospital property and commissioned for service last winter just prior to commencement of construction of the new centre, which is due to open in 2005.

Nurse Carol Nelson and Chief of Emergency Dr. Eric Letovsky show how they manage their task lists with the touch of a finger, ordering tests online from Lab and Diagnostic Imaging.

The Credit Valley Hospital
Mississauga, ON
PROJECT: Emergency Department Management
PROJECT LEAD: Carol Nelson, Nursing Project Coordinator and Keri Brown, Application Analyst.

The Credit Valley Hospital implemented an improved emergency department patient tracking system. This solution monitors and assists with patient's care from initial contact through triage, treatment and discharge. Clinicians are aware of results online as soon as they are available.

Mount Sinai Hospital
Toronto, ON
PROJECT: Blended Learning System Education Initiative
PROJECT LEAD: Marilyn Sanli, Project Manager

Blended learning is a training approach that is aimed to equip physicians with the overall knowledge of new software(s). The computer-based learning can be done in any location at any time, and offers the learner control of pace, quantity and depth of learning. It will be used to train 3,000 users on the physician order entry system and for the new pharmacy system to be implemented at the hospital.

Mount Sinai Hospital
Toronto, ON
PROJECT: Wireless Computer Rounds Carts
PROJECT LEAD: Marilyn Sanli, Project Manager

Developed in-house by Mount Sinai's Informatics team, these wireless point-of-care computers are the central system for all patient information. Wireless point-of-care computers also offer web links, drug databases, ECG charting and educational presentation and have become a teaching tool as well as a patient care system. Other hospitals such as UHN, Sunnybrook have based their systems on Mount Sinai's model.

Mount Sinai Hospital
Toronto, ON
PROJECT: Web-Enabled Health Card Validation
PROJECT LEAD: Steve Noyes, Director Information and Communication Technology

When HealthLink dissolved last year, Mount Sinai Hospital's Informatics department took the lead in developing a new web-based application that would give real-time access and validation of a patient's demographic information with a swipe of the card through the card reader. It is currently used at patient registration areas at four different hospitals.

INNOVATIONS

Driver Heather Coulson gets a driving lesson from instructor Remo Minichiello, Director of Driver Training.

Bridgepoint Health

Toronto, ON

PROJECT: Driver Assessment and Training Centre

PROJECT LEAD: Shirley Rolin, Director, Driver Assessment and Training Centre

At Bridgepoint Health's new Driver Assessment and Training Centre, the latest technology – including computerized steering, electronic hand-controlled breaks, and voice-activated lights – helps people with disabilities get into the driver's seat with skill and confidence. The Centre teaches new ways of driving and new ways of thinking about maximizing ability on the road to independence.

Storm water management and the gardens at the Café at the new Thunder Bay Regional Health Sciences Centre.

Western entrance of the Thunder Bay Regional Health Sciences Centre.

Thunder Bay Regional Health Sciences Centre

Thunder Bay, ON

PROJECT: Thunder Bay Regional Health Sciences Centre

This new 375-bed hospital is designed to promote humanism and improve the patient experience by making the hospital a healing space. The innovative design uses wood as the primary structure material. It will also be the first cancer centre in Canada to incorporate direct light skylights within the radiation treatment rooms.

ONTARIO LAUNCHES CANADA'S FIRST EMERGENCY MEDICAL ASSISTANCE TEAM

The Ontario Ministry of Health and Long-Term Care has implemented a mobile, acute-care unit called Emergency Medical Assistance Team (EMAT) to respond swiftly and effectively to major health emergencies. This acute-care field unit – the first of its kind in Canada – can be on-site, anywhere in the province, within 24 hours.

What is EMAT?
EMAT is a 20-bed, acute-care field unit, with its own medical equipment and supplies, a communications centre, electricity and water. EMAT is staffed by a volunteer, on-call support team of health-care professionals that includes physicians, paramedics, nurses and respiratory therapists.

EMAT provides a staging and triage base for the evaluation and management of patients prior to their being transported to hospital. It can also isolate patients who have infectious diseases in a tent that filters the air at a level greater than national standards.

Why does Ontario need EMAT?
EMAT can provide the medical resources needed in any community that is unable to manage a large number of patients because of a health emergency such as SARS.

How quickly can EMAT be in place?
EMAT can be on-site, anywhere in the province, within 24 hours of dispatch.

Where would EMAT be set up in a community?
It can be set up in such places as a local community centre, arena or gym.

How long can EMAT operate without outside support?
EMAT can be self-sufficient, operationally, for a 72-hour stretch without needing outside resources. It can travel 3,200 kilometres before refuelling.

How is EMAT staffed?
EMAT uses on-call professional healthcare providers who have volunteered to work on EMAT during an emergency.

How are EMAT staff protected?
The EMAT staff has the appropriate training and skills to function as a team in this kind of environment. EMAT also has a range of personal protective equipment that can protect staff from noxious gases and infectious diseases.

Where will EMAT be stationed?
EMAT will be parked on the grounds of Sunnybrook and Women's College Health Sciences Centre in Toronto.

How much did it cost to create EMAT?
The medical equipment costs approximately $1.5 million. The remaining costs associated with EMAT (trailer, oxygen supply, generators, tents) cost approximately $500,000.

What are the costs to operate EMAT?
$450,000 per year.

INNOVATIONS

Dr. Pierre Soucie, Medical Director of CareConnect, in consultation with a patient. Photograph courtesy of The Ottawa Citizen. Photographer: Chris Mikula.

CareConnect
ON
PROJECT: Telemedicine
PROJECT LEAD: Kathy Crone, Program Director

CareConnect, one of the three regional telehealth programs in Ontario, links more than 27 partners at 40 sites in eastern Ontario. An innovative way of providing care that saves time and money, it facilitates two-way, high-speed transmission of diagnostic results - from x-rays to heart monitoring and skin and eye examinations – all in real time.

Louella Sinha, administers therapy using Brennan Healing Science at HSC's Rainbow Room

Winnipeg's Health Sciences Centre
Winnipeg, MB
PROJECT: The Rainbow Room
PROJECT LEAD: Patricia A. Frain

The Rainbow Room, available free of charge, offers Winnipeg's Health Sciences Centre staff stress-relief through holistic therapies and healing techniques. The staff can choose from a range of modalities including Jin Shin Jyutsu, Reiki, Reflexology, Massage, Therapeutic Touch, Geo-Tran and Ortho-bionomy. Approximately 40 practitioners volunteer their time to the Rainbow Room, with nine practitioners available every day.

Homecare nurse Amanda Burns with a patient.
Photograph courtesy of The National Post.

Vancouver Coastal Health
Vancouver, BC
PROJECT: Internet-Based Wireless Technology – Pixalere
PROJECT LEAD: Sherri Adams

Vancouver Coastal Health Authority will pilot Internet-based wireless technology – Pixalere – to treat patients with wounds in an efficient and cost-effective manner. Pixalere technology will enable community and acute care staff to exchange wound images and information via PDAs or laptops from a patient's home or care facility to a nursing wound care expert in real time through the Pixalere website, resulting in more timely assessments and treatments and reduced travel time.

An artist's view of the CollegeSide.

David Thompson Health Region
Ponoka, AB
PROJECT: CollegeSide

Expected to finish in spring 2004, CollegeSide is Canada's first college-based caring, living and learning community. CollegeSide boasts 110 continuing-care units, up to 100 retirement-living suites, and 10,000 square feet of new teaching space. It includes a common area that will boast an Adult Day Support Program, a music room, a great-room, bistro and convenience store.

Another innovation is that 10 of the 110 continuing-care beds will be designated for disabled adults. This designated house will have a special private entrance so that residents can order in pizza or have friends over late. Each wing of CollegeSide will have a garden with raised flower beds, which will make it easier for residents to participate in tending the garden.

From left to right: Wendy Busse, Physical Therapist; Renee Giammarioli, Physical Therapist; and Robin Sanderson, Physical Therapist.

David Thompson Health Region
Ponoka, AB
PROJECT: Suspended Ambulation System
PROJECT LEAD: Chris Richards, Program Manager, Brain Injury Rehabilitation Program

The David Thompson Health Region's Alberta Hospital Ponoka is one of the few brain-injury rehabilitation facilities across Canada to begin using a Suspended Ambulation System in conjunction with a treadmill to assist in the process of gait retraining. The system suspends a small portion of clients' weight while they walk.

Maureen Jennings, Regional PACS Coordinator, shows BC Minister of Health Services Colin Hansen and Burnaby MLA Richard Lee how PACS will revolutionize health care delivery at Fraser Health.

Fraser Health
Surrey, BC
PROJECT: PACS
PROJECT LEAD: Sandra Sewell

Patients of Fraser Health will benefit from improved care as doctors throughout the region will soon have access to digital diagnostic imaging results. The Fraser Health Picture Archiving and Communication System (PACS) will be one of North America's largest systems linking diagnostic imaging equipment such as MRIs and ultrasounds to a network of computers throughout the health authority. Canada Health Infoway will invest $11.4 million in the project.