



Hamilton
Health
Sciences

Where Our Healthy Future Begins

COMMUNITY REPORT
2014-2015



WELCOME |

A MESSAGE FROM THE BOARD CHAIR *and* PRESIDENT & CEO

Where Our Healthy Future Begins

There are many great stories to tell about Hamilton Health Sciences and choosing just a few to highlight the past year is never an easy task.

As the only health system in Ontario providing advanced medicine for people from pre-birth through to old age, and as the largest hospital workforce in the province, our patients and staff give us endless opportunities to illustrate how we're achieving our vision of providing the "best care for all."

To narrow it down, this community report looks inside our four strategic directions: **Patients; People; Sustainability;** and **Research, Innovation and Learning** for a snapshot of 2014/2015's initiatives and accomplishments.



Paul Chapin
Chair, Board of Directors

One of our most important projects this year was to begin a process to re-focus our clinical services and the infrastructure that supports them. This is a major planning exercise called Our Healthy Future, of which the initial step has included reaching out to you - our communities, our staff and our partners in care - to help us understand what it is you value most in your healthcare system. From here, we'll continue to build a plan that will ensure we have a sustainable, high-quality health system that reflects the changing needs of our community, now and in the future.

This is an exciting time for HHS. The work we're doing now, with the help of our community, will shape the future of our healthcare system. Thank you for your participation and support as we embark on this transformational journey.



Rob Maclsaac
President and CEO



vision

**Best
Care
for All.**

mission

To provide excellent health care for the people and communities we serve and to advance health care through education and research.

values

Respect
Care
Innovation
Accountability



STRATEGIC PLAN



patients

Provide an excellent patient and family experience every time

sustainability

Meet the healthcare needs of the communities we serve now and in the future

Best Care for All.



research innovation & learning

Lead in research, innovation and learning for the benefit of our community and the world



people

Engage, empower, and enable our people to deliver on our mission



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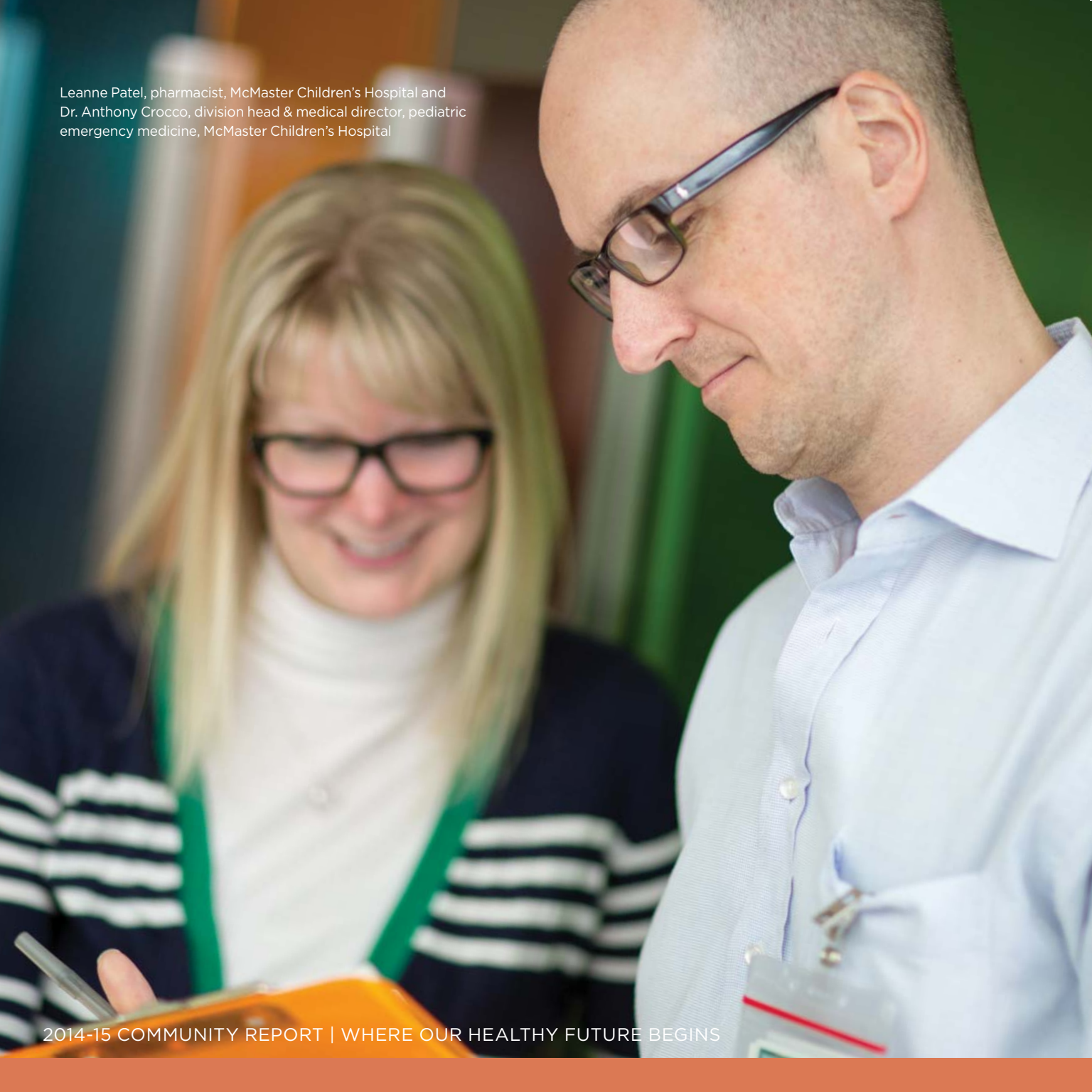
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Leanne Patel, pharmacist, McMaster Children's Hospital and
Dr. Anthony Crocco, division head & medical director, pediatric
emergency medicine, McMaster Children's Hospital

PATIENT SAFETY | CODEINE & KIDS: LEADING SAFER PAIN MANAGEMENT

In the realm of pain management, codeine is a household word for many. But for some, the side effects of codeine can be dangerous, even fatal. McMaster Children's Hospital has led an initiative that has eliminated the use of codeine in pediatric care, for safer pain management in our young patients.

Codeine, an opioid medication available in various forms, has been commonly used to treat mild to moderate pain. People could purchase it with a prescription, or over-the-counter if it was an ingredient in a combination product.

In order for codeine to do its work in relieving pain, it first needs to be converted by our bodies into morphine. But not everyone processes codeine the same way. For some, the conversion is more rapid and results in higher concentrations of morphine than intended, posing a risk of toxic levels of morphine in the blood. In children and adolescents, this risk is especially concerning.

"Without genetic testing, we cannot know which patients will convert codeine into more or less morphine, making it unpredictable, and having potentially serious consequences such as decreased breathing or even death," says Leanne Patel, clinical pharmacist in the emergency department at McMaster Children's Hospital (MCH).

In recent years, MCH has taken action to minimize codeine use in pediatric care. Codeine was removed from the pharmacy database in pediatric programs as well as in post-partum care, since codeine may affect infants through breast milk. Instead, morphine was encouraged as a safer alternative. This patient safety initiative was driven ardently by pediatric pharmacists and physicians, and pre-empted an official recommendation from Health Canada that codeine use be suspended in pediatric patients aged 12 or younger

Most recently, codeine has been officially removed as an option across Hamilton Health Sciences for pediatrics and post-partum women, and a decision was made to encourage this philosophy at all emergency departments and urgent care centres across the Hamilton Niagara Haldimand Brant Local Health Integration Network, to demonstrate an abundance of caution with younger patient populations.

McMaster Children's Hospital has developed a policy and educational materials around the "no-codeine" philosophy, which have been shared with local and regional partnering organizations, including smaller community hospitals and pharmacies, to encourage further acceptance.

Dr. Anthony Crocco, head of pediatric emergency medicine at MCH says the elimination of codeine is a significant step in the hospital's goal to become the safest children's hospital in Canada.

"One of our responsibilities as leaders in pediatric emergency medicine is to continuously evolve our practices, and to work closely with our community partners to ensure we are all providing the safest, most effective care to children in our communities."

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Dr. Anthony Crocco
emergency physician,
McMaster Children's Hospital



Chuck Donohue
facilities management



Lisa Gilmour
health, safety & wellness



Lili Brylowski
emergency & disaster management



Annette Lacivita
logistics



Kristie Smeaton
customer support services



Kim Alvarado
surgery, oncology, critical care
& ambulatory services



Dr. Deb Yamamura
infectious diseases



Steve Jamieson
safety



Cindy O'Neill
infection control



Dr. Dominik Mertz
infection control



Louise Brady
cardiac & intensive care



Dr. Corey Sawchuk
critical care

DEVELOPING OUR WORKFORCE | PREPARING OUR DEFENSE AGAINST AN INTERNATIONAL THREAT

In the fall of 2014, Ebola emerged as a public health threat that knew no borders. Worldwide attention focused on West Africa where the highly contagious viral illness was claiming many lives. With international travel commonplace and early diagnosis difficult, all countries were on alert and started making plans on how they would care for patients with Ebola.

Canada began screening international travellers for Ebola symptoms, and provinces made treatment plans for patients with the virus. Ten Ontario hospitals were designated treatment centres, including Hamilton Health Sciences' Juravinski Hospital for adults and McMaster Children's Hospital for children. With just a few weeks notice, HHS had to be ready to admit patients from across its catchment area.

An extreme level of infection control is required for anyone in contact with patients who are suspected of having, or who have been diagnosed with, Ebola. That means both caregivers and support workers must be trained in the use of Personal Protective Equipment (gowns, masks, respirators.) Hundreds of HHS staff and physicians participated in enhanced infection control training. It was a learning experience for all involved as the provincial standards evolved and HHS, along with other designated treatment centres, worked hard to meet those standards as quickly as possible.

Other preparations at HHS included renovations to the intensive care unit and emergency room at Juravinski in order to boost the number of isolation units and create physical barriers in triage areas. In addition, the laboratories upgraded their protocols to ensure speedy, safe and accurate testing, and an on-call system was established to make in-house infectious disease and infection control experts available 24/7.

Behind the scenes, educators worked overtime to train staff, housekeepers learned new cleaning and waste handling protocols, and the materials management department hunted down all the necessary new products. Administrative leaders met in frequent "command centre" briefings ensuring that protocols were developed and shared with front line staff.

In the end, Hamilton Health Sciences didn't receive any patients who tested positive for Ebola, although HHS did care for some patients who were suspected of having the virus, but eventually tested negative. Ultimately, the work that was done to prepare puts the organization at a higher state of readiness for the next infectious disease outbreak.

"Our response to the threat of Ebola demonstrated the versatility and dedication of everyone in our organization," says Dr. Richard McLean, executive vice president, inter-professional practice & chief medical executive. "The teamwork by our staff and physicians was outstanding."

"Although the threat of Ebola spreading to North America is now much lower, we all learned a great deal through this experience and are more ready than we've ever been to manage a public health risk like Ebola," adds Kirsten Krull, vice president, inter-professional practice & chief nursing executive.

people

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Kirsten Krull

vice president, interprofessional practice and chief nursing executive

Dr. Darryl Leong,
cardiologist, Hamilton Health Sciences
and principal investigator, Population
Health Research Institute



WORLD CLASS RESEARCH | THE POWER OF A HANDSHAKE

The results of a population research study have once again put Hamilton on the world map of medical research. A Hamilton Health Sciences (HHS) cardiologist gained international attention with a study indicating the strength of one's handgrip is a better predictor of death than blood pressure.

Dr. Darryl Leong, cardiologist and principal investigator at HHS' Population Health Research Institute, led the investigation that assessed the link between reduced grip strength and illness, disability, and early death.

The study was conducted in 17 culturally and economically diverse countries: Canada, Sweden, United Arab Emirates, Argentina, Malaysia, Bangladesh, Zimbabwe, Brazil, Chile, Poland, South Africa, Turkey, China, Colombia, Iran, India and Pakistan. Nearly 140,000 people, aged 35-70 years, participated over a four-year period in the study where a simple hand-grip device was used to test participants' manual strength.

"A hand grip dynamometer is inexpensive and reusable and the test is quick and easy to do," explains Dr. Leong. "In resource-challenged settings, particularly in low-income countries, this might be a useful test to identify patients who are at greater risk and need closer attention or might need more specific treatments."

Dr. Leong adds that while the initial results are promising, there is more work to be done.

"Further research is needed to identify determinants of muscular strength and to test whether improvement in strength reduces mortality and cardiovascular disease."

Published in the prestigious medical journal, The Lancet, the hand grip study has gained global media interest with nearly 100 national and international news agencies covering the story in print, broadcast and web.

research
innovation
& learning

"Particularly in low-income countries, this might be a useful test to identify patients who are at greater risk and need closer attention, or who might need more specific treatments."

Dr. Darryl Leong

cardiologist and principal investigator at HHS' Population Health Research Institute

Alan Sheen,
Hamiltonian and resident,
St. Joseph's Villa



A SUSTAINABLE SYSTEM | LINKING HEALTHCARE PROVIDERS FOR A SEAMLESS PATIENT JOURNEY

If you've been injured in an accident or are seriously ill, going to the Emergency Department and getting admitted to hospital wouldn't be unusual or unexpected. Too often, however, individuals in our community can feel that they have no other option than to seek assistance for most of their healthcare needs in a hospital setting.

Through a provincial initiative called Health Links, Hamilton Health Sciences is partnering with other health and social services to improve the coordination of healthcare services for individuals with complex healthcare needs. The purpose is to enhance access to specialists and other health-related services, and to link local healthcare providers so that they can share information and provide patient-centred solutions. Health Links also works to improve the transitions for patients between primary care providers, specialists, hospitals, home care, long-term care and community services organizations, connecting patients to the care and services they need.

Health Links Care Coordinators are assigned to follow-up in-person with selected patients, get a good picture of the care, supports and services they need, and to integrate care across the continuum.

For 88-year-old Alan Sheen, a veteran living at St. Elizabeth's Villa in Hamilton, routine activities such as going to doctors' appointments were becoming challenging. When a Health Links staff person came to visit him, he was amazed at the detailed conversation they had.

"She took the time to get to know me as a person," he recalls. "She asked about my health, the medications I was taking and the doctors I'm seeing." Alan learned he's eligible for veterans' benefits which will pay for transportation to doctor appointments.

"It's critical that everyone who is involved in the care of a patient is doing their part to make it easier for the patient to get the services they need when they need it most," says Dr. Joan Bellaire, family physician at West Lincoln Memorial. "Our goal is to improve quality of life for seniors and those with complex illnesses, while reducing Emergency visits and hospitalizations whenever possible."

"This is an innovative model of care delivery," says Rob MacIsaac, president and CEO, HHS. "The hospitals are just one part of an overall health system. Patients are better served, and our system is more sustainable, when care is well coordinated between the hospitals and the community."

"It's critical that everyone who is involved in the care of a patient is doing their part to make it easier for the patient to get the services they need when they need them most."

Dr. Joan Bellaire

emergency physician,
West Lincoln Memorial Hospital

* Compared over
2013/14 when shown

50,387
patient admissions (^ 3.4%*)

4,022 babies born (^ 4.0%*)

28,115 surgeries

181,261 (^ 4.1%*)
Emergency Room visits

106,944 Hamilton
General, Juravinski,
West Memorial Hospitals

43,953 McMaster
Children's Hospital

about us

11,398 employees

882 active physicians,
1922 total credentialed

1305 volunteers who
gave **101,548** hours

Ranked **#2** among Canadian
Research hospitals in 2014 (Research Infosource)

Home to **400+** researchers
and **500+** research support staff

2213 student placements

OUR COMMUNITIES ARE CHANGING, SO WE'RE CHANGING, TOO

We're implementing sustainable solutions today to help create a healthier future for tomorrow.

COMMUNITY PARTNERSHIPS



We're continuing to build on our existing community partnerships, such as our joint programs with the YMCA Hamilton-Burlington-Brantford, so that patients can receive the support they need in the community.

COMMUNITY ENGAGEMENT



In April 2015, we launched our "Our Healthy Future" visioning exercise, to map out our plan for the next 20 years. Involvement of community members is an important component of this initiative, and will help shape our plans moving forward. To participate, visit hamiltonhealthsciences.mindmixer.com

INTEGRATION



ClinicalConnect, for which HHS is the provider, is a secure, web-based portal that provides physicians and clinicians with real-time access to their patients' electronic medical information from hospitals, Community Care Access Centres and oncology centres in South West Ontario. Data for the more than 3.6 million patients living in this region - about 30 per cent of the Province's population - will be accessible through ClinicalConnect, giving healthcare providers a clearer picture of their patients' healthcare journeys.

TECHNOLOGY



As of Spring 2015, HHS has implemented pharmacy robotics at its St. Peter's, Hamilton General and Juravinski Cancer Centre sites, to ensure safe and efficient medication dispensing.



McMaster University Medical Centre
and McMaster Children's Hospital



Main Street West
Urgent Care Centre



Hamilton General Hospital
and Regional Rehabilitation Centre



Chedoke Campus

Juravinski Hospital and Cancer Centre

St. Peter's Hospital

West Lincoln
Memorial Hospital



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