EDUCATION 2016-17 ANNUAL REPORT



CENTRE FOR EDUCATION & KNOWLEDGE EXCHANGE IN AGING

THE CENTRE FOR EDUCATION & KNOWLEDGE EXCHANGE IN AGING

VISION

Leading the world in healthy aging through excellence and innovation in teaching and learning

MISSION

- An exceptional learning experience for students and trainees, staff, patients, families and community
- Knowledge translation and education scholarship
- Being a local, national and international resource dedicated to transforming the journey of aging

PRINCIPLES

- Education and practice informed by best evidence
- High quality and standards for all education
- All staff engaged in teaching and learning
- Interprofessional and collaborative practices
- Evaluation and scholarship key to advancing education
- Alignment with Baycrest values: compassion, advocacy, respect and excellence

2016 - 2017



INNOVATIONS IN EDUCATION IMPACT QUALITY OF CARE

Message from Dr. David Conn, Vice President, Education, and Faith Boutcher, Director, Academic Education & Interprofessional Education

The need to train the next generation of clinicians and researchers who specialize in the care of older adults has never been more urgent than it is today. For the first time in Canada, there are now more seniors than children. By 2025, 20 per cent of the population will be over 65. As an academic health sciences centre and global leader in healthy aging and geriatric care, Baycrest is preparing for the health needs of older adults by investing in educational innovations that will empower current and future healthcare providers as well as consumers.

This year has been an exceptional one for innovations in education at Baycrest. Technologies such as virtual reality, gaming apps and web-based learning have given us the tools to create effective new ways to enhance learning and impact the quality of life of older adults. Simulating scenarios with a client who has dementia both online and in the classroom offers an engaging and interactive approach to experiential learning for students, trainees and staff.

Interprofessional collaboration is a key element of many of these educational initiatives including an exciting and creative project with George Brown College students that led to the development of 15 new recipes for older adults with swallowing and nutritional issues.

The launch of a new learning management software system this year means that Baycrest can deliver courses and training 24/7, anywhere in the world, to staff, students, volunteers, clients, families and caregivers. This investment in education is another example of Baycrest's commitment and efforts over the past 100 years to build on traditional teaching methods and widely disseminate knowledge that will advance the care and quality of life of older adults.

All of these achievements and more are the result of the hard work and ingenuity of our staff, students and collaborators and would not be possible without the ongoing support and generosity of our donors, government and funding agencies.

Sincerely,

Dail K. Cam Houtcher





VR could revolutionize seniors' care education

Clarence has dementia. He's tired and he doesn't want to get out of bed for his doctor's appointment. As you walk into his room you see him lashing out at his personal support worker, Mary. She patiently gets him up but he starts screaming when he thinks a dark floor mat is a huge hole he is going to fall through.

You immediately empathize with Clarence as you see the world through his eyes. This is the goal, and the proven outcome, of a new virtual reality dementia simulation developed and tested by Baycrest for healthcare staff and family caregivers.

The use of virtual reality (VR) as an education tool is new to healthcare and this first Baycrest effort - a formal study by the Centre for Education tested with 33 participants and funded by the Centre for Aging and Brain Health Innovation (CABHI) - has demonstrated that immersive technology increases empathy towards people living with dementia and their caregivers.

Participants donned headphones and VR goggles to view 360-degree video scenarios of Clarence and his caregiver, from his perspective and from hers.

"I could better understand how clients feel and how dementia impacts the most basic of day-to-day activities," said one healthcare worker.

Work is now underway on an app for smartphones and tablets that will provide wide and easy access to the video simulations for healthcare providers and the general public. The potential to develop VR scenarios related to other aspects of seniors' care could revolutionize the way education is developed, standardized and delivered.

(pictured right): At a Baycrest Foundation Board retreat, Board members experience a VR dementia simulation. "It's often hard to take myself out of my own experience and put myself into my mother's experience. It's easy to forget how frustrating it is for her to be sort of trapped in this disease as well."

- study participant





Simulating a client-caregiver interaction through role-playing is being used as an educational tool to give nurses and other healthcare providers the opportunity to practise and enhance their skills.

This year, nursing educators collaborated with the Centre for Education's Training & Simulation team to develop brief scenarios based on real situations that occur on units at Baycrest. They chose Responsive Behaviours – such as yelling, hitting, punching, kicking or refusing care – as a workshop topic for a Clinical Skills Day designed to support staff in their continuing professional development.

Participants were paired up with one playing the healthcare provider and one playing the client. Following a briefing and some practice, they acted out their scenarios for the group, for example: a resident is trying to leave a locked unit and the healthcare provider has to apply non-pharmacological strategies, such as distraction or redirection, to get the resident away from the door safely. The group then debriefed and offered suggestions on alternative ways of interacting.

"The increased use of simulations helps provide participants with more experiential learning opportunities. Evaluations indicate that both participants and facilitators are enthusiastic about this more 'hands-on' team-learning format," according to Clinical Educator Roxana Nagra and Calen Freeman, Manager & Professional Practice Chief, Nursing.

"We continue to integrate simulation in innovative ways into learning for our interprofessional teams so that staff can practise strategies, learn about new tools and trial techniques that enhance the quality of life and care of our Baycrest clients."

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Clients benefit from "Top Chef Dysphagia" competition

Baycrest clients with swallowing and nutritional issues will soon taste test some of the 15 delicious, new recipes developed to enhance their dining experience.

The recipes are the product of "Top Chef Dysphagia," an interprofessional education project now in its sixth year involving the Education department, registered dietitians and speech-language pathologists at Baycrest and students from George Brown College's Centres for Hospitality and Culinary Arts and Health Sciences. Each year, three teams are given a case study of a typical elderly person with dysphagia (swallowing issues) and other complex medical concerns and asked to develop recipes for a beverage, appetizer/side, main entree and dessert. Their menu plans are then judged by a panel of experts.

This year, a grant from the Helderleigh Foundation allowed project members to standardize 15 recipes for both home and long-term care use and share them at professional and community events. Each recipe was tested and assigned a rating per the International Dysphagia Diet Standardization Initiative (IDDSI) and some will soon be trialled at Baycrest.

This inventive interprofessional approach to teaching future chefs, food managers and personal support workers about dysphagia has encouraged students to seek placements at Baycrest and led to the hiring of some students by Food Services. ⁶⁶ Both students and clinicians appreciated the opportunity to learn about, from and with each other with the goal of improving the dining experience for clients with chewing and swallowing difficulties.²⁹

> - Lisa Sokoloff, Manager, Training and Simulation, Education Leadership at Baycrest

(pictured above): Roasted beet and squash soup, vegetable frittatas and avocado chocolate pudding are some of the tasty, brain healthy recipes developed for people with dysphagia.



Gaming app an important learning tool for client care

If you see nursing students at Baycrest playing a game on their smartphones or tablets, chances are good they are using an innovative gaming app to learn how to recognize and respond to an acute change in the condition of a frail elderly patient and prevent a transfer to an emergency department.

Recently, 123 practical nursing students beta-tested the SOS Gaming App, which was developed at Baycrest to enhance long-term care and avoid or reduce unnecessary emergency room visits.

The app consists of 37 evidence-based clinical cases. In order to win, players must recognize the critical symptom or disease pattern presented based on their role, reflect on which systems to observe or assess, prioritize these events, decide on immediate actions and provide a team response.

After three weeks, students who played more cases were better at recognizing and responding to acute deterioration in a frail elderly patient. Students found the app engaging and it enabled them to selfassess areas for improvement, build confidence and transfer skills to clinical practice at the bedside. Clinical instructors also observed improved performance, communication and critical thinking skills in students.

Development of the Sensory Observation System (SOS) app was generously supported by Glenn and Tracie Graff, the Government of Ontario, SIMone Ontario Simulation Network, the Centre for Aging and Brain Health Innovation, and Baycrest. It is a project of the Baycrest Centre for Learning, Research & Innovation in Long-Term Care (CLRI). (pictured above): A practical nursing student tests the SOS Gaming App.





Innovative online learning pilot enhances team-based care

Baycrest has developed a ground-breaking approach to online learning in "Team-Based Care for Responsive Behaviours." The Web-based program combines discussion forums, eLearning modules and simulation designed for interprofessional teams to learn collaborative and effective ways to respond when clients act out by hitting, yelling or resisting care.

The experience culminates in a "Choose Your Own Adventure" scenario where participants are immersed in a simulation experience with a client named Mr. Brown. They must practise their skills in recognizing the concern, reflecting on possible causes of the behaviour, communicating with team members, and responding in a way that achieves the best possible outcome for their client. Initial pilot testing has been positive and a final pilot/development cycle is in progress.

When asked to comment on the program's value, one participant said, "I will be more attentive to my residents and their responsive behaviours. I will have a better understanding of underlying triggers and be able to describe the situation and come up with a plan of action as a team."

Future online learning modules are being developed using innovative techniques to help staff apply what they learn to actual client care. The "Responsive Behaviours" module is also being adapted into shorter versions for new staff, volunteers and Security staff and will become part of Baycrest's Core Curriculum training.



Baycrest is building on its history of teaching excellence with the launch of a new online learning management system (LMS) to deliver, administer and track eLearning courses and training for staff, students, volunteers, clients, families and caregivers. The goal is to enhance professional development and continuing education as well as strengthen and grow client and consumer education.

Designed for the needs of the Canadian healthcare sector, the LMS - a custom distribution of Moodle, the world's most popular LMS - went live on January 1, 2017 and permits easy access to online courses and registration for traditional face-to-face instruction available onsite. It is accessible from any device with an Internet connection and available 24 hours a day, from home or work or anywhere in the world.

Everything is tracked automatically in real time as courses are completed. Staff and managers receive friendly reminders when courses are due and managers can access the LMS dashboard for real-time updates.

To date, 580 staff members, 209 students and 297 volunteers have used the LMS to complete the 2017 Core Curriculum required by Baycrest, and 290 training modules required by Nursing have been completed online.

of Academic Education & Interprofessional Education.

Plans are now underway for a multi-module course in partnership with the National Ballet School of Canada to bring dance and movement to clients with dementia. Modules being planned with funding from the Centre for Aging and Brain Health Innovation (CABHI) include oral hygiene for seniors in long-term care and an online eating assistance course.

Launch of new online system makes learning accessible 24/7

"Implementation of a key educational technology such as the LMS enables Baycrest to engage all our learners - from students to consumers - and expand our reach globally," says Faith Boutcher, Director





Teaching physiotherapy students onsite at Baycrest has numerous benefits: students gain valuable clinical experience and provide hands-on assistance to staff; and staff keep up-to-date with current research and techniques and hone their teaching and communication skills.

All of this impacts positively on client care, introduces future physiotherapists to working with older adults, and facilitates the recruitment of potential Baycrest staff.

By the end of the academic year, more than 30 students from the University of Toronto's Master of Science in Physical Therapy program and the occupational therapy/physiotherapy assistant diploma programs at Humber and Centennial Colleges will have completed placements at Baycrest.

Staff have received a number of awards for teaching excellence over the years and most recently were recognized with the Humber School of Health Sciences award for Excellence in Education and Preceptorship, and the University of Toronto Physiotherapy Teaching Award.

"Teaching students allows us to explain the rationale behind treatment plans, helps with our scheduling and treatment of patients and improves patient care," says physiotherapist Tina Wells-Rowsell, who works on the High Tolerance Rehab unit.

Rehabilitation Sciences represents one of the numerous disciplines that benefits from the onsite training of students by Baycrest staff.

> (pictured above): Physiotherapist Myrna Benderoff (right) teaches student Varsha Ahir (left) how to adjust the height of a walker.

Investing in volunteer training improves client service

Giving library volunteers the skills they need to effectively assist clients, families, caregivers and visitors with helpful resources is the objective of a series of training sessions developed by Library Services and the Centre for Education's Division of Training & Simulation.

Advancing Teamwork for Library Accessible Services (ATLAS) employs a variety of approaches to help volunteers rethink their services from a client's perspective and challenge their routines and assumptions.

The Anne and Louis Pritzker Wellness Library is a free lending library with a wide range of health information and reading materials. The library enriches the lives of older adults through volunteer interactions, meaningful resources, programs and the use of technology. Volunteers are trained to provide knowledgeable service tailored to clients' needs while creating a community hub for clients, families and members of the community with connections beyond Baycrest.

The ATLAS program is an innovative model that could be adopted by other organizations that value and rely on library volunteers.

(pictured above): Volunteers help library users discover reliable health information and reading materials.







Baycrest

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For more information about education at Baycrest, please visit baycrest.org/educate/



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