Hotel Dieu Hospital Research Institute Annual Report 2013-14

Research Excellence in Ambulatory Care and Health Care Systems
June 17, 2014

Dr. Pichora, CEO of Hotel Dieu Hospital, is pleased to present the following first annual report of the Hotel Dieu Hospital Research Institute. In its first full year as a not-for-profit corporation, the Research Institute has generated and supported research initiatives across the hospital, helping to position Hotel Dieu Hospital (HDH) as a centre of excellence in ambulatory care and research.

The Research Institute continues to build a culture of inquiry at HDH by working with staff and researchers to facilitate the research process and overcome barriers. New research has been created through the Research Club (including bariatric and infection control) as well as the Kingston Ophthalmic Training Centre (KOTC) curriculum. Research Institute staff recently met with all interested researchers in a focus group session, to define common barriers to research at HDH. Response to this focus group initiative was excellent, and an action plan is now underway.

Currently HDH is involved in research projects that total over $16 million of awarded funding. As new scientists develop their research and establish clinics and labs at HDH, we anticipate that HDH’s position as a leading ambulatory care research centre at the provincial, national and international levels, will be solidified.

The Research Institute has completed its infrastructure and is now fully incorporated with a Board of four directors and its own bank account. Three Board meetings and one Members’ meeting have occurred. The Institute is a not-for-profit corporation registered with Industry Canada.

The Research Institute has also worked to streamline processes including contract and ethics board approval, and credentialing for those outside of HDH. The Institute continues to pursue multidisciplinary collaborations with new academic and non-academic partners including university and college researchers and industry, and to develop ongoing relationships with these partners. Further, the Research Institute has submitted metrics pertaining to revenues and stories highlighting HDH research to the Council of Academic Hospitals in Ontario (CAHO).

The Research Institute is grateful for the support of their Board, HDH staff, the HDH Senior Leadership Team, and former Chief of Staff Dr. Dale Mercer, who was key to the foundation of the Institute in line with the strategic direction of fostering a culture of research at HDH.

The Research Institute looks forward to another productive year in advancing the mission of the Religious Hospitallers of Hotel Dieu in the pursuit of excellence in health service, education and research.
Hotel Dieu Hospital Research Institute

Annual Report 2013-14:
Research Excellence in Ambulatory Care and Health Care Systems

The Research Institute (RI) has had a busy year setting up its corporate infrastructure, streamlining processes, developing research partnerships, initiating new research projects at HDH, and engaging in other activities designed to build research culture and presence at HDH. The RI has enjoyed liaising with HDH staff across departments to understand how to support clinicians and non-clinicians in research endeavours. The RI looks forward to further fostering multidisciplinary collaborations between researchers at Kingston universities and colleges, health care institutions, and social agencies.

1. **Streamlining contract process.** Contracts involving HDH researchers are now processed more efficiently. They are reviewed by Vic Sahai, Director of the Research Institute (RI), to ensure that HSREB (Health Sciences Research Ethics Board) approval has been obtained and also to ensure that any financial implications are duly compensated to HDH from research funds. This involves communications with research staff involved with each contract, regarding HSREB approval, use of hospital resources and payment obligations. After review by Vic, contracts are vetted by Steve Miller, Chief Financial Officer (CFO), before final signature by Dr. David Pichora, Chief Executive Officer (CEO). Research Institute staff worked with Finance at HDH, Queen’s Office of Research Services and the KGH Research Institute to set up a practice at HDH that ensures compensation for hospital resources. Further, the time needed for final signature on research contracts by the HDH CEO has been reduced, is usually accomplished within 2 to 5 business days, and can be expedited in case of sponsor deadlines.

2. **Streamlining REB approval process.** The time involved in application to the HSREB was often seen as a barrier to potential researchers. The Research Institute has been involved in assuming this task for novice applicants at HDH, in order to facilitate this process and avoid use of clinical time. RI staff has also advised clinical staff as to the need for HSREB approval depending on the type of research project, quality improvement initiative and publication intention. Queen’s Office of Research Services has provided consultation and training in HSREB application to RI staff, who have completed submissions for Principal Investigators at HDH, which were subsequently approved.

3. **Support of HDH as a Best Practice Spotlight Organization.** When staff involved in implementation and evaluation of Best Practices, under the leadership of Jennifer O’Neil, first expressed interest in publication of their findings, the Research Institute facilitated the HSREB application process. Potential publication of Best Practices in foot assessment in diabetic patients, as well as assessment of chronic pain, has been supported in this manner. The Research Institute looks forward to an ongoing role in enabling the dissemination of findings to other health care organizations, as new Best Practices are implemented at HDH.

4. **Kingston Ophthalmic Training Centre.** Research Institute staff have worked with Craig Simms, Coordinator of the HDH Ophthalmology Technician program, to initiate a research component to the two-
year program, which leads to certifications as ophthalmic technicians and ophthalmic technologists. Students learned the research process, carried out research projects with supervisors who are ophthalmologists at HDH, wrote research papers and have shared their findings through a poster session at Queen’s-HDH Ophthalmology Research Day. There are currently 5 projects completed or in progress. Topics are: difference of visual acuity measurements between 3 types of visual acuity projector; difference of axial length measurements between 2 types of probe; differences between 3 instruments for corneal thickness measurement; differences between cup-to-disc ratios in optical coherence tomography (OCT), physician assessment and fundus photos; and functional vision loss in homonymous hemianopia patients.

5. Research Club. The Research Institute has established a Research Club involving novice researchers from a variety of disciplines at HDH. The Club has resulted from information gathered from staff about barriers to research, including inadequate research training, lack of awareness of available resources, insufficient time to do research, and difficulty in access to collaborators and mentors. To overcome these deterrents, guidance in developing and executing research projects, as well as feedback from members, is provided at monthly meetings. RI staff also assists members on an individual basis between meetings. There are currently 4 projects, all developed from initial research questions of members. Topics are: defining predictors of diabetic remission after bariatric surgery; effect of animation on spirometry effort and volume; attitudes and perceived barriers to hand hygiene in ambulatory health care; attitudes to hand hygiene among medical students and residents. It is a goal of the Research Institute that these projects will be presented and published, and that members will be able to mentor other novice researchers.

6. Research partnerships. In order to increase multidisciplinary collaboration, partnerships have been initiated between researchers from HDH and those in other disciplines. For example, a meeting was set up to introduce an HIV physician scientist at HDH, Dr. Wendy Wobeser, to a Queen’s mathematics professor. RI staff met with Queen’s social psychology professors with a view toward collaboration in the improvement of hand hygiene adherence. RI staff also initiated a partnership with the Queen’s MSc. in Health Care Quality program, resulting in a student project involving reduction of wait times for initial child and adolescent psychiatric assessment, under supervision of Dr. Khalid-Khan, a psychiatrist at HDH. Creation of multidisciplinary partnerships continues to be a top priority. Further, staff of the RI are working with Dr. Maha Othman and Dr. Nancy Sears of St. Lawrence College to initiate student research projects at HDH and clear any administrative hurdles.

7. Grant applications. As an outcome of the Aging Research Priority Setting workshop organized by Queen’s Office of Research Services in December 2013, Vic Sahai was a co-applicant on a SARC (Senate Advisory Research Committee) grant with HDH Principal Investigator Dr. Angeles Garcia, and co-applicant Queen’s Geography professor Dr. Mark Rosenberg. The Frontenac-Kingston Council on Aging and the KFL&A Public Health Unit were also involved in this application. The goal was to develop a Kingston Older Adult Needs Assessment Survey, as a first step to identifying the needs of seniors and thus direct future research in aging. Although the grant was not awarded, academic and community partnerships were formed.
Vic Sahai engaged the Queen’s Family Health Team (QFHT) in developing a grant proposal that was successfully funded ($23,000) by Centre for Studies in Primary Care (CSPC) in Kingston: A pilot study: Reducing wait-one (T1) times – Assessing the effectiveness of a standardized algorithmic approach to booking primary care referral patients into outpatient urology clinics. The premise of this project is that the implementation of a more efficient and algorithmic booking process will reduce T1 wait times between QFHT and Urology. A secondary objective of the study is to address the timely documentation/feedback the Primary Care (PC) physician receives from the Urologist. This will address two of HDH’s strategic priorities – reduction of T1 wait times and timely documentation to PC physicians.

HDH played an active role in partnering with the KFL&A Public Health Unit and Queen’s Family Health Team in responding to a proposal for the provision of evaluation services on behalf of the 7 South East LHIN Health Links. Although the proposal was not successful it did establish the grounds for future endeavors.

CANADA-AFRICA RESEARCH EXCHANGE GRANTS (CAREG) - Secure and Trustworthy Reservation and Medical Records System (STRMRS) ($45,000): This award funds a new collaboration between Drs. Zulkernine (Queen’s University) and Ejigu (Addis Ababa University, Ethiopia), who will combine their expertise to build on research outcomes from previous work in Canada and in Ethiopia. The project aims to improve public healthcare service delivery through a web-based overlay to the existing Health Management Information System (HMIS) in Ethiopia. One important goal for the team will be to develop expertise in software assurance techniques for healthcare systems. The role of Hotel Dieu Hospital will be to share our knowledge and experience rated to IT and its impact and utilization on patient care.

8. Research Hospital Appointment applications. The Research Institute has streamlined this credentialing process for individuals who are not employees of HDH and wish to engage in research at HDH in any capacity. These include Queen’s graduate students, medical students, and health care staff from KGH. RI staff have engaged in consultation on the application of the new Research Hospital Appointment (RHA) policy to individuals in various categories. They have provided applicants with the required forms and guidance as to their completion and submission, as well as the necessary authorization from Vic Sahai as Director of Research. Applications are expedited when necessary with the aid of RI staff.

9. Research Institute infrastructure. Research Institute and other HDH staff have completed the infrastructure needed for the Institute, including the acquisition of a Certificate of Incorporation, adoption of the Articles of Incorporation and By-laws, election of Directors and Officers, appointment of a Public Accountant and creation of a bank account. In 2013-14 this involved three Board meetings and one Members’ meeting. Board directors are Dr. David Pichora, CEO of HDH; Ms. Sherri McCullough, Chair, HDH Board of Directors; Dr. Bob Stewart, President and CEO, Catholic Health International; and Dr. Richard Reznick, Dean of Health Sciences and Director of the School of Medicine, Queen’s University. Ongoing consultation with legal counsel, HDH senior leadership, RI and HDH Board members, the hospital insurance provider HIROC, the hospital Public Accountant Collins Blay LLP, Queen’s Office of Research Services and other Research Institutes have been integral to the creation of the infrastructure.
10. Development and population of Research Institute website. With the help of Anne Rutherford and Carrie Holden in Public Relations, the Research Institute page on the HDH internal and external website has been created and populated, and continues to be updated. The page can be accessed at http://www.hoteldieu.com/research.html.

11. Communication with HDH Departments about role of the Research Institute. Research Institute staff have met with HDH staff, including managers, from most clinical departments. They communicated that the role of the Institute is to break down barriers to research, facilitate collaborations, assist researchers in developing, funding and executing their projects, and generate more research in ambulatory care. Research Institute staff recently met with all interested researchers in a focus group session, to define common barriers to research at HDH. Response to this focus group initiative was excellent, and an action plan is now underway.

12. CAHO metrics and stories. As a member of the Council of Academic Hospitals of Ontario (CAHO), HDH had the opportunity to provide metrics to CAHO regarding research projects, research staff and related funding at the hospital. The Research Institute together with Finance staff and the assistance of KGH staff, provided the required metrics before the deadline in October. Further, RI staff interviewed HDH researchers and provided 9 stories profiling HDH research for potential publication on the CAHO website, also by the October deadline.

13. Collaboration within Kingston research environment. Research Institute staff have met with many stakeholders in the Kingston research community. These include the KGH Research Institute and other staff at KGH, Queen’s Office of Research Services and several Queen’s faculty members, St. Lawrence College faculty, Royal Military College faculty, Queen’s Family Health Team, Health Links, and KFL&A Public Health Unit, in the interest of creating a harmonious research environment in Kingston, which does not involve duplication of research services and does facilitate research processes.

14. Learning and knowledge acquisition: Vic Sahai worked with Dr. Zulkernine (in the Queen’s School of Computing Science and Engineering) and one of his students as well as Dr. Linda Lévesque, Assistant Professor within the Faculty of Health Sciences, to develop a series of online calculators that can be used in the teaching of critical appraisal of the research literature. The purpose of these calculators is to answer the “treatment” related questions that learners have about patient care. Eventually, these programs will be linked to the RI website. The online calculators are currently being pilot-tested by medical students.
The expectations are that the annual report of the HDH Research Institute be shared with the VP (Research) at Queen’s University and that the HDH Research Institute be accountable for the same standards outlined in the existing Affiliation Agreement between Queen’s University and Hotel Dieu Hospital.