HEALTH QUALITY

Master of Science in Health Quality (M.Sc. [H.Q.])

Program Structure

The Master of Science in Healthcare Quality (M.Sc.[H.Q.]) degree will prepare professionals for practice, research and education in the developing area of Health Quality, Risk and Safety. This two (2) year, part-time, interdisciplinary course-based program consists of eight (8) courses, including a supervised project. Participants will have two (2) mandatory, one-week intensive sessions each year in July or August; the remainder of the program will be a combination of synchronous and asynchronous study using interactive online videoconferencing.

The program is of interest to practicing professionals, such as healthcare managers, nurses, physicians, pharmacists, allied health professionals, lawyers, engineers, business leaders, engineers, healthcare architects, IT specialists, and medical physicists. In addition, the program may appeal to those who wish to gain additional education and credentials to move into a healthcare quality position or role.

Applicants to the M.Sc.(H.Q.) program

Admission requirements are:

- Graduation with a minimum of a second class standing of 3.0 GPA from an accredited, baccalaureate-granting University
- A baccalaureate in a healthcare discipline, law, business, engineering, or policy studies is preferred;
- Undergraduate course in statistics and evidence of an understanding of research methodology, and/or quality improvement experience;
- A statement of interest in the program (maximum 2500 words) is requested to match the applicant's academic and work background with the objectives of the program; and
- A current resume or curriculum vitae (CV)

Doctor of Philosophy (PhD) in Health Quality

Program Structure

The PhD in Health Quality will prepare experts who will improve the delivery of healthcare through teaching, developing new methodologies and theoretical frameworks, as well as testing innovation in the field of health quality. The PhD in Health Quality program offers a collaborative approach to comprehend and address the complexities within the healthcare system. Graduates of the program will be prepared to take senior leadership roles in health quality portfolios in practice and policy settings across Canada and will also be educated to assume tenure track positions in university programs. While the degree is research intensive, it will also be grounded in pragmatism and will help prepare independent researchers for quality improvement research and developing leadership capabilities in health settings.

The PhD in Health Quality program is a four (4) year, interdisciplinary program using a combination of synchronous and asynchronous study using interactive online videoconferencing. The PhD in Health Quality program consists of five (5) courses in year one, including an internship over the summer months. The internship will be tailored to the learners' interests and to broadening their perspectives on health quality. In the fall term of year two, students will complete their written comprehensive exam. The comprehensive exam will be a take home two (2) week written submission. In the winter and summer terms of year two (2) students will focus on their PhD thesis, and complete HQRS-905* Current Topics in Health Quality.

Applicants to the PhD in Health Quality Program

Admission requirements are:

Applicants who have a project based or thesis-based research master's degree in health, health-related law, business, architecture, or engineering will be eligible to apply for admission. Potential applicants who have master's degrees in other disciplines would be encouraged to discuss the suitability of the degree with the Associate Director (Health Quality Programs) prior to applying. The overall grade point average required is B+ at the master's level.

Applicants from under-represented groups will be encouraged to apply and specific recruitment will be targeted to ensure the applicant pool reflects the population of Canada. As the program will be offered in a hybrid format, access to the program is unlikely to be a barrier as students will be required to be on campus for one-week periods at select times over the four years.

Faculty

Director (Nursing), & Head (Anesthesiology & Perioperative Medicine)
Snelgrove-Clarke, E., & Arellano, R.

Associate Director (Health Quality Programs)
Wilson, R.

Professor
Almost, J., Premji, S.S., Sears, K., Tranmer, J., Woo, K.

Associate Professor
Camargo Plazas, M.d.P., Duhn, L., Egan, R., Galica, J., Godfrey, C., Knutsen, W., Luctkar-Flude, M., Pilon, R., Rocklein Kemplin, K., Rotter, T., Sawhney, M., Wilson, R.

Assistant Professor
Goldie, C., MacDonald, D., Mahar, A., Zuk, A.

Cross-Appointed Faculty
Johnson, A.

Programs

- Health Quality - Doctor of Philosophy (https://queensu-ca-public.courseleaf.com/graduate-studies/programs-study/health-quality/health-quality-phd/)
- Health Quality - Master of Science (https://queensu-ca-public.courseleaf.com/graduate-studies/programs-study/health-quality/health-quality-ms/)

Courses

HQRS 840 (3 cr) Introduction to Quality, Risk and Safety
A comprehensive introduction of the historical, current and future state of quality, risk and safety. The developments of quality and safety research will be examined via the exploration of system enhancement, theoretical frameworks and tools for measuring system improvements. Summer/ Fall. L. Duhn. Intensive Week fee $1700 (July 2023; est. $1790 July 2024).

HQRS 841 (3 cr) Process Improvement in Health care
A solid foundation in the current methods of process improvement in healthcare settings by incorporating best practices for process definition, value stream mapping and performance measurement in the course. Root cause analysis, hypothesis testing methods, and design of experiments (DOE) and other related analytical methods will be taught using relevant examples from different healthcare settings. Fall. Instructor TBD.

HQRS 842 (3 cr) Research and Evaluation Methods to Assess Quality, Risk and Safety
Advance safety science knowledge through independent research using quantitative and qualitative methods, including topics in advanced research design, data management, and measurement and analysis techniques. Students are expected to generate a research proposal at the end of course. Winter. R. Egan.

HQRS 844 (3 cr) Law, Risk and Healthcare
The intersection of areas of law, risk, and healthcare that create specific and unique complexities for a variety of professionals is explored in this course. Topics include accident law, civil litigation, insurance and risk management; the course concentrates on the intersections of these areas to synthesize both a coherent system of redress and a risk and safety conscious system for organizing social behaviour. Winter. Instructor TBD.

HQRS 845 (3 cr) Organizational Behaviour in Healthcare
Fundamental organizational behaviour concepts and theories and their use in healthcare settings are presented. Behavioural and organizational dynamics within and beyond organizational boundaries are explored and analyzed. Fundamentals and skills to analyze, manage and change organizational dynamics in healthcare services are addressed. Fall. W. Knutsen.

HQRS 846 (3 cr) Human Factors in Healthcare
Human Factors as a discipline researches and provides information about human behavior, abilities, limitations, and relationship to the work environment (physical, organizational, cultural), and applies it to the design of safer and more effective tools, machines, systems, tasks, jobs, and environments. This course will cover the main human factors (e.g., perception, stress, workload, fatigue, etc.) that play a role in various healthcare contexts and can have a critical impact of the outcomes (e.g., care success, patient safety, job satisfaction, etc.). Summer. Instructor TBD. Intensive Week fee est. $1790 (July 2024).

HQRS 847 (3 cr) International Perspectives on Policy, Economics, and Quality Healthcare
This course examines concepts in health policy and health economics and how this relates to policy process and development. The concepts will be analysed from an evaluative perspective on effectiveness and efficiency in healthcare nationally and internationally. Summer. Instructor TBD.

HQRS 898 (3 cr) Project in Healthcare Quality
The focus of this course is the scholarship of integration, implementation, and application. Students will develop interdisciplinary group projects for system-based practice change to address a problem in healthcare, incorporating aspects of policy, equity, and social determinants. (3.0 credit units). Summer. C. Godfrey.

HQRS 900 Philosophy of Health Quality Science
The course examines the major philosophical traditions that have influenced the generation of knowledge related to the science of quality and improvement through empirical, interpretive and critical paradigms. It includes a critical analysis of world views, truth, theoretical perspectives, and constructs within and across disciplines, with an emphasis on relationships between philosophy, theory, research and

practice toward the generation of new knowledge. Fall. L. Duhn.

HQRS 901 Research and Theory of Change Management and Leadership
This course examines concepts in change management and leadership as related to improving the quality of healthcare delivery. Discussion will focus on contemporary issues in healthcare delivery with an examination of change management and leadership theory and principles. The theory and principles will be applied to organizational culture, the influence of policies, and the implementation and evaluation of best practices to advance healthcare safety. Winter. A. Zuk.

HQRS 902 Qualitative Methods for Research in Health Quality
This course prepares students to advance knowledge in the area of quality improvement using qualitative approaches. Topics addressed include the historical and philosophical foundations of qualitative research, research design, data collection, analysis, interpretation and knowledge translation. Fall. P. Camargo.

HQRS 903 Quantitative Methods for Research in Health Quality
This course prepares students to advance knowledge in the area of quality improvement using quantitative methods. It focuses on conceptualizing research, measurement, design, sampling and reliability of measures. Emphasis is placed on the appropriateness of design for the level of theoretical knowledge available and the nature of the research problem to be investigated. Winter. K. Goldie.

HQRS 904 Internship in Health Quality
The internship involves a placement in an organization where research and theory on quality can be applied in a practical environment. The internship will be developed jointly with the organization and the learner and will require approval from the course supervisor and program director. Summer. L. Duhn.

HQRS 905 Current Topics in Health Quality
A required doctoral course for all year two PhD in Health Quality students. This course will present current topics in health quality. Topics will be identified each year in collaboration with the learning needs identified by students. Potential topics may include the following: cyber security of sensitive data, leading and project management of large scale improvement, global issues in quality improvement, metrics, politics of change, laws and liability, transitions in care, implementing, spreading and sustaining improvement across health systems, funding and resources for improvement, knowledge dissemination and implementation, co designing improvement projects with patients and families, person centered care, social determinants of health, aging, Indigenous Communities, and mental health and addictions. The course will include seminars, presentations from visiting scholars with sessions held every other week throughout the year. Winter/Summer. C. Godfrey.

HQRS 999 Thesis