Queen's University

Department of Public Health Sciences

Title: EPID 837 Health Services Research and Routinely Collected Health Data

3.0 Credits Fall 2020

Course Coordinator and Instructor:	**Teaching Assistant:**
Patti Groome, PhD	Meaghan Mavor, PhD candidate
Professor, Department of Public Health Sciences	Department of Public Health Sciences
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Office Hours: By appointment with Dr. Groome or Ms. Mavor

Class Schedule   **Tuesdays 2-3 or 3:15-4:15 pm and pre-recorded lectures**

Location   Zoom (live sessions) YouTube (pre-recorded lectures) onQ (course materials)

Prerequisites
None. The course is designed to accommodate knowledge variability among graduate students from across the Faculty of Health Sciences.

Enrollment
Minimum enrollment of 5 for this course to be offered.

Course Description
This course is designed to support MSc, MPH, and PhD students who will be using routinely collected health data for a health services research oriented thesis or practicum, as well as those with an interest in using these research methods later in their career. The course covers health services research methods as they relate to the use of routinely collected data in the areas of healthcare access, quality, effectiveness and policy. The course focusses on the use of ICES data holdings, but learning can also be applied to other routinely collected health data sources. Course activities include weekly readings, pre-class quizzes, and research article reviews of the health services literature that will ask you to apply the course material. Sessions will highlight examples of published or ongoing health services research, including presentations from guest speakers.

Learning Outcomes
At the end of the course, students should be able to:
1. Discuss health services research methods and their application to Canadian health care problems using routinely collected health data.
2. Critically assess published health services research studies.
3. Identify the appropriate research design and statistical approach to a health services research question.
4. Apply epidemiological concepts to health services research questions.
5. Identify and characterize the appropriate routinely collected health data for use in health services research.

Format

This is a remotely-provided course taught using a combination of teaching methods, including pre-recorded lectures, readings, online resources, synchronous group discussions and activities. Quizzes and assignments are due by noon on Tuesdays, which is just prior to the live discussion sessions. Discussion sessions will address lecture content, readings, quizzes and assignments. They will consist of a 5-10 minute overview with Dr. Groome, 25 minute breakout groups and a 25 minute wrap-up. Students will be assigned to their breakout group to ensure a mix of skill sets in each group. Half the class will attend the 2-3 pm session and the other half will attend the 3:15-4:15 pm session. Dr. Groome will meet with each student individually at the start of the term for about 15 minutes to learn about the student's expectations of the course and their background for the purpose of breakout group assignment and to refine course content.

Course Materials

Readings include textbook chapters, government reports, journal articles and technical documents. Those readings along with pre-recorded lecture links, associated quizzes and research article review assignments will be uploaded to onQ at least one week before the related live discussion session.

Assessment

 Five pre-class quizzes on the readings (top 4 marks will be kept) – 40%
 Three Research Article Reviews – 39%
 Final review of an HSR article of student-pair's choosing (working in pairs) – 21%

Assessment Policy*

Late submissions will be accepted with a 10% penalty per day. The student may discuss extenuating circumstances with the instructor, who may ask for documentation to support an extension.

Course Design

Introductory Session: What is health services research? What is routinely collected data? What is ICES?				
Theory / Purpose	**Design and Data**	**Analysis**	**Validity**	**Affecting Change**
Module 1: Access to Health Care				
Session 2: Theory, descriptive design, data choices, analyses and introduction to some commonly used variables			Session 3: Assessing validity and introduction to knowledge translation	
Module 2: Health Care Quality				
Session 4: Theory, cross-sectional design, quality indicators (QIs), their measurement and analysis			Session 5: Assessing QI validity and exploring strategies to affect change	
Module 3: Health Care Effectiveness				
Session 6: Purpose, comparative effectiveness designs, data choices, analyses and introduction to dataset creation plans			Session 7: Assessing validity and usefulness of CER findings	
Session 8: Partnerships with Indigenous Peoples to answer their Health Services Research questions				
Module 4: Health Care Programs / Policy				
Session 9: Program/policy evaluation including cost effectiveness and deriving variables from ICES data sources			Session 10: Measuring the impact of program/policy evaluations	
Final Assignment Presentations				
Session 11: Access and quality presentations and discussion				
Session 12: Effectiveness and programs/policy presentations and discussion				

Schedule

Week (Live Session Date)	Pre-Recorded Lecture Topics	Live Sessions
Week 1 (September 8)	Introduction to Health Services Research, ICES and Routinely Collected Health Data ICES Data Sources	Introductions, syllabus review
Week 2 (September 15)	Access to Health Care: Design, Data Choices, Analyses *(Guest lecturer: TBD)*	Descriptive designs **Pre-class quiz**
Week 3 (September 22)	Access to Health Care: Assessing Study Validity and Knowledge Dissemination Commonly-used ICES Variables and their Validity	**Research Article Review** review/discussion
Week 4 (September 29)	Health Care Quality: Design, Data Choices, Analyses *(Guest lecturer: TBD)*	Surveillance designs / other **Pre-class quiz**
Week 5 (October 6)	Health Care Quality: Assessing Validity and Knowledge Dissemination Data Privacy – Lecturer: Meaghan Mavor	**Research Article Review** review/discussion
Week 6 (October 13)	Health Care Effectiveness: Design, Data Choices, Analyses Dataset Creation Plans	Comparative effectiveness designs **Pre-class quiz**
Week 7 (October 20)	Health Care Effectiveness: Assessing Validity and Knowledge Dissemination *(Guest lecturer: TBD)*	**Research Article Review** review/discussion Causality as it relates to treatment effects
	Break	
Week 8 (November 3)	Partnerships with Indigenous Peoples to Answer their Health Services Research Questions *(Guest lecturers: TBD)*	Indigenous Health Research **Pre-class quiz**
Week 9 (November 10)	Health Care Programs / Policy: Evaluation including Cost-effectiveness *(Guest lecturer: TBD)*	Program and policy evaluation **Pre-class quiz**
Week 10 (November 17)	Health Care Programs / Policy: Measuring their Impact *(Guest lecturer: TBD)*	Policy impact review/discussion
Week 11 (November 24)	Research Article Review presentations by students	
Week 12 (December 1)	Research Article Review presentations by students	
December 8	Final written Research Article Review due	

Accessibility and Accommodation*

Queen's University is committed to achieving full accessibility for persons with disabilities. Part of this commitment includes arranging academic accommodations for students with disabilities to ensure they have an equitable opportunity to participate in all of their academic activities.

If you are a student with a disability and think you may need accommodations, you are strongly encouraged to contact your Program Director and the Queen's Student Accessibility Services (QSAS) and register as early as possible. For more information, including important deadlines, please visit the QSAS website at: http://www.queensu.ca/studentwellness/accessibility-services/.

Academic Integrity*

Students are responsible for familiarizing themselves with the regulations concerning academic integrity and for ensuring that their assignments conform to the principles of academic integrity.
Academic integrity is constituted by the six core fundamental values of honesty, trust, fairness, respect, responsibility, and courage (see www.academicintegrity.org). These values are central to the building, nurturing, and sustaining of an academic community in which all members of the community can thrive. Adherence to the values expressed through academic integrity forms a foundation for the "freedom of inquiry and exchange of ideas" essential to the intellectual life of the University; see Senate Report on Principles and Priorities:
http://www.queensu.ca/secretariat/policies/senateandtrustees/principlespriorities.html and the Queen's School of Graduate Studies website: https://www.queensu.ca/sgs/graduate-calendar/academic-integrity-policy

Departures from academic integrity include plagiarism, use of unauthorized materials, facilitation, forgery, and falsification, and are antithetical to the development of an academic community at Queen's. **Given the seriousness of these matters, actions which contravene the regulation on academic integrity carry sanctions that can range from a warning or the loss of grades on an assignment to the failure of a course to a requirement to withdraw from the university.**

Copyright of Course Materials*

Course materials are copyrighted and are for the sole use of students registered in EPID 837. As such, these materials may not be distributed to any person not registered in this course. Contravention of this requirement constitutes an academic integrity breach.

*Excerpted from the websites cited and from the Queen's GLPH471 course syllabus.