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

COURSE DETAILS	
Term:	Fall 2021
Course Instructor:	Dr. Morgan Slater morgan.slater@queensu.ca
Day/Time:	Tuesdays, 10:00am – 1:00pm
Location:	Carruthers Hall, Room 311
COURSE OVERVIEW	

This course introduces health services research methods as they relate to routinely collected health data and will cover approaches for assessing healthcare access, quality, effectiveness, and policy. The course will focus on the use of Ontario's administrative health data sources, specifically the ICES data holdings, however students will also be introduced to other routinely collected health data sources (e.g., primary care data). The 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. Class sessions will highlight examples of published or ongoing health services research, including presentations from guest speakers.

#### EXPECTED LEARNING OUTCOMES

By the end of this course, students will be able to:

- Apply health services research methods to solve Canadian health care problems using routinely collected health data;
- Identify the appropriate routinely collected health data, research design and statistical approach to answer a health services research question; and,
- Critically assess published health services research studies.

#### COURSE MATERIALS

OnQ is the teaching platform for EPID 837. All lecture slides, required readings, and assignments will be available through OnQ.

#### **OFFICE HOURS**

If you would like to meet with us to discuss course activities and progress, please email the instructor to book a time to connect.

# COURSE SCHEDULE

Week	Date	Торіс
1	September 14	Introductions and course overview;
		Introduction to health services research, routinely collected health
		data and ICES
2	September 21	Important concepts in thinking through an ICES study;
		Privacy;
		Commonly used ICES variables and validity
		(Guest lecture: Shelley Wei, Rebecca Griffiths)
3	September 28	Access to health care
		(Guest lecture: TBA)
4	October 5	Access: application and critical appraisal;
		Quality
5	October 12	Quality: application and critical appraisal
		(Guest lecture: Joan Tranmer)
		Effectiveness
6	October 19	Effectiveness: application and critical appraisal
		(Guest lecture: TBA)
7	October 26	Class presentations: critique of HSR article
8	November 2	Program and policy evaluation
		(Guest lecture: Mike Green)
9	November 9	Partnerships with Indigenous Peoples to answer their HSR questions
		(Guest lecture: TBA)
10	November 16	Other data sources (i.e., primary care data (CPCSSN), CLSA,
		CCHS) and linkage to ICES
		(Guest lecture: Chris Mills)
11	November 23	Knowledge translation;
		Review
12	November 30	Class presentations: HSR study proposals
*May ha	aubiant to revision	: see OnO for undates

\*May be subject to revision; see OnQ for updates.

#### EVALUATION AND EXPLANATION OF ASSIGNMENTS

The course will include both individual and group assessments as follows:

Assessment type		Weight
Individual	Participation	15%
	Critique of health services research article	35%
Group	Development of study proposal using routinely collected health data	50%

# **Description of assignments**

# 1. Participation (15%)

You will complete a self-evaluation of your participation and engagement in the class. Along with competing a quantitative assessment, you will provide a written reflection of your participation throughout the term. The grade you provide yourself may be altered by the instructor if they assess your level of participation differently.

Due: December 7<sup>th</sup> by 11:59pm

# 2. Critique of health services research article (35%)

You will choose a health services research article that uses routinely collected health data and will summarize and critique the study. Prepare a 10-minute (<u>maximum</u>) presentation that will be presented to the class and a panel of experts. Your presentation should include:

- A <u>brief</u> description of the study including background/rationale, objective(s), study design, study population, data and variables, analysis, results and conclusions. Be sure to summarize the study findings: what are the bottom-line results, how strong is the effect(s) reported, and how precise are the results?
- Your thoughts or concerns about the quality of the study according to the relevant critical appraisal checklist. In the interest of time, you can choose to focus on the key methodologic issue you found and speak to how those issues might have biased the study results and/or influenced your opinion about the usefulness of the study findings.
- Address the validity (do you believe the results? Why or why not?) and relevance (has the study contributed valuable information?) of the study.

The article must use routinely collected health data, such as the ICES data holdings we have been discussing to date.

Presentations will take place in class on October 26<sup>th</sup>. You must submit the article you have chosen to critique by October 12<sup>th</sup>.

# 3. Development of study proposal using routinely collected health data (50%)

Working in pairs, you will development a short research proposal that uses routinely collected health data to answer a health service research question.

a) Presentations (20%): Students are to clearly and concisely present the rationale, research question, study design, data sources and variables, and data analysis plan for the proposed study. Each group will have time to complete a 15 minute presentation with 10 minutes for questions. Feedback from your peers and instructor will help support the writing of your final proposal.

Presentations will take place in class on November 30<sup>th</sup>.

b) Peer review (5%): During the presentations, you will conduct a peer review of each group. You will be assessed on the clarity, usefulness, and collegiality of the feedback you offer; this feedback will be provided to your peers. The details of your feedback should enable further refinement of the research proposal. Review forms will be provided on the day of the presentations.

Peer reviews will be submitted during presentations on November 30<sup>th</sup>.

- c) Written component (25%): Groups will submit a written report of the proposed research including the following sections:
  - 1. Study introduction
  - 2. Objective/research question
  - 3. Population and study design
  - 4. Data sources and variables of interest
  - 5. Data analysis
  - 6. Expected impact

The written submission is to be a maximum of 5000 words, not including references or appendices. You man include an appendix with any additional material that supports the proposal; there is no limit on the number of appendices but these **must** be suitable and relevant to the proposal.

Due: December 10<sup>th</sup> by midnight.

# Important dates and deadlines for assignments

Date	Milestone/deadline
October 12	Article for critique selected and submitted via onQ
October 26	Critique of HSR article presentations (in class)
November 30	HSR study proposal presentations (in class)
December 7	Self-evaluation of course participation and engagement
December 10	HSR study proposal (written component)

# **General expectations for all assignments**

All assignments are to be submitted via OnQ by **11:59pm** on the due date. You are expected to submit your assignments on time. Extensions will only be considered in the case of extenuating circumstances and requests for an extension must be submitted via email to the instructor no later than noon the day prior to the assignment due date. Late submissions will be penalized 5% per day.

For all written assignments, a standard referencing style must be used. It does not matter which style you use (e.g., Vancouver, APA) but it must be used consistently.

# TURNITIN

This course makes use of Turnitin, a third-party application that help maintain standards of excellence in academic integrity. Normally, students will be required to submit their course assignments through OnQ to Turnitin. In doing so, students' work will be included as source documents in the Turnitin reference database, where they will be used solely for the purpose of detecting plagiarism. A student guide for using Turnitin at Queen's can be found here: https://www.queensu.ca/ongsupport/turnitin-students-0.

Turnitin is a suite of tools that provide instructors with information about the authenticity of submitted work and facilitates the process of grading. Turnitin compares submitted files against its extensive database of content and produces a similarity report and score for each assignment. The score is the percentage of a document that is similar to content held within the database. Turnitin does not determine if an instance of plagiarism has occurred; it gives instructors the information they need to determine the authenticity of the work as part of a larger process.

Please read <u>Turnitin's Privacy Pledge, Privacy Policy, and Terms of Service</u>, which governs users' relationship with Turnitin. Also, please note that Turnitin uses cookies and other tracking technologies; however, in its service contract with Queen's Turnitin has agreed that neither Turnitin nor its third-party partners will use data collected through cookies or other tracking technologies for marketing or advertising purposes. For further information about how you can exercise control over cookies, see <u>Turnitin's Privacy Policy</u>.

Turnitin may provide other services that are not connected to the purpose for which Queen's University has engaged Turnitin. Your independent use of Turnitin's other services is subject solely to Turnitin's Terms of Service and Privacy Policy, and Queen's University has no liability for any independent interaction you choose to have with Turnitin.

#### ACADEMIC INTEGRITY

Queen's students, faculty, administrators and staff all have responsibilities for supporting and upholding the fundamental values of academic integrity. The core values of honesty, trust, fairness, respect and responsibility (see <a href="http://www.academicintegrity.org">http://www.academicintegrity.org</a>) are central to building, nurturing and sustaining an academic community in which all members thrive.

This course aims to uphold the values of academic integrity; students are responsible for familiarizing themselves with and adhering to the regulations concerning academic integrity. General information on academic integrity is available at <u>Academic Integrity @ Queen's</u>, along with Faculty or School specific information. Departments from academic integrity include, but are not limited to, plagiarism, use of unauthorized materials, facilitation, forgery, and falsification. Actions which contravene the regulations on academic integrity carry sanctions that can range from a warning, to loss of grades on an assignment, to failure of a course, to requirement to withdraw from the university.

#### ACCESSIBILITY

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 the Student Wellness Centre and register as early as possible. For more information, including important deadlines, please visit the <u>Queen's Student Accessibility</u> <u>Services (QSAS)</u>.

#### COPYRIGHT OF COURSE MATERIAL

This material is designed for use as part of EPID 806 at Queen's University and is the property of the instructor unless otherwise stated. Third party copyrighted materials (such as book chapters and articles) have either been licensed for use in this course or fall under an exception or limitation in Canadian Copyright law. Copying this material for distribution (e.g. uploading material to a commercial third-party website) can lead to a violation of Copyright law. Find out more about copyright at <a href="https://library.queensu.ca/help-services/copyright-fair-dealing">https://library.queensu.ca/help-services/copyright-fair-dealing</a>.

#### **RESOURCES AVAILABLE TO YOU**

The <u>Student Academic Success Service (SASS</u>) offers academic support to students who wish to develop their skills in critical thinking, reading, learning, studying, writing, and self-management.

<u>Student Wellness Services</u> support the personal, academic and social development of students at Queen's University by providing a range of programs and services (e.g., accessibility services, counselling, physical and mental health services, health promotion).

The Library offers many great services to enhance your learning.

<u>Career Services</u> offers students, faculty, employers and alumni various services including workshops.