

Cyclical Program Review Final Assessment Report and Implementation Plan for the Academic Programs Offered by the Department of Public Health Sciences, including the MSc Biostatistics program, offered jointly with the Department of Mathematics and Statistics

## **Programs Reviewed:**

- Doctor of Philosophy (PhD) Public Health Sciences with 3 fields of study: General, Epidemiology and Biostatistics.
- Master of Public Health (MPH). Includes the following options:
  - Accelerated program (12-month duration) open to students with at least 2 years of relevant work experience.
  - Specialization track in Infection Prevention and Control (IPAC).
- Master of Science (MSc) Public Health Sciences, Field of Study Epidemiology.
- Master of Science (MSc) Public Health Sciences, Specializing in Biostatistics

# Program Changes since last Cyclical Program Review:

- PhD: Introduction of current fields of study, approved as major modification October 30, 2018.
- Master of Public Health: Introduction of two options:
  - Accelerated 12-month program for experienced health professionals, approved as a major modification December 1, 2015. Introduced September 2016.
  - Specialization track in Infection Prevention and Control, approved as a major modification to the MPH program November 30, 2021. Introduced January 2022.
  - Name changes for PhD and MSc programs, from Epidemiology to Public Health Sciences. The new names were introduced in 2016. The Epidemiology program names were inactivated as the final students graduated, between 2021-2023.

In accordance with Queen's University Quality Assurance Processes (QUQAP), this final assessment report provides a synthesis of the external evaluation, internal responses, and assessment of the above programs. This report identifies the significant strengths of the programs, and opportunities for program improvement.

An implementation plan is attached that identifies:

- who will be responsible for acting on and monitoring progress on the recommendations,
- any resource or governance implications resulting from the recommendations, and
- timelines for implementation of the recommendations.

# Final Assessment Report: Executive Summary

#### **Summary of Review**

- The Department of Public Health Sciences produced a self-study document that was reviewed by the Dean, Faculty of Health Sciences, the Vice-Provost and Dean, School of Graduate Studies and Postdoctoral Affairs, and the Vice-Provost (Teaching and Learning). The self-study was approved on April 3, 2023.
- 2) The previous cyclical program review of these programs took place in 2013-14 and the Final Assessment Report was completed in February 2015. The current review was delayed due to the pandemic. As a result of the delay, a "bridging" report was completed to provide an update on the status of recommendations made in the last review. This report was approved by the Senate Cyclical Program Review Committee (SCPRC) on June 2, 2022. The committee requested additional information on fulfilment of one of the recommendations; this was considered on November 25, 2022. See Appendix A of this Final Assessment Report for further details.
- 3) The review team visit took place on October 22-23, 2023. The review team members were:
  - i. Dr. Fran Scott, Associate Adjunct Professor, Health, Aging and Society, and Leadership in Teaching and Learning Fellow, McMaster University.
  - Dr. Jeremy Taylor, Professor, Department of Biostatistics and Associate Director for Biostatistics, Comprehensive Cancer Centre, University of Michigan. (Attended remotely via zoom).
  - Dr. Warren Mabee, Professor, Department of Geography and Planning, Director, School of Policy Studies and Associate Dean, Faculty of Arts and Science, Queen's University.
- 4) The visit included meetings with
  - i. Students
  - ii. Faculty
  - iii. Staff
  - iv. Librarian
  - v. Department and Unit Heads and members of the Department's General Education Committee.
  - vi. Vice-Dean, Faculty of Health Sciences
  - vii. Associate Deans, School of Graduate Studies and Postdoctoral Affairs
  - viii. Vice-Provost (Teaching and Learning).
- 5) The review team reported on November 7, 2023. The Department Head, Faculty Dean and the Vice-Provost and Dean (School of Graduate Studies) provided responses to the review team report. Responses were completed by August 2, 2024.
- 6) The Senate Cyclical Program Review Committee considered the review team report, internal responses and a draft Final Assessment Report and Implementation Plan at its meeting on November 12, 2024. The Report and Plan was approved on November 27, 2024.

#### The following strengths were noted:

- The programs' faculty members have a long and well-established reputation for research excellence
- Expertise has broadened in recent years to include more areas of public health research. This is linked with offering a broader range of classes, and with expansion of the MPH program.
- Faculty collaborate with colleagues in many other areas of health sciences.
- Faculty and senior students are accessible and supportive to students. Core faculty provide thesis supervision, most of the core course teaching and some of the elective course teaching.
- The programs' objectives are well formulated and align well with the University and the Faculty's mission and academic plans.
- Excellent support is available from Library Services.
- Elective options have improved since the last review with the addition of global health, qualitative research methods, a new statistical machine learning class and three new infection prevention and control (IPAC) electives.

## The following opportunities for enhancement were noted:

- Opportunities for joint Queens degrees should be enhanced (for example MD-PhD, MD-MSc) and investigated such as MPH-LLB and Master of Public Health Policy).
- Clarity about virtual and hybrid course offerings to ensure Queen's standards are identified and applied.
- Ensure the joint committee between Mathematics/Statistics and PHS is actively meeting to identify and resolve issues of common interest such as admission criteria, scheduling and adjunct funding.
- With the loss of the communications staff member the PHS web site is somewhat out of date as the remaining staff can only update it as they have time. It is essential this is kept current as it is the main recruitment tool for applicants.
- The current group reviewing elective options across FHS and perhaps beyond to ensure access for PHS students as well as promote opportunities for non-PHS graduate students to enroll in PHS electives should be supported. This cross-fertilization benefits students and faculty and can be a source of additional revenues.
- In the MPH program, elective options are not always available at the right time for students. The review team felt there were many benefits of the 4<sup>th</sup> term of the MPH program, but the current structure has some substantial challenges. Reviewers suggested that the program director and allied stakeholders investigate flexible options to meet student needs while maintaining the learning objectives.
- Students requested more opportunities to present and receive feedback on their work, such as additional research/practicum poster or presentation days, and student respondents at seminars.

#### Summary of Review Team Recommendations

The reviewers made eight recommendations, summarized as follows. Please see the Implementation Plan for the full text of the recommendations.

- Teaching focussed recommendations:
  - Enhance teaching by the department's faculty members in selected undergraduate programs.
  - $\circ$   $\;$  Clarify the budget implications of undergraduate teaching.
  - Consider development of a teaching professor career stream.
  - Review workload expectations for faculty members.
- Investigate ways to increase the number of graduate students in the programs, consider development of a new master's program/pathway.
- Negotiate sustainable core teaching assistant opportunities.
- Develop enhanced administrative support for research grant applications to gain student support funds.
- Ensure librarian resources are used optimally.

#### Status

The academic programs in the Department of Public Health Sciences (including the jointly offered MSc Collaborative Specialization in Biostatistics) have been approved to continue.

Dates monitoring reports due:	June 2026, November 2028
Date of next review:	2028 - 2029 Academic Year
Prepared by Vice-Provost (Teaching and Learning)	October – November 2024
Approved by the Senate Cyclical Program Review Committee	November 27, 2024



## **Implementation Plan**

Recommendations	Proposed Follow-up	Responsibility for Leading Follow-up	Resource or Governance Implications	Timeline for Addressing Recommendation
1. The Public Health Sciences (PHS) department review the current workload expectations with respect to teaching, research and service, to allow for flexibility to ensure core and elective program teaching responsibilities are achieved, and that there is sufficient flexibility in teaching responsibilities for those faculty with large research programs.	Establishment of departmental Workload Review Committee to examine current PHS workload standard. i) Election of committee members. ii) Review of current workload requirements. iii) Proposal of workload standard revisions. iv) Departmental review/endorsement of revisions. v) Ratification and implementation.	Department Head	No additional financial or administrative resource needs anticipated. Governance implication: establishment of committee following collective agreement rules.	<ul> <li>i) Winter 2024</li> <li>ii) Spring/Summer 2024</li> <li>iii) Fall 2024</li> <li>iv) Winter 2025</li> <li>v) Spring/Summer 2025</li> </ul>

Recommendations	Proposed Follow-up	Responsibility for Leading Follow-up	Resource or Governance Implications	Timeline for Addressing Recommendation
2. The PHS faculty investigate ways to increase their number of graduate students. Opportunities for this would include reviving the proposed Master of Clinical Research Methods (MCRM) program and increasing the numbers in the PhD program and the MSc-Biostatistics program.	<ul> <li>i) Formation of General Education Committee Program Expansion Sub- Committee.</li> <li>ii) Proposal for new PhD and MSc targets and proposal for MCRM pathway/field.</li> <li>iii) Program approvals (FHSGC, GSEC, SCADP, Senate).</li> <li>iv) Program implementation.</li> </ul>	Department Head, General Education Committee.	Availability of external agency research funding is key to increased enrolment, to provide student stipends. Financial implications of creating a new pathway/filed in the MPH program need consideration.	<ul> <li>i) Winter 2024</li> <li>ii) Spring/Summer 2024</li> <li>iii) Fall 2024/Winter 2025</li> <li>iv) Spring/Summer 2025</li> </ul>
3. The PHS chair clarify and enhance public health teaching in selected undergraduate programs as a means to recruit graduate students into the department and ensure transparent funding agreements are established.	<ul> <li>i) Establishment of Undergraduate (UG) Teaching Working Group to advise on expansion of UG teaching opportunities.</li> <li>ii) Review current UG course offerings &amp; consider potential future offerings.</li> </ul>	Department Head supported by UG Teaching Working Group.	Establishment of working group. Examination of funding arrangements to be carried out.	i) Winter 2024 ii) Spring/Summer 2024

Recommendations	Proposed Follow-up	Responsibility for Leading Follow-up	Resource or Governance Implications	Timeline for Addressing Recommendation
	<ul> <li>iii) Determine cost/benefits of expanded teaching.</li> <li>iv) Propose 1-2 new UG course offerings.</li> <li>v) Course review &amp; approval by curriculum committee.</li> </ul>			iii) Spring/Summer 2024 iv) Fall 2024 v) Winter 2025
4. The General Education Committee (GEC) and Department faculty be provided with full PHS department budget details to allow all faculty to understand department financial opportunities and constraints with respect to teaching roles and support for research.	<ul> <li>i) Prepare working draft of de- identified budget sheet.</li> <li>ii) Finalize and share budget sheet with PHS faculty and staff.</li> </ul>	Department Head and Department Manager, liaising with Health Sciences' Chief Financial and Administrative Officer.	No additional resources needed to prepare budget information.	i) Winter 2024 ii) Spring/Summer 2024
5. The PHS chair negotiate sustainable core TA opportunities such that offers to MSc and PhD applicants can guarantee TA positions and secure acceptance.	<ul> <li>i) Review PHS undergraduate teaching for 2024- 2025. Determine number of guaranteed TA slots for Fall/Winter.</li> </ul>	Department Head, working with Associate Dean, Undergraduate Studies	Firm budgetary commitments will be required from the Associate Dean and CFAO with regard to	i) Winter 2024

Recommendations	Proposed Follow-up	Responsibility for	Resource or	Timeline for
		Leading Follow-up	Governance Implications	Addressing Recommendation
	<ul> <li>ii) Include TA guarantee in admission offer funding letters for incoming PhD and, if possible, MSc students.</li> <li>iii) Review PHS UG teaching for 2025- 26. Expand TA guarantee to additional students.</li> </ul>		confirmed, guaranteed TA positions to be generated through graduate and undergraduate teaching each year. Guaranteed TA offers cannot exceed funds available for this purpose.	ii) Spring/Summer 2024 iii) Fall 2024
6. The PHS Department chair consider the development of a teaching professor career stream to support sustainable academic educators with core roles in the PHS graduate programs.	<ul> <li>i) GEC conducts teaching needs assessment. GEC generates proposal for 1.0 FTE teaching faculty.</li> <li>ii) Proposal presented to Dean for budgetary approval.</li> </ul>	Department Head, General Education Committee, Faculty Dean.	The department and Faculty Dean recognize that this cannot be implemented in the short- term due to budget constraints.	<ul><li>i) Winter 2024</li><li>ii) Spring/Summer 2024</li></ul>

Recommendations	Proposed Follow-up	Responsibility for	Resource or	Timeline for
		Leading Follow-up	Governance	Addressing
			Implications	Recommendation
	<ul> <li>iii) Inclusion of proposal in faculty expansion budget.</li> <li>iv) Department also explores existing mechanisms for adjusted workload distributions for faculty members.</li> </ul>			iii) Fall 2024 (or later) iv) Winter 2025
7. The PHS chair work with FHS to develop enhanced research grant administrative support for faculty to gain student support funds in grant applications.	<ul> <li>i) Formation of Research Working Group. Consideration of research administrative options.</li> <li>ii) Meet with Associate Dean, identify feasible strategies.</li> <li>iii) Implement faculty research support strategies.</li> </ul>	Department Head, supported by Research Working Group. Vice-Dean, Research, Faculty of Health Sciences is also involved.	Additional financial resources would be required to hire a research administrator at the department level, which seems unrealistic in the short term under current budgetary constraints. However, incorporating	i) Winter 2024 ii) Fall 2024 iii) Fall 2024

Recommendations	Proposed Follow-up	Responsibility for Leading Follow-up	Resource or Governance	Timeline for Addressing
			Implications	Recommendation
8. The PHS GEC invite the Health	i) Invite HS liaison	Chair of the	PHS faculty members into the research administrative portfolio of existing support staff in other units may be a feasible, cost- effective strategy.	i) Winter 2024
Sciences liaison librarian(s) to a future meeting to ensure all 4 PHS graduate programs utilize the library/librarian resources optimally.	<ul> <li>i) Invite the number of the second provide the number of the second provide the second provide the second provides and the second provide the second provides and the</li></ul>	General Education Committee.		ii) Fall 2024

The Dean, Faculty of Health Sciences shall be responsible for monitoring the implementation plan. The details of progress made will be presented in monitoring reports to the Vice-Provost (Teaching and Learning), submitted to the Senate Cyclical Program Review Committee for approval and to Senate for information. All monitoring reports will be posted on the university web site.

Final Assessment Report & Implementation Plan	Approved by SCPRC November 27, 2024
Final status of academic programs in the Department of Public Health Sciences	Approved to Continue
Date of next program review	2028 - 2029 Academic Year

#### **Next Steps for Department**

Monitoring reports to be submitted 18 months and 4 years after receipt of the signed Final Assessment Report: June 2026 and November 2028. The provost's office will remind the department of the deadlines nearer the time and provide a template for these reports.