



Introduction

In accordance with the Icelandic Quality Enhancement Framework at the University level in Iceland and the University of Iceland's Guidelines for the organization, schedule, and process of institution-led review of faculties and interdisciplinary programs, the interdisciplinary program in public health sciences, Centre of Public Health Sciences (CPHS), School of Health Sciences, University of Iceland, carried out a self-evaluation during the fall semester of 2021. The results are presented in this report. The members of the self-review committee were:

- 1. Magnús Karl Magnússon, MD, professor, Chairman of CPHS Program Board
- 2. Arna Hauksdóttir, PhD, professor, Academic Director of CPHS
- 3. Svava Dögg Jónsdóttir, PhD students' representative
- 4. Rebekka Björg Guðmundsdóttir, MPH students' representative
- 5. Ólöf Elsa Björnsdóttir, MPH, Project Manager at the Directorate of Health, national external expert, and former students' representative
- 6. Jóhanna Jakobsdóttir, PhD, assistant professor, CPHS faculty representative
- 7. Noel Weiss, MD, DrPH, Prof Emeritus, Dept. of Epidemiology, University of Washington, international external expert
- 8. Harpa Rúnarsdóttir, Database Manager at DPHS, staff representative
- 9. Dóra R. Ólafsdóttir, Project Manager of CPHS, committee secretary

The Committee received data and information regarding the Centre from University databases which were included in this report. The Committee received the student satisfaction survey results and student focus groups were engaged to explore those results more closely. The University of Iceland Centre for Teaching and Learning reviewed the relevant course catalogue descriptions, especially learning outcomes, and provided the Committee with that review.

The Social Science Research Institute provided quantitative data from the regular student satisfaction surveys and organised focus groups for both undergraduate and graduate students.

Characteristics of CPHS

Public health is broad in its context and connects to most disciplines of the University. In 2007, CPHS was established as the University's research institution in public health as well as the organizational organ for the interdisciplinary graduate programs, masters (MPH) and doctoral degrees (PhD) in public health. The academic education at CPHS is aimed to be inherently multi-disciplinary extending across the medical, biological and social sciences, focusing on quantitative methods. The core of the programs are quantitative disciplines, mainly epidemiology and biostatistics, which are fundamental for analysing determinants of a broad impact of health problems as well as the impact of preventive interventions.

According to an agreement from 2018 between all five schools within the University the program is financially and academically independent. Despite the interdisciplinary position and status of the CPHS Program board, the Program is "housed" within the School of Health

Sciences, and administratively placed under the Faculty of Medicine. Following the changes, four study programs were added, MS and PhD in epidemiology and MS and PhD in biostatistics. However, these programs started in fall 2019 and are thus not a subject of this review. The CPHS Program Board includes representatives from all five schools within the University of Iceland. In addition, the Chair of the board is appointed by the Rector of the University as well as the Academic Director of the Program.

To date, CPHS now coordinates seven study programs, three of which are reviewed in this report (Appendix 1, Table 1). Within the programs, a total of 10 courses are run by CPHS as mandatory, restricted, or free electives, depending on program and/or specialization. Most of these courses are open for registration for any master's or doctoral level student at UI.

CPHS personnel include 6 faculty members (FTE 4.5), 2 project managers (FTE 2) and 1 data-base manager (FTE 0.5) (Appendix 1, Table 2). Also employed at CPHS are approximately 12 staff scientists and junior scientists (research assistants, PhD students and post-doctoral fellows) who are fully funded by external research grants. Guest lecturers and sessional teachers are involved in teaching, mainly in three of CPHS courses where current applied public health knowledge is essential and supervising in masters and doctoral thesis committees. About 70% of MPH projects have been supervised or co-supervised by faculty members outside CPHS, of whom approximately 30% are from faculties other than the Faculty of Medicine.

The Postgraduate diploma program is a part time, two semester program, and originally intended for professionals aiming to increase their knowledge of health promotion and population-based studies. About 11 students complete the first term on average, with around 23% of students finishing the second year. An average of 13 students graduates yearly, with most students completing their degrees while enrolled part-time over a longer period than the two semesters structured for the program (Appendix 1, Table 3). The MPH program provides training in conducting and interpreting research into health and health factors, as well as an understanding of how to implement health promotion initiatives. Emphasis is on providing solid training in epidemiology, biostatistics and/or other research methods, determinants of health and basic knowledge of disease prevention. The average number of students completing the first term was about 6 students for the period 2016-2019. Total number of active students was 31, which was lower than for the years before, but numbers of students for 2020 and 2021 have risen rapidly. During 2016-2019, 7-8 PhD students were registered at CPHS (and now, in 2022, this number is increasing). All students work with different subjects within public health and all use epidemiological methods. The study subject varies, but in recent years many have been working with the SAGA Cohort and COVID-19 cohort (see research strategy). Most of them are full-time students and have facilities at CPHS, while some are part-time (e.g., physicians).

Summary and Main Conclusions for the Faculty

Lessons learned from QEF1

Progress and changes from the last review in 2012 have been substantial.

- Faculty and research team: Number of faculty members has more than doubled since 2012 and with increased research grants, number of other members in the research team is also rising. In 2020 and 2021, number of post-graduate diploma and masters' students have rapidly increased.
- Research: Two large cohorts have been established, The SAGA Cohort was established in 2018-2019 (N=32,000) and the COVID-19 National Resilience Cohort (N=24,000). In addition, numerous domestic and international grants have been secured, the larger ones from the European Research Council (Horizon 2020), NORDFORSK and the Icelandic Centre for Research. Grant support and management has been greatly improved during this period, both at CPHS, School and University level.
- Study programs: Late in 2019, two new study programs in epidemiology and biostatistics were added (MS and PhD degrees). These new programs will however be subject to the next self-review report. In addition, the MPH degree is now divided into two focus areas: 'Global Health' and 'Health and Lifestyle'. CPHS program structure and subdisciplines are under continuous re-evaluation according to the student's needs and societal demands. With altered administrative structure in 2019, the CPHS has now anchored alliances with several faculties of the University with representative faculty members in the supervisory and program boards. In addition, CPHS is now a formal alliance member of the Association of Schools of Public Health in the European Region (ASPHER) which will hopefully open for access to courses across the European member states/universities.

Teaching and Learning

The organization of the course curriculums was extensively re-evaluated in 2018-2019 in preparation for the establishment of additional degree programs in epidemiology and biostatistics. All faculty participated extensively in this process. The learning outcomes of the programs had not been revised since 2007 and will need to be under continuous revision, not least with the latest university strategies in mind (see action point in Table 1.2.6). The core curriculum was revised during 2018-2019, and two new MS programs in Epidemiology and Biostatistics have been added, as previously stated.

On a regular basis, the SSRI carries out surveys on student satisfaction within the University of Iceland. The surveys are a part of the University's quality assurance system and aim to monitor how students evaluate the quality of their studies. Faculty at CPHS monitor results from these surveys on a regular basis, but participation in the surveys has not been optimal. CPHS faculty members would want to seek ways to increase participation in the surveys. Overall, students and alumni view the program favourably. Some student concerns, such as the workload during methods classes and the perception that these classes are less well suited to the block teaching format, have prompted discussion among the faculty and been translated into action points.

The strengths of the PhD program include high quality courses and research projects with international collaboration. However, a more standardized admission process with greater transparency is needed, as it is currently ad hoc where students must reach out to individual faculty members to investigate if projects with funding are available. Students who have completed a PhD from the program are generally happy with their supervisors and how the courses are taught, but express that the selection of courses needs to be larger, and the disclosure of information and organization of the program needs to improve. This program therefore should continue in its current form, but with some improvements detailed as action points above.

The centre is small, leading to a high teaching load for each faculty member and challenges balancing teaching and research. This is somewhat alleviated by faculty guest lecturing in each other's courses. Action points include reducing the course load by allowing seminars to count toward teaching obligations and streamlining the hiring of teaching assistants. Next years will also include actions such as revising the new study programs in epidemiology and biostatistics, e.g., if they should be combined or continue in its current form.

Management of Research

CPHS is a vibrant community of academics, research specialists and young scientists, working on a diverse portfolio of population-based research. Mean research output of CPHS members in years 2016-2019 is well above both the school and University.

While high impact research in the past few years has been focused on the impact of trauma and stress on health, especially after the establishment of the <u>SAGA cohort</u> in 2018, and large grants received for projects in this field of research, the overall subject areas of faculty and students' projects are diverse. While a research strategy has not been formally implemented (now in action point), CPHS's mission is to advance current understanding of evolving determinants of health to provide knowledge-based strategies for health promotion, prevention and clinical practice.

Dissemination has been extensive both through launching of new research projects, as most projects are financed through competitive funding, and at publication of results in international scientific journals. Scholarly output has been relatively stable during the period 2016-2020 and occurs mostly (83%) through international collaborations. Other types of activity include participation and presentations at conferences, public events, workshops, interviews in printed and broadcast press, and establishment of new websites (e.g. epiresearch.hi.is). CPHS has been tracking societal impact systematically through yearly reports to funding agencies.

Follow-up Processes

The implementation of the Action Plan will be an ongoing item on Faculty, Study Board and Supervisory board meetings. The Supervisory board will be expected to quality control action points and to provide support and guidance on relevant matters.

Appendix 1. Key Figures.

Table 1. Overview of present Study Programmes within CPHS

Name of Study Program	Cycle ¹	Degree	Credits (ECTS)
LÝÐ311 Public Health Sciences	2.1	Post.Grad. Dip.	30 ECTS
LÝÐ441 Public Health Sciences	2.2	МРН	120 ECTS
LÝÐ562 Public Health Sciences	3	PhD	180 ECTS

¹ See National Qualification Framework for Higher Education No. 530/2011.

Table 2. Faculty members as of 1.11.2020 and sessional teachers 2019, number (No.) and full time-equivalent (FTE).

	Male		Female		Total	
	No.	FTE	No.	FTE	No.	FTE
Professors	1	0.8	4	3.2	5	4.0
Associate Professors						
Assistant Professors			1	0.5	1	0.5
Adjunct Lectures						
Total	1	0.8	5	3.7	6	4.5
Sessional teachers	19	0.4	33	0.9	52	1.3

Table 3. Total number of students, number of entrants, retention rate for first year, and completion rate (4-year mean).

Program	No. of students		ts	No. of entrants ³	Retention rate	No. of graduates	Completion rate ⁴
	Total no.	Full time ¹	Part time²				
Post.grad Dipl.	23	2	16	11	23	13	78
MPH	28	7	13	6	61	8	41
PhD	8	-	-	1		2	53

¹> 22.5 ECTS completed. For Ph.D. students > 1 ECTS completed.

² 1-22 ECTS completed.

³ For all programmes except Ph.D., no. of students completing at least one examination in first term.

⁴ 2-year rate for diploma, 4-year rate for B.A./B.S., 3-year rate for M.A./M.S., 5-year rate for Ph.D.

Table 4. Research output of CPHS members, based on the Evaluation System for the Public Universities in Iceland, expressed by mean total research points (A) and mean research points from peer-reviewed publications only (B) calculated per employee.

	20	16	20	17	20	18 [*]	20	19 [*]	Me	ean
	Α	В	Α	В	Α	В	Α	В	Α	В
CPHS	84.1	75.3	49.9	40.0	62.4	51.6	39.9	32.6	59.1	52.8
School	40.6	29.6	34.7	24.1	37.7	27.6	37.7	29.2	37.7	36.9
University	37.1	25.1	34.8	22.8	37.8	26.4	35.6	24.2	36.3	36.1

^{*} Includes data for post-doctoral fellows

Appendix 2. Action Plan for Teaching and Learning and Management of Research in QEF2

Actions	How	Deadlines	Responsible
			party

1. FACULTY LEVEL

CPHS Board Chairman
chairman
CPHS director and
project manager
CPHS project
nanager and Study
Board
CPHS director and
Study Board
Director of CPHS
and chair of the
CPHS board
CPHS faculty and
project managers
CPHS faculty and
supervisory board
CPHS faculty and
project managers
CPHS project
CPHS project manager

2	Ensure that	1 ECTS, 1-2 days mandatory	Fall 2022	CPHS director
	students receive	orientation course where the		
	and hear essential	structure and interdisciplinary		
	information at the	nature of the program, course		
	beginning of the	selections and other practical		
	studies	issues are addressed.		
3	Prepare new	Include an introductory session	Fall 2022	CPHS biostatistics
	students to work in	of R in the orientation course		faculty
	R			

2. STUDY PROGRAMMES

LÝĐ311 Public Health Science (Postgrad.Dip 30 ECTS)

Ch. 2.1.1	Students			
1	Clarify mode of study further for prospective applicants	Rewrite a section of the program website	Fall 2022 application season	CPHS project manager
2	Revise program learning outcomes	Carry out curricular mapping	Fall 2022	MPH program study board – Director of CPHS

LÝĐ441 Public Health Science (MPH 120 ECTS)

Ch.	Students'			
2.2.1	satisfaction			
1	Help students to better organize their studies	Publish timetables and syllabuses earlier. Make the study planner in the student handbook and course catalogue more visible	Ongoing	CPHS project managers and faculty responsible for each course
2	Improve orientation for students who are admitted in spring semester	Add a short orientation meeting in early January.	January 2022	CPHS project managers
3	Improve orientation and support to international students	Add a short orientation session designed for this group of students. CPHS office will have individual follow-up.	September 2022	CPHS project manager and faculty responsible for each course
4	Additional support in student's final thesis	Increase follow-up of students after the individual interview. Add more seminar session on the thesis or design on-line series specific to issues regarding the thesis.	February 2022	CPHS project manager and supervisory teacher of the course on the scientific process.
5	Seek ways to balance gender ratio	Consult with the School's and the University marketing personnel. Advertise in bachelor's programs that have higher male ratio.	Fall 2022 application season	CPHS project manager
6	Encourage exchange studies	Actively promote opportunities available for CPHS students.	Fall 2022	CPHS project manager

7	Allow more time for students to master core methods	Discuss whether to move core courses in epidemiology and biostatistics from block to semester-long teaching	May 2022 (to take place in fall 2022)	CPHS faculty
Ch. 2.2.2	Teaching and Learning			
1	Improve participation in course evaluations	Allot time during lectures for students to fill out course evaluations	ongoing	Faculty responsible for each course
2	Update learning outcomes and assessment criteria in the course catalogue	CPHS office emails reminders to teachers	February 2022	Faculty responsible for each course
3	Revise program learning outcomes	Carry out curricular mapping	Fall 2022	MPH program study board – Director of CPHS
4	Revise teaching approach for core methods classes from block to semester-long classes	Discuss and decide whether to implement change	May 2022 (to take place in fall 2022)	CPHS Faculty
5	Start student activity earlier in all mandatory courses	Implement a 10 th day check-in	Ready before fall 2022	CPHS Faculty
Ch. 2.2.3	Coordination between teaching and research			
1	Better registration of teaching hours	Register supervision at students' seminars and similar towards teaching.	Spring 2022	CPHS project manager
2	Coordinate teaching between teachers and courses	Organize group work and schedule planning before each semester	Ongoing	CPHS faculty
3	Increase teacher support	Request teaching assistant funding of PhD student at the time of acceptance into the program. Discuss and submit a written proposal to the appropriate administration	Fall 2022	CPHS faculty
4	Increase teacher support	Formalize the role of teaching assistants. Review CPHS's office procedures and job description to better assistance.	Fall 2022	CPHS project manager

LÝÐ562 Public Health Sciences (PhD 180 ECTS)

Ch. 2.3.1	Students			
1	Increase diversity in students' background	More advertising and outreach to prospective applicants outside our current student body.	Ongoing	Study program boards, CPHS project managers
2	Increase transparency and	Provide data on student experience in promotional	Fall 2022	CPHS faculty and project managers

	1		1	1
	realistic expectations among	materials, including statistics on proportion completing		
	PhD applicants and	doctoral study and average		
	incoming students	length of study.		
3	Discuss possibility of	Suggest and discuss at School	Ongoing	CPHS Faculty and
	a centralized School	level		supervisory boards
	of Health Sciences recruitment in PhD			
	programs			
	programs			
4	Improve support for	Weekly PhD seminars, other	Fall 2021	CHPS Faculty and
	PhD students	seminars		project managers
5	Consult students on	Invite PhD students'	Spring 2022	CPHS Faculty
	quality assurance	representatives to a CPHS		
6	We also refer to	faculty meeting, 1x semester		
U	action points for the			
	MPH program, table			
	2.2.1.1			
Ch.	Teaching and			
2.3.2	Learning			
1	Regular evaluation	Yearly evaluation by the study	September	Study program
	of the PhD learning	program boards	every year	boards
2	outcomes		5 1 (2022	ODUG :
2	Simplify process of doctoral	Review agreements and	End of 2022	CPHS supervisory board
	applications	management structure of CPHS		Doard
Ch.	Coordination			
2.3.3	between teaching			
	and research			
1	Discuss	Compare with other programs	End of 2022	CPHS Supervisory
	implementing			board
	minimum teaching			
		1	1	1
	requirements for			
2	PhD students		End of 2022	CDLIC cupomisor:
2	•		End of 2022	CPHS supervisory and study boards