Periodic program evaluation of the Masters of Health Economics, Policy and Management

2015

Preface

According to the study program quality assurance system at the University of Oslo, every study program must undergo a periodic program evaluation every sixth year at the minimum. The purpose is to undertake a comprehensive assessment of the study program and propose future measures in order to assure quality and improvement. The external evaluation panel was appointed the 8th of December 2014 by the Faculty of Medicine, University of Oslo, to evaluate the Master of Health Economics, Policy and Management.

The evaluation panel is made up by the following representatives:

Professor Haldor Byrkjeflot

Department of Sociology and Human Geography, Universitetet i Oslo

Professor Bjarne Robberstad

Centre for International Health, University of Bergen

Research Director Anne Line Bretteville-Jensen

The Norwegian Institute for Alcohol and Drug Research (SIRUS)

Benedicte Sofie Eilertsen (student representative)

Master programme of Health Economy, Policy and Management (HEPMA)

Robberstad was appointed as coordinator of the panel and Eilertsen was appointed to fill the secretary role. The report is hereby submitted to the Medical Faculty of the University of Oslo.

Bergen, Oslo, Copenhagen 15th May 2015

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Introduction

The master program in Health Policy and Management (HEPMA) started in 2005, and was evaluated for the first time in 2009. The external panel in 2009 found the profile of the program to be unclear, with 50% of the topics being elective, and recommended to focus the program profile by creating more distinct and clearer specialization. They also recommended synergizing through coordination across both the bachelor and the master program. Finally, the external panel stressed the need for improved completion rates and continued high application rates in the future.

In 2013 the program structure was revised substantially, responding in several ways to the suggestions of the external panel. Firstly, the program was divided into three specializations; Health Economics, Management and Economic Evaluation, in order to offer more distinct and specialized courses and accordingly three focused thematic areas of study. Second, the degree of flexibility was reduced within each of these specializations, with elective courses representing 17 % of total credits, or 21-25% of total credits if the flexibility between mandatory in-specialization courses is taken into account. Third, more courses are now offered in-house in order to enable better coordination of content and coherence of courses. Finally, all courses have been standardized to 5 ECTSs as a response to the need to harmonize activities with the EU-HEM program.

The period since the last evaluation can therefore be divided into two: the period before and after revision, 2009-2013 and 2013-present time respectively. In this external evaluation the panel has chosen to focus on the last of these periods, i.e. the way the HEPMA is organized today. We believe this provides more relevant and valuable input than feedback on a program structure that has already been abandoned. However, the obvious limitation of this approach is that the evaluation panel only has limited data to support its considerations. For example, the first batch of students after the program reform in 2013 have not yet graduated, and will only do so soon after this report has been submitted.

To mitigate this dearth of data, the external panel performed interviews with 3 academic staff, 1 administrative staff and 2 second year students. In addition, the secretary of the panel is a second year student that has contributed with valuable information. Moreover, the work of the evaluation panel is based on the external report from 2009, an internal report from 2014, reports from external program supervisors, and reports from midway and annual evaluations,

along with statistical information and study program information provided by the department of Health Economics and Management.

1. Achievement of the objectives as described in the program plan

In the appointment letter from the Medical Faculty the mandate of the evaluation panel includes to provide considerations about the program plan. However, such a document no longer seems to exist, and the panel was referred to information provided on the HEPMA-program web page. Thus, the panel interprets its mandate as giving consideration about the contents of the website. Here, no clear account of the program objectives is provided, but according to the internal evaluation report from 2014 the overall aims are:

"The Master's Degree Programme in Health Economics, Policy, and Management (HEPMA) is a multidisciplinary program that gives the students the opportunity to specialize in three highly relevant fields for the national and international health care sector: Health economics, Health management and Economic evaluation"

This information is also provided at the HEPMA web page, although not highlighted as the program aim.

The impression of the evaluation panel is that HEPMA is a well esteemed masters` program, producing candidates with multidisciplinary competence which are attractive in relevant labor markets. The program has been particularly successful in producing candidates that meet the requirements of higher administrative levels of the national public health sector, but a bit less so for the international labor market and private sectors. The three specializations, Health Economics, Management and Economic Evaluation, appear to be founded on existing competencies at HELED. This clearly strengthens quality of teaching and improves its research basis. The achievement relating to the learning objectives of the three specializations will be considered in more detail below.

2. Formulation and appropriateness of the objectives

There is a discrepancy between the overall aims of the program, as described by the academic staff during the interviews, and the aims as described in the internal report. The essence of the descriptions of the aim of the program from the three academic staff was coherent, and can be summarized as to «educate candidates with competencies that are required by the health care system in Norway». The internal report, in contrast, emphasizes to «…… give the students the opportunity to specialize in three highly relevant fields for the national and international health care sector….»

There are several issues regarding this discrepancy that require attention. First, the aim according to the internal report is not formulated as a specific aim. Rather it limits itself to technical and organizational aspects of the master degree. Second, the aims as formulated by the academic staff seems to be in better concordance with the career paths of the alumni than what appears in the internal report and on the HEPMA web page, since the majority of the alumni hold positions in higher administrative levels of Norwegian health services. Finally, while the internal report and the web based information focus equally on national and international health care sector, it seems like national health care services are more important with respect to research activities, the content of the teaching, and the career paths of candidates.

In sum, the evaluation panel recommends the aims of HEPMA to be revised in order to better express the overall ambitions of the program and reflect the multidisciplinary nature of the program, as manifested in the actual current structure. The panel also recommend that the aim is supplemented with study objectives for each specialization that (i) have a common base reflecting the 6 common first semester courses, (ii) have individual study objectives that reflect the contents of the respective study specializations and (iii) are sufficiently specific for their success rates to be measurable. This will help prospective students and employers to understand more precisely the students` skills.

3. Quality of the program and measures for improving the program

The 2009 external panel expressed concerns regarding HELEDs small share of academic staff, and the related quality risk associated with dependency on external teachers in several subjects. Furthermore, the 2009 external panel recommended reducing the share of electives. Consequently, the amount of elective courses has been reduced from 50 credits to about 20

credits, as mentioned in the introduction. The department has also expanded its staff, and it now covers most of the courses internally. This has made it easier to plan courses and ensure coherency between courses in each specialization. However, the teaching load has increased after introducing 5 credit courses, and perhaps one should consider moving back to 10 credit courses in some cases.

Even though the program is multidisciplinary, students may now formally and more thoroughly specialize in one discipline. Each specialization provides a complete set of courses thought to equip students with a desirable level of knowledge, skills and competences. Moreover, a staff member is appointed to be in charge of each specialization. In the internal self evaluation report it is emphasized that there is still room for improvements with respect to the mix of mandatory and elective courses and regarding how many courses in quantitative and qualitative method should be mandatory in each specialization.

In general, and as emphasized in the internal evaluation, there are still problems associated with finding the right balance between being a multidisciplinary program, while at the same time offering specialized educations. Some students find courses too easy while others find them too difficult, depending on bachelor background. In order to mitigate such problems the department recently started offering introduction courses and does now provide information regarding content and requirements of the different specialization in the early beginning of first semester. This seems to be a good way to deal with problems associated with the new course structure.

Lecture forms and student evaluation forms and practices

As noted later on in this report we find that there is a good mix of teaching methods in the courses offered. Methods include "traditional" formal lecturing, student presentations, computer-based teaching, group work and written assignments.

4.1 Comprehension and coherence of the program

After the 2013 revision, the program has had a three-block structure:

Block 1: 6 mandatory courses ("Fundamentals") for all students are offered in the first semester. Each course provides 5 credits and covers the following topics: health economics;

management; statistics; health care systems: health law and medicine. All course exams must be passed before entering the next block.

Block 2: Students choose either one of three specialization program (Health economics; Health management; Economic evaluation) or the General program. Each program offers a set of program specific courses, some mandatory and some elective. These courses sum up to 40 credits in total. In addition, the students freely choose four courses (20 credits) from other specializations or relevant courses from other departments at the University of Oslo. Block 2 constitutes semester 2 and 3 of the master program.

Block 3: Students write their master thesis (30 credits) in the fourth semester. Students in the specialization programs write thesis within their field of specialization.

Given the recruitment diversity and variation in basic knowledge among new students, a first semester of "fundamentals" seems necessary and relevant. Whether it fully meets the intentions of providing all students with sufficiently general knowledge of the field, is difficult to assess. For students entering the master program with a good understanding of economics, and health economics in particular, the first semester appear to offer less new input than ideally desirable. However, students recruited from the bachelor program in Health economics and Management, or other relevant studies, can apply for exemption from overlapping courses.

In addition to the HEPMA program, the department also offers a European Master in Health Economics and Management, the EU-HEM program. For the latter, the department collaborates with the Erasmus University of Rotterdam, the Management Center Innsbruck and the University of Bologna. EU-HEM students follow the same courses as the HEPMA students. The choice and contents of courses offered in the second and third semester of the HEPMA program are to some extent influenced by this international collaboration, as the courses in Oslo are linked up to courses offered at the partner universities. This has required substantial changes in the course profile previously offered in Oslo, but seems to have created few problems to the overall content and coherence of the program.

Given the number of students in the HEPMA and EU-HEM program, the number of courses offered in the second and third semester is relatively large. Consequently, for some courses, there are relatively few students attending classes. In order to reduce the workload and

confine resources, the program managers could consider whether more courses can be offered across the specializations.

It is the evaluation panel opinion that the current HEPMA program is well designed. It offers a great number of relevant courses and has a clear and logical structure, as the content of courses build on one another. The program revision of 2013 seems to help students to specialize in a more thorough way than before, and the overall structure and coherence of the program seems good.

4.2 Learning objective and learning outcome

Economic evaluation

Economic evaluation is by far the most popular of the specializations, with the same amount of students as the other two combined. According to the program information, which is rather scarce for this specialization, the students will gain knowledge of (i) economic theories and models of health program evaluations, and (ii) basic theories of decision making under uncertainty. Students will learn how to (i) develop decision tree and Markov models for economic evaluations, and evaluate uncertainty in such models, and (ii) develop and perform simple Health Technology Assessments (HTAs). Students will finally attain (i) competence in distinguishing different decision-making frameworks, like informed decision making, situated judgment and political decision making, and (ii) experience in different methods to estimate the effects of a treatment or a policy intervention.

The structure of the aims with theoretical foundation (knowledge), applied skills (how to) and analytical understanding of context and limitations (attain) makes sense and is in concordance with the Bologna standard, where applied skills distinguish master programs from lower degrees.

However, the plan description is a bit general and vague, and it is not immediately clear how the six mandatory courses of the specialization ensure that all the aims are achieved. The overall impression is that joint modelling of costs and effects is given high priority, while sub-disciplines constituting the enumerator and denominator of the cost-effectiveness ratio are somewhat less emphasized. The apparently important topics of costing and effect estimation are not dealt with in separate courses, and it is therefore unclear how well these key topics are

covered. Are the candidates for example able to compile and synthesize treatment benefits from secondary sources after the completion of their training? At the same time linear regression (HMET5130) does not seem to address any of the aims in particular. It is easy to understand why the topic is important for economic evaluation, as a means to estimate parameters for the economic evaluation models, but it would be useful to spell this out more clearly in the aims which currently only emphasize the modelling exercise.

Health management

Regarding the specialization in Health management, the following learning objectives are listed: gain knowledge of (1) management tools and techniques used to design and manage successful organizations, (2) core financial accounting and control principles, (3) the work of management accounting, incorporating budget preparation and budget appraisal, and lastly (4) ethical principles and principles of priorities. Skills: analyze and evaluate complex micro and macro policy and organizational challenges, differentiate between the functions, roles and responsibilities of healthcare managers, make successful negotiations, define and apply key quality concepts in health care organizations, manage organizational processes, including redesigning organizations, effectively and efficiently foster innovation within care settings, demonstrate personal and professional ethical responsibility in all managerial and organizational decision making. Competences: Organizational analysis, communication, medical ethics, meet multilevel challenges. This is a fairly long and ambitious list and it might be useful to check whether the courses offered actually provide such skills and competences, e.g. in quality management and negotiation.

In one of the courses the aim is to "make participants become both expert organization technicians and wise organization developers". This is a difficult combination. Given the emphasis on courses in specific management tasks and tools, the impression is that the emphasis of this master program is more on educating technicians than "wise developers". Given that a fair share of graduates start working in the Norwegian public administration one may perhaps ask whether there should be more emphasis on developing knowledge of the context of healthcare management, e.g. to gain insight in the political nature of the Norwegian public administration compared to some other countries. We understand that one of the reasons for the current structure of the program is its alignment to EU-HEM program. However, more focus on the Norwegian public administration would enable students to reflect more on how management systems are embedded in specific cultural and institutional

contexts. One of the courses offered HGOV 5200 is presented as a course on topics in health policy, but it rather appears to be a course in project management.

Health economics

Health Economics is the third specialization and aims at providing the students with knowledge of (i) the key analytical reasoning and tools of health economics and their normative foundations and ethical implications; (ii) basic economic theories and models of regulation applied to health care providers as GPs, hospitals and long-term care organizations; and (iii) the health-related behavioral determinants and an overview of some recent policies aimed at improving the populations' lifestyles. According to the course description, the students will learn how to a) use economic models to understand behaviors of actors in the health care sector; b) do analyses of needs for health care services; c) make analyses of efficiency and quality of health care organizations; d) find and utilize relevant data sources, and e) use relevant econometric models for the analysis of the economic agents' behavior. This specialization aims at providing the students with competence to apply economic concepts and models to the fields of demand for health, demand for health services, demand for health insurance, provision of health insurance and provision of health care. Further, the students will attain competence to describe, analyze and critically address economic aspects of health care organizations

The health economics specialization has six mandatory courses which cover main health economical topics (four courses) as well as one course of linear regression analysis (HMET5130) and one of research design (HMET4210). Altogether, adding up to 30 credits. Demand for health and health insurance (HECON4210) seems in particular to cover many highly relevant themes of health economics, as it aims at giving students competence to apply economic concepts and models to the fields of demand for health, demand for health services, demand for health insurance and provision of health insurance. It touches upon important concepts such as asymmetric information, adverse selection, ex ante and ex post moral hazard, patient co-payment and demonstrates how demand for health and health care deviates from general economic theory. Whether all these relevant topics can be satisfactorily covered in one intensive 6 weeks course or whether it should be extended to a 10 credit course could be considered.

Further, for the remaining 10 points required for this specialization, students can choose among three courses, each providing 5 credits: Paying providers of health care (HECON4220);

Risk and uncertainty in health and health care (HEVAL5150) and Valuing health (HEVAL5110). The program managers could consider whether to include more optional courses to the health economics specialization. Courses like Topics in priority setting (HMAN5140) and Fundamentals in economic evaluation of health care (HEVAL4200) may be similarly relevant for these students.

4.3 Results achieved

The candidate survey of 2014 shows that the master candidates are in demand and that the candidates apply their educational knowledge, competencies and skills in their current job. In the following, we consider in more detail the subjective feedback from candidates, and the achieved results in terms of completion and drop-out rates for the cohorts 2009-2013.

Student evaluations

The internal evaluation report gives an overview of the students` evaluation of the program for the periods 2009-2013 and post 2013, respectively. The response rate for the online end-evaluations has been very low, so the most important information has come through the mid-term evaluations with student representatives. For the first of these periods, before the program revision, student feedback mainly revolved around a wish for more foreseeable course structure and ability to plan studies two years ahead. Students found the heterogeneity of students in terms of prior skills in statistics/economics to be problematic, that there was lack of thematic coherence within courses with several lecturers, and some overlap between different courses. The internal report further explains how these challenges were addressed by announcing elective courses earlier, arranging elevator courses for students lacking basic knowledge in statistics and economics, and by reducing the number of lecturers involved in each course while also making internal lecturers responsible for the teaching.

For the period after 2013, with the new program structure, the most important feedback from students consisted of requests for detailed teaching plans prior to courses, and that curriculum sometimes was too vast. This might be a consequence of the transition from 10 to 5 ECTS courses, and a lack of sufficient adjustment of the related curricula. Students also encourage more varied teaching modes, including more use of seminars, projects and excursions. The internal report explains that the amount of readings for each course has been addressed as an attempt to harmonize workload per credit.

It is the impression of the evaluation panel after reading the internal report and after interviewing key staff and candidates, that feedback from students are valued and taken seriously when planning teaching activities. Continuation of this good practice is recommended. Furthermore, it is encouraged to take measures in order to improve response rates on end-evaluations. Not only will this provide important information about the courses, but also about the master thesis work, supervision and the program in total.

Completion rates

Key indicators for achieved results are the number of candidates who complete on time, who get delayed and who quit without completing their studies. These outcomes are important for financial and cost reasons, since completion release reward funds, and since continued supervision of delayed students is resource demanding. However, equally important are quality indicators, i.e. indicators on whether candidates received sufficient thematic and motivational input of sufficient quality, in order to be able to complete their studies in a timely way.

Figure 1 illustrates the completion rates for the 2009 – 2012 uptakes (cohorts). During this period, completion time has on average been relatively long for the HEPMA program. This might partially reflect that several candidates were part-time students. Two positive and important trends appear to be that the proportion of students completing on time (4 semesters) have tripled during the period, from about 13% to 38%, while the number of drop-outs (quit) have been reduced from 34% to 23%. With a lack of information regarding the underlying reasons for this positive development, the evaluation panel interprets this as an expression of successful improvement of enabling factors and mitigation of constraining factors. Better information prior to uptake to give prospective students more realistic expectations about the content and requirements of actual studies could be one of several contributing factors.

However, these figures are from the period before the last big program revision in 2013, hence we know little about the revisions impact on completion rates. The internal evaluation report suggests that completion rates will improve with the «new tight program structure». The evaluation panel recommends that completion rates and reasons for drop out are systematically monitored to get early feedback on the performance of the revised HEPMA structure.

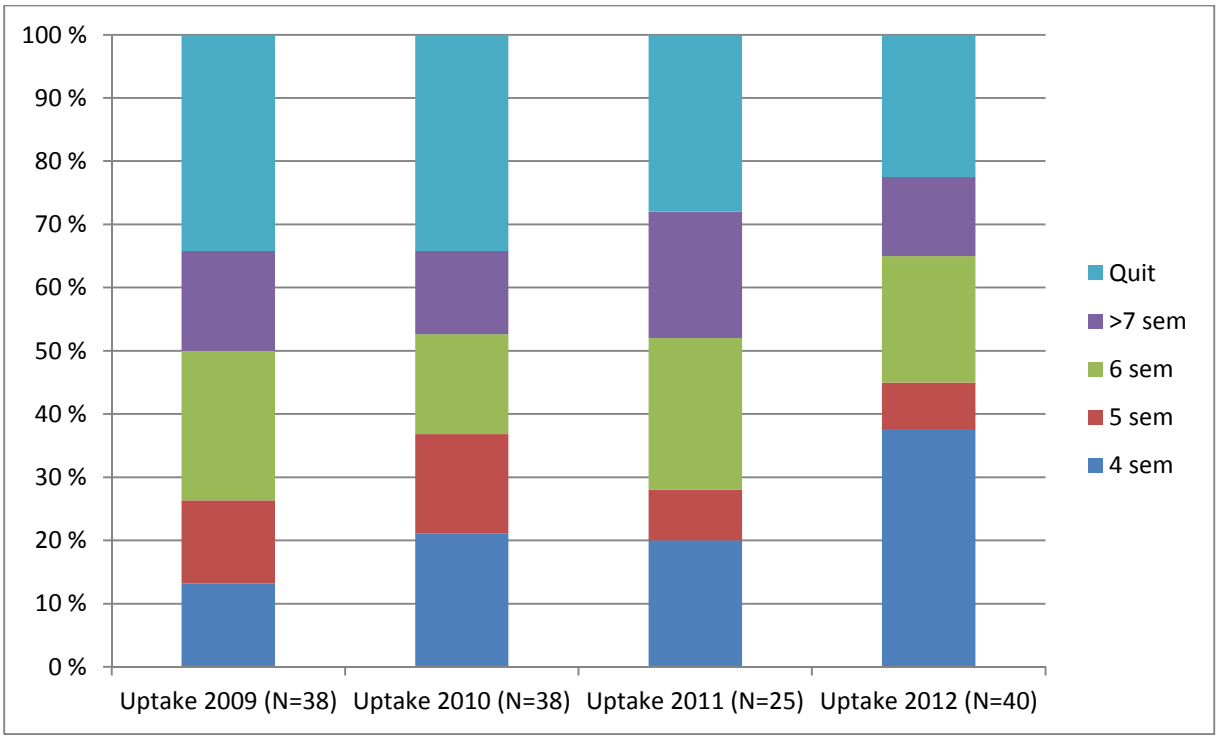

Figure 1 The proportion of candidates from the 2009 – 2012 uptakes (cohorts) who completed their studies on normed time of 4 semesters (4 sem), completed with additional time (5 or 6 sem), completed with 7 or more semesters or are still in progress (>7 sem), or who discontinued their studies (Quit).

4.4 Target group/recruiting

The number of international applicants has increased from 97 in 2009 to 435 in 2014, while during the same period the number of Nordic and EU applicants increased from 114 to 286. This indicates that the HEPMA program is increasingly attractive among the prospective candidates, and/or, better advertised. Irrespective of reason, a very positive consequence is that the academic level of the students has improved, which was stressed in the academic staff interviews. A measurable indication of the improved academic level is that the lowest GPA for admitted students has increased from 62.5 in 2009 (midpoint between C and D) to 63.6 in 2014 (midpoint between B and C).

The HEPMA program recruits students broadly, including candidates with bachelors in health economy and management at one end of the scale, and candidates with bachelors from health sciences at the other end of the scale. The baseline competencies are therefore very mixed, with some candidates for example being very proficient in mathematics and quantitative

methods at the start of the study, while others have very little knowledge in these areas. This is potentially challenging for teaching, especially in the Health Economics specialization, which is the most quantitative of the three specializations.

These questions were discussed during interviews with the staff. It is the impression of the evaluation panel that awareness of these challenges is high among the staff, as well as among the students. However, none of the stakeholders appear to be attracted to the idea of narrowing the recruitment basis to include only candidates with a more homogenous background. On the contrary, the view seems to be that this would violate the multidisciplinary foundations of the master program, which of several is stressed as unique. The evaluation panel has the impression that stakeholders view challenges posed by heterogeneous background among students as manageable. Both because the general academic level of the candidates has improved, and because the common first semester courses are designed to smoothen the differences before specialization among students is chosen.

In the light of this input, the evaluation panel does not recommend a more narrow recruitment basis. However, we suggest that performance, in terms of both grades and completion rates, are monitored more carefully with respect to students different backgrounds. This information is currently not available, but would provide valuable input for quality improvements of teaching and supervision, and might also serve as an evidence base for future considerations regarding recruitment strategy.

4.5 Teaching style and course evaluation

As stated in the internal evaluation report from 2014, the program lecturers apply a range of different lecture forms such as “traditional” lecturing, student presentations, working groups, computer based teaching and written assignments. More recently, HEPMA has made attendance compulsory for one of the courses (Research design). The lecturers upload their lecture notes and extra resources on Fronter. Some lecturers also podcast their lectures and, in some cases, have published part of their lectures on YouTube.

According to the evaluation reports (Midtveis-evalueringene) the students are in general satisfied with the teaching styles and also emphasize that the lecturers appear to be ”positive,

engaged and competent". It was mentioned, however, that some lecturers over-use power point presentations and the students therefore suggested more variation in the teaching styles. More use of seminars and project-based teaching has been suggested and more case examples is called for in order to better understand the presented theories. Students report that they find the short videos on YouTube useful for exam preparations. The students we interviewed stressed that the teaching staff is very friendly and welcoming. They emphasized the low threshold for asking questions in class or for calling at their office door. Overall, the students seem very satisfied with the lectures and the lecturers.

One topic discussed in the internal evaluation report is whether it is a good idea to make sit-ins on lectures compulsory. As mentioned above, participation in group exercises for the Research Design course has become compulsory, and it is stated in the internal report that the plan is to "make sit-ins for the whole course compulsory to secure students' matureness when starting their thesis in their third semester".

It is the evaluation panel's view that the HEPMA lecturers employ a varied set of teaching styles and that their positive and friendly attitudes towards students is a valuable asset for the program. Increased use of videos to help the students prepare for, and review, lectures can be considered, as can increased use of interactive activities during the lectures. Increased use of seminars and project-based lectures should also be considered. Moreover, the program managers may consider to introduce a system where lecturers peer-review each other's teaching in order to give each other feedback, which further can improve teaching. If extension of compulsory attendance is considered to other courses, all pro's and con's should be carefully assessed. Compulsory attendance has some advantages, but it "steals" time and resources and may disadvantages part-time students. Specifically the associated problems for students with a heavy work load outside their studies and the challenges compulsory attendance may posit regarding the need to deal with requests for exemption from the rule.

Since the previous evaluation report came in 2009, the means of evaluating students have increased. The 2009 report encouraged the use of written assignments and the increased number of courses that came with the new HEPMA program led, in some cases, term papers and home exams to replace school exams. HEPMA now makes use of written assignments, written school exams, written school exams with computers, home exams/term papers and oral presentations.

According to the reports from the external program supervisors (tilsynssensorer), they seem overall satisfied with the program and exams questions and evaluations. One supervisor, however, found some of the exam questions to be to "unnecessary complicated" and calls for improved quality assurance. He exemplifies his claim with one exam given for the HMM4202 course.

This evaluation panel welcomes the increased variation in evaluation methods. Alternatives to written school exams are usually less resource demanding and provide some variation in the student testing. During the evaluation panel's interviews with staff and students, however, a concern was raised that home exams may not test the students satisfactorily as extensive collaboration between students and help from outsiders could blur the individual assessments. Also regular cheating may be more of a problem for this exam form than for others, such as written school exams. On the other hand, it can be argued that home exams constitute a more realistic form of working condition and compare better to what the students will meet after graduating from UiO. Use of plagiarism programs, such as the Ephorus, may reduce the risk of "copy and paste" behavior among students.

4.6 Universal design and arrangements for students with disabilities

According to the internal report from 2014, the Department of Health Management and Health Economics follows the University of Oslo's rules when it comes to arrangements for functionally disabled students. Further, all three study programs at the Department have a contact person for the functionally disabled students, and this person is also in a dialogue with the central counseling office.

Through dialogues with students at HEPMA, the impression is that the department is very accommodating in regards to make arrangements for students with disabilities. This applies both to arrangements made in the students daily life and in exam situations.

4.7 Internationalization

There has been a steady increase in international applications, so in this sense the program has become much more international. The number of students that go abroad to study is on the other hand much less impressive. One of the reasons for this might be that there are too many mandatory courses, which creates less room for actually going abroad. Another reason might be that students already have been abroad and want to stay in Norway in order to qualify for the Norwegian job market. The students emphasized that marketing of the program seems insufficient, not only in Norway but also international, and how better marketing might attract more international students.

In general, the program has become more internationally oriented and the trend is rather promising.

4.8 Learning environment and sense of program belonging

There is a general agreement between the views presented in the internal report and the views provided by the students during the interviews. The fact that students, the administration and many of the lectures` are placed on the same floor is perceived as a main advantage, enabling informal discussions between students and staff to take place during the study day. This gives students a sense of belonging to the program and creates a good study environment. Critical remarks were rather related to the physical environment and lack of reading- and computer facilities, which forces master students to work from different venues and therefore somewhat dilutes the academic environment at the Department.

4.9 Resources/infrastructure

Both the internal evaluation report and the interviews with academic staff reveal worries that the teaching burden is too high, not only in absolute terms, but also relative to comparable departments at the Medical Faculty and the University of Oslo. Currently there are 21,8 students per faculty member at the Department of Health Management and Health Economics. It is the impression of the evaluation panel that the supervision burden increased after the integration with the EU-HEM master, while teaching burden increased after the revision of

the curricula and courses in 2013 due to division into the three separate specializations and the reduction of elective courses allowed outside HELED.

To maintain good academic standards and good student satisfaction in the short run it is important that each candidate receive adequate attention from their supervisor. In the longer run it is essential for good research based teaching and supervision that the research time of the academic staff is protected, i.e. not compromised by too high teaching and supervision burden. This is also important for the career development and retention of academic staff. The evaluation panel therefore recommends that the teaching burden is monitored closely at individual level, and that measures are taken to protect the research time for teachers. Relocation of positions from departments with less teaching and supervision burden in cases of retirement is an option that the faculty should consider, unless funds become available for new positions.

The internal report suggests that supervision might be performed more efficiently through organization of groups. This is a good initiative that should be explored further. Students organized in groups with similar thematic or methodological focus might benefit from sharing experiences and solving of common problems, but it is probably important that the supervisors take charge of these processes and organize the activities. Another option that might be explored is how the department can compete better for 4 year UIO PhD scholarships, as one of the four years can be used for teaching or other duties that may relieve the permanent staff, while at the same time being meriting for the PhD student.

Since the selection of specialization at the moment is open, the number of students requiring supervision is likely to vary between the disciplines. The last two years, the economic evaluation specialization has attracted the same number of students as the other two specializations combined. At the moment, the staff supervising economic evaluation students may therefore require particular attention, although the pressure may vary between the different uptakes.

In principle, there are two ways to smoothen the supervision burden between the staff of the three specializations. The first is to control the uptake, with quotas of students for each specialization. The second is to ensure some degree of flexibility in resources in terms of manpower between the specializations. The evaluation panel experienced low level of support for the first alternative from both students and staff, and the second option might therefore for the time being be the best solution. Several of the academic staff have very general

backgrounds and wide experience, and may easily contribute across a number of disciplines. However, some topics and methods are more narrow, and in practice supervision can only be provided by few department members. The evaluation panel therefore recommends that the department considers how adjunct professors (existing and/or new) can be used to smoothen supervision -and teaching burden between specializations.

4.10 Accomplished improvements/initiated measures

The HEPMA program is an improved version of the previous program offered at the Department. It has taken on board most of the suggestions made in the evaluation report of 2009 and has even taken the specialization further than suggested. Now the master students are offered the choice of three specialties as well as a General program. It took some time before the new system was in place (2013) but it now seems to work well. In response to the suggestion of increased internationalization the EU-HEM program was introduced in 2013, with collaborating partners at universities in Rotterdam, Innsbruck and Bologna. Further, the possibilities for international student exchange and collaboration have substantially increased in recent years.

Exam forms and student evaluations have also changed in line with what the report suggested and the teaching styles now comprise more variation than was previously the case. In line with suggestions, also the share of elective courses is reduced. Further, an increased share of the courses are now offered in-house, which seems to have made coordination of content and quality easier.

HEPMA further seems responsive to suggestions in students' evaluations reports and in direct communication with the teaching and administrative staff. Examples provided during the evaluation panel's interviews include the reduced number of reading material for 5 credit courses when pointed out that the number of pages had not been reduced according to the change from 10 credit courses to 5 credit courses and reduced workload for the Internship course.

The Department has also conducted a survey among previous students, which provide some information and feedback on the teaching and course contents. Although no student at this

point has graduated from the new HEPMA program, the survey response provided some valuable feedback into the current program.

It is this evaluation panel's view that the Department and the program managers have been responsive to the suggestions made by the previous evaluation panel and by students. Many important and pervasive changes have been implemented in the 2009-2014 period, which have improved the program substantially. HEPMA is still relatively new and further changes and adjustments are expected. The evaluation panel provides some suggestions for future actions in the next section.

5. Conclusion and proposal for future action

The master program in Health Economics Policy and Management at HELED is currently the most well developed and largest of it's kind in Norway, and by far the one with the greatest health economic focus. The closest competitors are (i) the Master's Degree Programme in Applied Social Sciences - Program option International Social Welfare and Health Policy at the University College of Oslo and Akershus, (ii) the Experience based master in Health management, quality improvement and Health Economics at University of Bergen, and (iii) the Experience Based Master in Health Management at the University College of Bodø.

Due to past and current health care reforms there seems to be a demand for students from HEPMA who possess the skillset required to administer and evaluate these reforms in directorates, ministries, research institutions and private consulting companies. The expected future trends underlying the challenges in the health care sector point to a continually high and increasing demand for students with knowledge in this area.

Proposals after evaluating the program are the following:

1. It is recommended that the program aims are revised. There is a clear and coherent understanding of the programs` uniqueness, strengths and vision among the academic staff and the students, which is also manifested in the actual structure of the program. However this is not presented clearly in written form for the public, future students and employers.
2. For all three specializations, the external panel recommend that specific program aims are developed, and that the individual aims for Health Economics, Health

Management and Economic Evaluation are carefully aligned with the descriptions and content of the mandatory courses of each sub-discipline.

3. The marketing of the program in Norway and elsewhere should be improved in order to both attract an even larger number of competent candidates, and make potential employers aware of the program and the skillset of students enrolling the program (implementation of proposal 1 will work in this direction).
4. Performance, in terms of both grades and completion rates, should be monitored with respect to student backgrounds, and the results used to inform future development of HEPMA.
5. With respect to both staffs` teaching load and students reading load throughout a semester, which seems to be moving on a fine line between overwhelmingly intense and academically stimulating due to the many 5 credit courses, several measures are proposed for consideration:
    - Re-introduce some 10 credit courses should be considered in order to ensure continuation, in-depth understanding and an adequate amount of curricula.
    - Offer more joint courses for all the tree specializations in order to both reduce workload for academic staff and equip students with broader insights relevant for all three specializations.
    - Recruitment of more PhD-students could both strengthen the programs` academic profile and ease the burden of the staff, for example through the establishment of a PhD research school in Health Economics, Policy and Management.
    - Considers how adjunct professors can be used to smooth supervision and teaching burden between specializations.
    - Encourage students to cooperate on master theses.
6. A system of peer-reviews of lecturers should be considered as a quality control and improvement strategy
7. Measures should be taken to tackle the lack of reading- and computer facilities, which forces master students to work from different venues and dilutes the good academic environment at HELED.
8. Measures should be taken to improve response rates on students end-evaluations
9. Finally, the external panel stresses the importance of improving completion rates and average completion time for master students, and recommend that reasons for drop-out and delays are more carefully examined