

Research Review

Erasmus School of Health Policy & Management

2013-2018



E-mail: meg@megvanbogaert.nl Project MVB047 © 2021 19 February 2021

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Preface

This report documents the findings of the committee appointed to review the Erasmus School of Health Policy and Management (ESHPM), as part of the Netherlands Standard Evaluation Protocol for Public Research Organizations 2015-2021. In reaching its findings, the committee had available a self-assessment prepared by the School, and conducted an intensive virtual site visit in December 2020. This online visit replaced plans for an earlier on-site visit that was precluded by the Covid-19 pandemic.

The committee examined a great deal of written material and sought views from a wide range of stakeholders. The signals from these diverse sources were consistent in indicating an excellent level of performance across each of the three broad assessment criteria: research quality, relevance to society, and viability (the extent to which the School is equipped for the future). In addition, as required by the Protocol, the committee reported on the School's PhD programmes, research integrity and diversity.

I speak for the entire committee in congratulating the School in securing such high levels of performance, judged against both national and international criteria, across a wide range of activity. It has been an honour to scrutinize such an outstanding institution. The details of our findings are included in this report. We draw out some recommendations, most of which take the form of suggestions for consolidating and enhancing still further the School's performance.

On behalf of the committee, I should like to thank all the members and affiliates of the School, whose contributions to the review were invariably insightful, open and helpful. We also thank the School's leadership for the excellent organization of the review materials and the site visit, especially in the light of the ongoing Covid-19 pandemic. I should like to thank the committee members for their wisdom, diligence, responsiveness and good humour throughout the review process. Finally, I thank our secretary Meg Van Bogaert for her unfailing support for the review process and the preparation of this report.

Peter Smith, Committee chair, research review committee ESHPM 9 February 2021

I GENERAL SECTION

1. Introduction

1.1. Scope of the assessment

The quality assessment of ESHPM research is part of the assessment system as specified in the Standard Evaluation Protocol for Public Research Organizations 2015-2021 (SEP) by the Association of Universities in the Netherlands (VSNU), the Netherlands Organization for Scientific Research (NWO) and the Royal Netherlands Academy of Arts and Sciences (KNAW).

The Executive Board of the Erasmus University Rotterdam (EUR) initiated the review of the scientific research done at the Erasmus School of Health Policy and Management (ESHPM) during the period 2013-2018. This was the first research review for ESHPM as a school. The review committee was asked to assess the performance by the Erasmus School of Health Policy and Management (ESHPM) on the three assessment criteria outlined in the SEP, including strategic targets and the extent to which the school is equipped to achieve them. In accordance with the protocol, the committee was also asked to reflect on PhD training, research integrity and diversity.

The ESHPM has an unusual administrative position, being part of Medical and Health Sciences of the Erasmus Medical Centre (Erasmus MC) and yet, at the same time functioning as if it were a fully independent school. ESHPM is located at the Woudestein campus (EUR), works together with various schools at this campus and has a strong bond with the Erasmus MC. This report describes the findings, conclusions and recommendations of the external assessment of ESHPM.

1.2. The review committee

The Executive Board of the EUR has appointed the following members of the committee for the research review:

- Peter Smith (chair), emeritus professor of Health Policy at Imperial College London, UK;
- Aileen Clarke, professor of Public Health Research at Warwick Medical School University of Warwick, UK:
- Aleksandra Torbica, associate professor at the Department of Social and Political Sciences, Director
 of Centre for Research on Health and Social Care Management, Bocconi University Milan, Italy;
- Karsten Vrangbæk, professor of Public Health and Political Science at the University of Copenhagen, Denmark;
- Peter Groenewegen, emeritus professor at the department of Human Geography at Utrecht University; senior researcher at NIVEL, the Netherlands;
- Ingrid Kremer, post-doc at the department of Health Services Research, Maastricht University, the Netherlands.

More detailed information about the members of the committee can be found in appendix 1. The Board of EUR has appointed Meg Van Bogaert as the secretary to the committee.

1.3. Independence

All members of the committee signed a declaration and disclosure form to safeguard that the committee members judge without bias, personal preference or personal interest, and the judgment is made without undue influence from the institute, the programmes or other stakeholders. Any existing professional

relationships between committee members and programmes under review were reported. The committee concluded that there was no risk in terms of bias or undue influence.

1.4. Information provided to the committee

The committee received detailed documentation consisting of the following parts:

- Self-assessment report 2013-2018;
- Standard Evaluation Protocol 2015-2021;
- Overview of key publications;
- NIHES research evaluation 2007-2012.

1.5. Procedures followed by the committee

The site visit of ESHPM took place on 9-11 December 2020. Originally, the members of the committee were intended to meet with each other and with ESHPM in Rotterdam during an onsite meeting. This site visit was planned to take place in the spring of 2020. However, due to the global Covid-19 pandemic, the site visits to Rotterdam were first postponed and later replaced by remote meetings via a digital platform. In order to partially compensate for the loss of interpersonal interaction during physical meetings, it was decided to schedule additional online meetings between committee members and use interactive working methods. Prior to the site visit, the committee members were asked to read the documentation and formulate questions for the interviews. In an online kick-off meeting, approximately two weeks prior to the site visit, the committee was introduced to the Standard Evaluation Protocol and agreed upon procedural matters. In this meeting the committee furthermore discussed its preliminary findings.

During its final meeting, the committee jointly discussed the scoring of the school. To conclude the visit, the committee presented the main preliminary conclusions to ESHPM. The schedule for the site visit is included in appendix 2.

This report describes the findings, conclusions and recommendations of the committee. ESHPM is assessed in relation to research programmes and institutes worldwide in similar disciplines and on similar topics. The texts for the assessment report were finalised through email exchanges. The final version was presented to the ESHPM management for factual corrections and comments. The report was completed on 19 February 2021.

II ASSESSMENT OF THE RESEARCH UNIT

2. Strategy and targets

2.1. Introduction

The Erasmus School of Health Policy and Management (ESHPM) seeks to achieve the highest standards in health care research, "simultaneously creating an impact with research and knowledge on actual health systems" (self-assessment page 8). Since its establishment, ESHPM has acquired a leading position in the health care sciences. In addition to research and societal impact, ESHPM is involved in education. It offers a bachelor programme and four master programmes.

2.2. Organisational structure

ESHPM is part of the Faculty of Medicine and Health Sciences of the Erasmus University Rotterdam (EUR), but is the only organisational unit of this Faculty that is not part of Erasmus Medical Centre. ESHPM functions similarly to independent schools within the university. ESHPM is managed by a Daily Board, the Dean of ESHPM is mandated by the Dean of the Faculty of Medicine and has the final responsibility for the functioning of the School (self-assessment page 13).

The academic staff of ESHPM is divided into seven sections, which all have their own financial responsibility:

- Health Care Governance (HCG);
- Health Economics (HE);
- Health Systems and Insurance (HSI);
- Health Services Management & Organisation (HSMO);
- Health Technology Assessment (HTA);
- Law & Health Care (LHC);
- Socio-Medical Sciences (SMS).

The sections vary in size, disciplinary background and research focus. The heads of sections, together with the Daily Board, form the Management Team of ESHPM. Some of the sections, such as HCG, HSMO and SMS, have a multidisciplinary staff; others are monodisciplinary and do multidisciplinary research through cooperation with other sections.

The committee recognizes that management arrangements reflect a variety of historical and practical pressures, and found no evidence that the current structure is in any way dysfunctional. However, it recommends that ESHPM periodically reviews its management structure to ensure that it continues to best serve the objectives of the School and preserves its ethos.

Three private limited liability companies are linked to ESHPM (owned by the EUR holding company):

- Institute for Medical Technology Assessment (iMTA)
- Erasmus Centre for Health Care Management (ECHCM)
- Academy for Medical Specialists (AMS)

The profit from these companies benefits the budget of the School. The companies provide opportunities for researchers to work in a different environment, whilst linked to the School, and to enhance societal impact.

2.3. Funding and staff

The table in appendix 3 provides an overview of staff over the period of review. It shows a stable total number of staff between 2013 and 2016, and an increase in 2017-2018. This increase is mainly the result of an increase in number of PhD candidates, while the number of post-doc positions was reduced after the reorganisation in 2014. The reorganisation was the result of budget cuts and led to a decrease in permanent staff. The number of permanent academic positions is now based on the amount of direct funding, which is approximately one third of total funding (see appendix 3).

Despite the cutbacks in direct funding flow, ESHPM has succeeded in securing funding from other sources. Over the period of the review, the total budget (in research FTEs) has increased. However, in the self-evaluation ESHPM indicates that the limited number of permanent positions is a threat for the future, as it affects career opportunities for assistant professors and post-doc positions (Self-assessment page 62).

Young, talented researchers want - and deserve - the chance and opportunity to grow towards senior positions. The lack of a tenure-track programme and not always transparent procedures from the point of view of those seeking a more senior position (although the criteria are clear) cause uncertainty and sometimes frustration among young researchers. The committee is of the opinion that mobility of researchers between institutions is important, but this mobility should be based on motivations other than an expiring and non-renewable contract. Partly this is a matter of national policy and the nature of funding, and the committee realises that the Executive Board of EUR also plays an important role. Nevertheless, the committee feels that where possible ESHPM should put arrangements in place to mitigate some of the consequences of this uncertainty. A systematic research training and capacity building approach should be adopted, including a mentoring programme and talent programmes for early career researchers. Examples from other institutions should be sought, but mentoring and shadowing and networking events to connect early career researchers to each other and to e.g. the visiting professors would be beneficial.

2.4. Mission and strategy

ESHPM aims to contribute to high quality, accessible, affordable, efficient, equitable, and sustainable health care around the world (Self-assessment page 12). The multidisciplinary approach to health care research is a central characteristic of the organisation. The main disciplines in the School are: policy sciences, sociology, economics, management and law. This enables ESHPM to provide an important contribution to the shaping of health care systems in terms of competition, regulation, quality and efficiency, as well as their organisation and management.

The research at ESHPM is organized around three major research themes:

- Competition and Regulation in Health Care;
- Quality and Efficiency in Health Care;
- Management and Organisation of Health Care Delivery.

The research themes connect research that takes place in the different sections. Each section has its own research topics and projects which are related to the research themes, and overall coordination of the research activities on the research themes is achieved through the presentation of research plans, joint projects, and regular meetings by section heads. Also, the connection between sections is stimulated through specific programmes, such as investing in (joint) PhDs around themes.

3. Assessment of ESHPM

3.1. Research quality

ESHPM produces a large volume of research output, mainly in the form of journal publications but also books, book chapters and reports. The majority of these publications are of very high scientific quality and range across different disciplines. Despite the absence of clear metrics (e.g. MNCS-scores) that could have provided more objective measures and a more systematic view on the quality of the output, the committee was impressed by the quality of the publications it has reviewed. The committee noted that many of the publications clearly have an international focus, reflecting the international approach and standards of ESHPM.

The multidisciplinary approach that ESHPM aims for was clearly reflected in the output. The committee identified many collaborative publications between the sections, a clear sign of genuine cooperation and multidisciplinary work. This is a distinctive feature of ESHPM, as successful and sustained multidisciplinary approaches are not (yet) common international academic practice. This is especially noteworthy, given the reluctance of monodisciplinary journals to publish multidisciplinary research. ESHPM is internationally leading in this respect and convincingly shows the value of multidisciplinary research.

Another reflection of the outstanding quality of research is the number (and total amount of funding) of grants that ESHPM has successfully received over the review period. The committee noted in particular that funding has been secured from a diverse range of national and international sources, and that there is a good balance between different sources of funding.

The three research themes reflect integration of the research of the seven sections and the multidisciplinary work of ESHPM. Research in the *Competition and Regulation in Health Care Theme* is of excellent quality. Amongst other achievements, ESHPM can be considered world leaders in risk adjustment in health system financing. Research quality is also excellent in the *Quality and Efficacy in Health Care Theme* and is clearly internationally relevant. The work in this theme has an international impact as a result of impressive publications in internationally leading journals. The examples given in the self-assessment demonstrate multi-site, international, and inter-as well as mono-disciplinary research with appropriate methods. Finally, the *Management and Organization of Health Care Delivery Theme* is of high international quality, targeting a wide variety of different publication outlets. There are many co-authored publications signifying a high degree of collaborative engagement both within ESHPM and externally.

On the basis of the five selected publications of each section, the committee drew the following conclusions:

- Researchers from the HCG section have been involved in many publications in a range of outlets, some in high ranking journals. The five selected papers are of high quality and published in good journals, some of these papers involved researchers from multiple sections.
- The HE sections publications are of outstanding quality and published in international journals in the field of health economics.
- The excellent quality of the HSI research is reflected in outstanding publications. The journals that these papers are published in are very good, although perhaps not quite reflecting the research excellence in the section.
- Researchers from the HSMO section published in a diverse range of outlets, in international journals. The five selected papers are of high quality.
- The quality of the research of the HTA section is outstanding, clearly of international interest and

- published in journals with very high impact factors.
- The SMS section publishes very good research in renowned journals, also with senior staff as first author.
- The output of the LHC section was difficult to judge as the committee did not include specific expertise on health law. The committee acknowledges that the publication culture and journals in the area of law differ from the other research areas of the School. However, it struck the committee that interdisciplinary publications seemed to be lacking.

The academic reputation of a number of staff members reinforces the internationally leading position of ESHPM. Their expertise, experience and stature is used internationally to validate and comment on research globally. This signals the high international scientific reputation of ESHPM. The academic quality of the research by ESHPM is evidently outstanding. As in all research institutes, there is a variation in the quality of research within ESHPM, but the committee judges that the quality across the board is of a very high level with many excellent examples of contributions to the body of knowledge. The committee considers ESHPM to be a world-recognized centre for the majority of its research. Sustainability of the research quality will require a cohort of equally talented middle and junior level researchers coming through. In order to maintain the current status attention needs to be given to staffing structures and progression.

3.2. Relevance to society

The impact of the research of ESHPM on society as a whole is outstanding. In particular, it has had a major and outstanding impact on research, researchers, policy makers and policy in the Dutch health system. The committee commends the way that impact is created by the structured embedding of endowed professors. Although the appointment of endowed professors is not unique to ESHPM, the school manages to embed these appointments in the research community in an exemplary way and at the same time connect the school to society. This results in building impact and a close connection to policy makers, ministries, and other relevant organisations. The committee believes that the systematic approach adopted by ESHPM towards its endowed professorship programme could also be applied to some of its other impact initiatives, such as its media strategy, for which such a systematic approach is currently not evident from the discussions or documents.

Although the greatest immediate impact of the research in the period of the review is at the national level, there are also some excellent international examples, such as the work on the inclusion of future medical costs in the evaluation of health technologies and its impact on bodies such as NICE in the UK. The committee discussed the ambition and aspiration of ESHPM to increase its international relevance to international organisations and other health systems. In the committee's view the international dimension of societal impact fits with ESHPM's international leading position in the field of research quality. This requires a clear policy choice and strategy. To achieve impact on countries other than the Netherlands is very feasible, and already observed in the period of the review. There is also considerable scope to increase influence at the global level, through channels such as the WHO, the World Bank and the European Commission.

A good and functioning network is extremely important for the school and ESHPM has many impressive links to important and relevant positions in organisations and government. To enhance such links still further, the committee thinks that ESHPM could make more structured use of their alumni. In particular, the committee suggests strengthening the alumni network itself (e.g. newsletters) and making membership easier. Alumni can also play a role in guiding young researchers and PhD candidates, for example as a source of information, for establishing policy and business contacts, or as a (temporary) workplace. There may also be opportunities to further exploit the links established through the School's commercial contract work of its limited liability

companies.

3.3. Viability

The committee's assessment of the viability of ESHPM is based on a wide range of aspects. The committee is of the opinion that ESHPM is in a very strong position to continue the high quality of the research, to grow as planned and intended and to achieve its own goals. Based on the size of the school and the diversity of funding sources, it is clear that ESHPM is in a better structural position than most comparable institutions to manage the financial uncertainty associated with all research and teaching activity.

In the self-assessment, several threats to the school are provided, which shows that ESHPM is well aware of its position, opportunities and (potential) weaknesses. Some of the threats mentioned are serious, although they are not unique to ESHPM and can be considered relevant to many organizations.

On the basis of the documents and discussions, the committee concludes that there is generally a good culture within ESHPM and that it is a robust institution, in the sense that it is resilient to changed circumstances, and readily able to adapt. The institutional culture therefore offers protection to many of the threats, and a good base for seizing opportunities. The committee was impressed by the way initiatives are responded to. Furthermore, ESHPM has put in place explicit mechanisms to improve resilience. For example, it has in place a horizon scanning function designed to mitigate some of the threats. The committee therefore believes that ESHPM is in a very good position to deal with threats. Amongst the opportunities are the emergence of potential new areas of research, such as global health and public health. It is important that the horizon scanning is effective in identifying and exploiting such opportunities.

ESHPM has put in place a number of arrangements designed to safeguard the welfare of staff and promote the quality of its work. However, from the interviews the committee concludes that there are different views on how well they function. As an example the committee mentions the quality cycle, which appeared to be better developed than was suggested in the documentation. The responses by the management to the committee's questions were impressive and show that ESHPM is doing much more than was initially visible to the committee. The committee acknowledges the importance of informality and light touch procedures but it is also important that all staff have clear knowledge of and access to remedial actions in the rare circumstances when informal measures fail. There seems to be a lack of transparency concerning those management arrangements to assure the welfare of staff and the quality of research. It therefore feels that ESHPM would benefit from more systematic documentation of formal management arrangements.

This SEP-review is the first external research evaluation of the school and ESHPM carried out a situation analysis and SWOT for this review. According to the committee this can be the start of regular structural analyses to help the management with the strategic vision, the measurement of performance and other achievements. Some activities are already being carried out, such as the horizon-checking discussed above. However, a routine periodic risk analysis does not seem to be in place.

In conclusion, the committee is convinced that ESHPM is very well placed to enjoy a very successful future. The school is vibrant, robust, large, diverse in research topics and has a large number of different funding sources. There is always room for improvement in order to be even more secure in the future. For some aspects ESHPM can take action itself, and the committee has made some recommendations. For others the School is (partly) dependent on external factors, such as the EUR policies or national policy. Wherever possible ESHPM should play an active role locally or nationally by using its extensive networks to secure beneficial change.

3.4. Integrity policy

Integrity issues can arise in any organisation and the key issue is how signals and solutions find their way to and from the central level. In addition to the Netherlands Code of Conduct for Research Integrity, ESHPM adheres to the university's code to safeguard good research. At EUR level there is a scientific research confidential advisor and a scientific integrity committee.

The committee found that the formal aspects of integrity policy are sufficiently defined. The EUR created a dilemma game as a way of raising awareness and focusing on professionalism and integrity in research. The ESHPM sections are encouraged to play this game with their researchers to enhance the awareness. PhD candidates play this game as part of the mandatory course 'Professionalism and Integrity in Research'.

Social safety at ESHPM in principle is good, but as an important point for attention it was mentioned that if an incident happens, more transparency about the procedures in place to deal with incidents and attention to the needs of the employee e.g. in terms of support is needed.

Data protection procedures were found to be well developed. However, the committee recommends that prompt attention is given to accessible, systematic archiving and organisation of data so that it is readily available for scrutiny when needed. The appointment of data stewards is a useful development, but it is still in its infancy.

3.5. Diversity

EUR wishes to create equal opportunities for everyone and a culture in which diverse talents feel at home and can excel. In 2014 ESHPM committed to the goal that 50% of new appointments at the level of professor must be women. In 2019, around 75% of PhD candidates and postdocs were female. For Associate and Assistant professorships the figure was over 50%. For the full professorship the percentage was however only 14%. Recent hires have led to a higher percentage of female professors (38% in February 2021). the female staff members we interviewed did not perceive any barriers in reaching their current position. It would nevertheless be useful in the future to augment this evidence with the views of female staff who leave the institution, to ensure that gender bias is not a reason for departure. The committee nevertheless believes that with regard to gender balance, ESHPM is on the right track. The committee hopes that ESHPM will maintain the current momentum towards its gender equality goals.

Although the Netherlands is recognised to be an increasingly diverse country, ethnic minority representation seems to be very low within the academic staff. For a world leading institution, the committee considers that policies to develop and enhance the ethnic diversity of the staff are required. On a related point, international diversity amongst academic staff is low, given the international ambitions of ESHPM. The committee recognizes that much of the School's research relates to national health services and health policy, and that to have an impact, understanding of the national context is important. However, the committee recommends that attention is given to the recruitment strategy of the School, both to increase the range of perspectives brought to research, and to enhance staff diversity as well as its international impact.

3.6. Quantitative assessment

Research quality	Excellent (1)
Relevance to society	Excellent (1)
Viability	Excellent (1)

4. PhD training

A doctoral track in the Netherlands generally includes three types of tasks: research, training and teaching. At the start of the doctoral track, the PhD candidate, promotor and (co)supervisors agree on how these tasks are combined. The agreements are included in the Training and Supervision Plan (TSP). In general, 75% of the time of a PhD candidates is devoted to research. Internal PhD candidates initially get a 1.5 year contract that can be extended for another 2.5 years after an evaluation by the promotor(s), co-supervisor(s) and/or department manager. In the period of the review, ESHPM joined the Graduate School of Social Sciences and the Humanities (EGSH) at Erasmus University Rotterdam.

During the virtual site visit, the committee had the opportunity to talk to internal PhD candidates from various sections and in different stages of their PhD trajectory. Supervision teams formally consist of two supervisors of which one is appointed daily supervisor. It emerged that, on the whole, ESHPM PhD candidates are satisfied with the guidance, training and research they receive. Nevertheless, not everyone expressed the same level of satisfaction with supervision. Sometimes supervisors have too little time (too many PhD candidates), or the quality of supervision could be improved. The committee recognizes that it is important to retain the benefits of diversity and informality in supervision arrangements, but recommends that the existing structure can be improved to ensure that there is a safety net in the exceptional cases when something goes wrong.

Both in a positive and in a more critical sense, practice seems to deviate on a number of points from what was written in the self-assessment. Sometimes a deviation applies to a single PhD candidate, sometimes to a larger group. In this feedback, the committee mentions the more general points needing attention. PhD candidates pointed out the open, informal atmosphere and the lack of hierarchy as positive aspects of ESHPM. At the same time, this requires PhD candidates to be responsible for their own work-life balance and to stay on schedule. Most PhD candidates need more than the stipulated four years before they can defend their thesis. In some cases this was partly due to teaching workloads but it was indicated that some PhD candidates may have not had sufficient guidance from supervisors about monitoring progress and staying on schedule. For many PhD candidates, it is not clear at the outset of their project what exactly is expected of them and they indicate to need more structure and support in shaping their projects. This aspect should receive more attention early in their appointment, generally from ESHPM but certainly also from the supervisors.

Although the diversity of funding sources makes an important contribution to viability, there is a risk that it leads to a lack of a clear common identity of the group of PhD candidates within ESHPM. Joining the Graduate School of Social Sciences and the Humanities (EGSH) of Erasmus University Rotterdam has brought many advantages, but the committee believes it also makes it important to reinforce a common identity amongst PhD candidates. This could be achieved through initiatives such as a joint course or annual PhD days e.g. with presentations of work in progress.

Equally, the multidisciplinarity and diversity of topics are strengths of ESHPM, but this also points to the requirement for explicit attention to be paid to the development of an ESHPM identity for PhD candidates. The committee discussed the multidisciplinary character of ESHPM with the PhD candidates and what this means for their daily functioning. PhD candidates work within their 'own' section, although there are many projects with supervisors from two sections. In general, the committee found that many PhD candidates have a real sense of multidisciplinarity in their work and are stimulated in this respect.

Young ESHPM (yESHPM) is the PhD community of ESHPM and has the objective to create a space for PhD candidates from different sections to meet and interact. yESHPM organizes regular activities and functions as

a platform for sharing experiences, difficulties and questions related to being a PhD candidate. Every six weeks the yESHPM Board and the ESHPM Daily Board meet to discuss general affairs concerning PhD projects. In the view of the committee, yESHPM has great added value, both for the PhD candidates and for the ESHPM Daily Board, yESHPM ensures that the interests of PhD candidates are represented. The committee feels that the annual survey is an excellent instrument for monitoring the well-being and guidance of this important group of employees, and is positive about the way in which the ESHPM Daily Board deals with the results of the surveys.

The committee also spoke to a few postdocs, who are a step further in their scientific careers than PhD candidates. The decline in the number of postdoc positions in relation to the number of PhD candidates is remarkable. The committee advises ESHPM to monitor this trend; as too great an imbalance will cause problems in the flow of staff and supervision. The postdocs interviewed were positive about mentoring arrangements for balancing research, teaching and administrative tasks. The committee feels there is scope for improving guidance for postdocs in making future career choices.

III Recommendations

In the light of the above findings, the committee has the following recommendations for ESHPM:

Strategy and management:

- that it should periodically review its management structure to ensure that it continues to best serve the objectives of the School and preserves its ethos.
- that it should put in place more systematic documentation and transparency of formal management arrangements.
- that it should use the situation analysis and SWOT for this research review as the start of structural and periodical analyses on the strategic vision, the measurement of performance and other achievements and that it should regularly monitor research quality using relevant metrics.
- that it should maintain the diversity of funding sources through an active promotion of the strategy within ESHPM.

Career perspectives junior and mid-career researchers

- that it should put in place arrangements to mitigate some of the consequences of the uncertainty in career prospects for junior staff (PhD candidates, postdocs and assistant professors).
- that it should give attention to the international recruitment strategy of the School, both to increase the diversity and range of perspectives that may bring to research, and to enhance its international impact.

Research quality

- that the multidisciplinary approach should be reinforced, protected and adequately incentivized at the individual level, given the value it generates
- that it should investigate whether the section on LHC can be more integrated into the multidisciplinary work at the School

Relevance to society

- that it should apply a more systematic approach to societal impact initiatives, similar to that towards its endowed professorship programme.
- that it should strengthen the alumni network.
- that it should promote awareness of opportunities for researchers to engage in contract research through its limited liability companies.
- that it should investigate ways in which the international relevance of the research can be enhanced.

PhD training and supervision

- that it should strengthen and nurture the links between PhD candidates through initiatives such as a joint course or annual PhD days.
- that it should ensure that all PhD candidates are given clear information on what is expected of them early in their appointment.
- that it should improve and strengthen existing structures to ensure that there is a safety net in the exceptional case when something goes wrong in the supervision of a PhD candidate.
- that it should regularly monitor the balance between number of postdoc positions and the number of PhD candidates.

Data management

• that it should give prompt attention to the accessible and systematic archiving and organisation of data so that it is readily available for scrutiny when needed.

Diversity

• that it should maintain the current momentum towards its gender equality goals and examine ways of addressing its lack of ethnic diversity.

Appendices

Appendix 1: Curricula Vitae of the committee members

Peter C. Smith is Emeritus Professor of Health Policy at the Imperial College Business School. He is a mathematics graduate from the University of Oxford, and started his academic career in the public health department at the University of Cambridge. His main work has been in the economics of health and the broader public services, and he was a previous Director of the Centre for Health Economics at the University of York. At Imperial he launched and co-directed the Centre for Health Policy in the Institute of Global Health Innovation. Peter has acted in numerous UK governmental advisory capacities. He has also advised many overseas governments and international agencies, including the World Health Organization, the International Monetary Fund, the World Bank, the European Commission, the Global Fund, and the Organization for Economic Cooperation and Development. He continues to research actively on economic aspects of global health, and is a Professor of Global Health Policy at the University of York. Current interests include: measuring and improving health system performance; universal health coverage; and the links between the health system and the broader economy.

Professor **Peter Groenewegen** PhD is senior researcher and former director of the Netherlands Institute for Health Services Research NIVEL and emeritus part-time professor at Utrecht University. He is co-founder and former member of the Executive Board of the European Forum for Primary Care (EFPC). He is a sociologist by education. His main research interests include organisation of primary care, international comparative studies, health policy and health care organisation. He is the (co-) author of numerous international articles on practice variations, on primary care, on disease management, on organizational change in health care, and on public trust in health care providers and institutions (http://www.nivel.nl/en/peter-groenewegen).

Ingrid Kremer PhD graduated cum laude from the Health Sciences Research Master at Maastricht University. In 2016 she started her PhD at the Department of Health Services Research, her research focused on the development of a patient decision aid for disease-modifying drugs for patients with multiple sclerosis. During her PhD Kremer had several positions of responsibility, such as chair of the early career researchers of the department, member of the CAPHRI PhD panel, president of the ISPOR Maastricht University student chapter, and member of the Host Organizing Committee of the European Health Economics Association conference 2018. She is currently working as a postdoctoral researcher and teacher at the Department of Health Services Research.

Aleksandra Torbica PhD is associate professor at the Department of Social and Political Sciences at Bocconi University, Milan. She was trained as a pharmacist in Belgrade, Serbia. She did a Master of Science (cum laude) in International Health Care Management, Economics and Policy and received her PhD in Economics and Management of Public Administrations at the University of Parma, Italy in 2007. Her research interests revolve around two main streams: (i) use and impact of Health Technology Assessment (HTA) on decision making in healthcare and (ii) methodological issues in estimating outcomes and costs of healthcare technologies/programmes/services. Some of her most significant scientific achievements concern the impact of economic analysis on decision making in healthcare and focus has been on exploring different methodological approaches to the issue (both quantitative (i.e. surveys, experiments) and qualitative (interviews)). With reference to the second research stream, in her research she adopts a perspective which combines economics and management disciplines for evaluation of costs in healthcare.

Karsten Vrangbæk is professor at the Political Science and Public Health Department and Director of Center for Health Economics and Policy (CHEP) at the University of Copenhagen. He is involved in a number of research and educational activities within the field of health policy and management dealing with a diverse range of issues related to health systems analysis, economic consequences of ageing populations, markets and public-private collaboration in health care and performance management in health care. Vrangbæk has

published extensively within the field of health policy and management. Vrangbæk has also conducted research on issues of coordination and integrated care in Denmark, Sweden and Norway, and has recently published a co-authored book comparing structural reforms to improve coordination of care in Denmark and Norway. Other current research projects include a comparative study of performance management in hospitals in Denmark, Germany and England, and an investigation of the implementation of EU's Cross Border Healthcare Directive in selected member states. Karsten Vrangbæk has co-edited volume on "Decentralization" and "The Nordic Health Systems" for the European Observatory on Health Systems.

Professor Aileen Clarke studied medicine at the University of Oxford and trained and practised for a short time as a GP. She went on to take her MSc in Public Health at the London School of Hygiene & Tropical Medicine, achieving both a distinction and the prize. Clarke worked in North London in a substantive consultant post at regional level where she had responsibility for 2.4 million people. She became a senior lecturer at the London School of Hygiene & Tropical Medicine (LSHTM) and ran the MSc in public health at the LSHTM before joining Warwick Medical School in 2007. At Warwick she is a professor of Public Health working in the Populations Evidence and Technologies group. She has active links with national and international bodies such as the Nuffield Trust, NICE, The Health Foundation, the Faculty of Public Health, the Royal College of GPs, the Society for Social Medicine and Population Health, the Society for Medical Decision Making and she has served on grant-awarding bodies (e.g. including for EU funding as well as , in the UK for the NIHR HTA, HS&DS and PEGFAR programmes).

Appendix 2: Programme of the site visit

Day 0: 9 December 2020

16:00 - 16:45	Welcome ESHPM + Introduction Research School (by research director)
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Day 1: 10 December 2020

Preparation committee (closed session)									
Faculty Management									
Small 'switch-break' between sessions									
Tenured staff (assistant-, associate professors, professors)									
Lunch break									
(Young) PhD-students, Postdocs, Graduate school									
Small 'switch break' between sessions									
Speed dates, round 1: Every committee member meets two PhD students (short									
presentation + discussion)									
Small 'switch break' between sessions									
Speed dates, round 2: Every committee member meets two PhD students (short									
presentation + discussion)									
Small 'switch break' between sessions									
Support staff (Research support, HR, Business controller, etc.)									
Committee: findings day 1 (closed session)									

Day 2: 11 December 2020

09:00 - 09:15	Preparation committee (closed session)
09:15 - 10:00	Holders of research grants
10:00 - 10:15	Small 'switch break' between sessions
10:15 - 11:00	Endowed professors with networking function
11:00 - 11:15	Small 'switch break' between sessions
11:15 - 12:00	Stakeholders / professional field and Alumni
12:00 - 13:00	Break & preliminary findings
13:00 - 14:00	Final meeting Faculty Management + sharing preliminary findings committee
14:00 - 16:00	Preliminary findings (closed session)
16:00 - 16:30	Oral presentation preliminary finding (by chair committee) for all ESHPM colleagues
16:30 - 17:00	Wrap-up research director / dean for all ESHPM colleagues

Appendix 3: Quantitative data

Table 1: Research staff in fte

2013		13	2014		2015		2016		2017		2018	
	FTE	#										
Scientific staff (1)	21.7	51	26.4	62	30.3	68	30.8	71	31.6	78	33.2	84
Postdocs (2)	34.8	45	23.9	32	22.9	30	21.2	30	18.0	26	16.8	23
PhD students (3)	20.6	35	26.6	40	26.4	41	28.4	43	38.0	58	40.7	62
Total research staff	77.1	131	76.9	134	79.6	139	80.4	144	87.6	162	90.6	169
Support staff	36.0	43	37.0	52	31.0	35	33.4	37	39.5	46	36.	42

Table 2 main categories in research output for the years 2013-2018

categories	2013	2014	2015	2016	2017	2018
Refereed articles	181	190	183	182	149	173
Non-refereed articles (1)		37	46	42	59	35
Books	5	3	2	-	1	1
Book chapters	16	5	8	15	9	13
PhD theses	12	12	22	16	4	8
Conference papers	2	1	0	0	1	3
Professional publications (2)	56	53	71	52	68	50
Publications aimed at the general public (3)	8	14	19	19	1	11
Other research output (4)	12	6	18	14	14	20

Note 1: Articles in journals that are non-refereed, yet deemed important for the field

Note 2: Publications aimed at professionals in the public and private sector (professionele publicaties), including annotations (e.g. law)

Note 3: Also known as "populariserende artikelen"

Note 4: Other types of research output, such as reports, working papers and inaugural lectures.

Table 3: funding in FTE

	2013		2014		2015		2016		2017		2018	
	FTE	%	FTE	%	FTE	%	FTE	%	FTE	%	FTE	%
Direct funding (1)	23.3	30%	27.1	35%	29.0	36v	26.5	33%	33.9	39%	28.3	31%
Research grants (2)	28.2	37%	18.8	24%	13.3	17%	11.4	14%	7.9	9%	9.2	10%
Contract research (3)	25.6	33%	15.5	20%	16.6	21%	21.7	27%	25.0	29%	32.1	35%
Other (4)	0	0%	15.5	20%	20.7	26%	20.8	26%	20.8	24%	21.0	23%
Total funding	77.1	100%	76.9	100%	79.6	100%	80.4	100%	87.61	100%	90.6	100%

Appendix 4: Explanation of the SEP scores

	Meaning	Research quality	Relevance to society	Viability
1	World leading/ excellent	The relevant research unit has been shown to be one of the few most influential research groups in the world in its particular field.	The relevant research unit is recognised for making an outstanding contribution to society.	The relevant research unit is excellently equipped for the future.
2	Very good	The relevant research unit conducts very good, internationally recognised research.	The relevant research unit is recognised for making a very good contribution to society.	The relevant research unit is very well equipped for the future.
3	Good	The relevant research unit conducts good research.	The relevant research unit is recognised for making a good contribution to society.	The relevant research unit makes responsible strategic decisions and is therefore well equipped for the future.
4	Unsatisfactory	The relevant research unit does not achieve satisfactory results in its field.	The relevant research unit does not make a satisfactory contribution to society.	The relevant research unit is not adequately equipped for the future.