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Chapter

# 13

**Discussion**



This thesis presents three cases of health services research at work for national health policy. All three are research projects in which national health policymakers posed a primarily content-focused research question. These were: a cost-effectiveness evaluation of a genetic screening programme for familial hypercholesterolemia (FH) to support the decision-making process for national implementation (Case I: see Chapters 2, 3, 4 and 5); a cost-effectiveness evaluation of the development and implementation of respiratory care guidelines in Nepal to guide the decision-making process for nationwide implementation and international development (Case II: see Chapters 6, 7, 8 and 9); and lastly, the development of a performance measurement instrument for the entire Dutch health system to be used by the Dutch Ministry of Health, Welfare and Sport (MoH) as a monitoring and steering information tool (Case III: see Chapters 10, 11 and 12). This final chapter provides reflections on these three cases. (See Table 1 for an overview of this thesis with case study results)

We explored two research questions in this thesis to increase the usefulness of health services research for national health policy. Firstly, How can health services research include content-, context- and process-focused research questions? (in addition to the initial research question) and secondly, How can health services researchers participate in an interaction process with policymakers?

## Case study results

### Inclusion of additional research questions

The strategies to include additional research questions showed similarities in the three cases. Firstly, we tried to interpret our research assignments in such a way that we could answer the additional questions within the initial research contracts. This attempt was not always successful, as was shown by our efforts to study the analysis of the pedigree and completeness of the family tree in the screening programme for FH (see Chapter 5). Secondly, these cases illustrate that addressing the additional questions was partly based on feasibility and availability. Staff, time, costs and supervision possibilities were important ingredients for the decision on whether or not to proceed with a study that was not part of the initial contract. We had the opportunity to involve students to carry out part of the research activities. Within our academic setting, we were able to find means and staff to develop these questions and to answer them. In our cases, the students involved were from the fields of medicine (3), health sciences (1) and medical information sciences (1). All were in the final stages of their academic training. They shared high motivation and constructive criticism that allowed us to seek answers to specific questions within short time frames and at no additional cost. In other settings, such as in institutions that conduct contract research, this opportunity of combining research with academic training of graduate students does not exist and the means and staff to address research questions that were not part of the initial research contract will be increasingly difficult to find. In our three cases, we experienced that other stakeholders

were enthusiastic about additional research when it supported their cause and involved no additional cost.

## **Interactions with policymakers and other actors**

Regarding the process of interaction with policymakers and other actors, it is important to point out the differences and similarities of the three cases. The first case – the evaluation of the screening programme for FH – was commissioned by the Netherlands Organisation for Health Research and Development (ZonMw) on behalf of the MoH [1]. In this case, the health services researchers did not interact with the policymakers or with the contractors at the beginning of the research period. After the agreement on the research proposal, the next interaction with policymakers and contractors was at the workshop, when we presented the results of all the studies we had conducted (including the studies on the psychosocial effects of the screening) [2]. Our interaction during the research was mainly with those involved in the programme that was evaluated: the staff and initiators of the Foundation for the Identification of Persons with Familial Hypercholesterolaemia (StOEH) (see Chapter 5).

The second case – the evaluation of the Practical Approach to Lung Health (PAL) in Nepal – was commissioned by the Foundation for the Advancement of Tropical Research (WOTRO), part of the Netherlands Organisation for Scientific Research (NWO) [3], but the request for the evaluation was initiated by the intended user of the research results, the World Health Organization (WHO). The interaction with WOTRO during the research period was limited to producing reports on research progress and financial project management. The main interaction during the research period was with the policymakers at the Nepalese National Tuberculosis Centre (NTC) and the WHO. The interaction consisted of discussions during the preparation phase of the research, feedback sessions during the fieldwork and discussions about the results of the research (see Chapter 9).

The third case – the development of the performance indicator framework – was contracted directly by the MoH [4]. The interaction with the policymakers was intensive throughout the research period because the contractor, co-developer and intended user were the same group of policymakers at the MoH (most of them were members of one department, see Chapters 11 and 12.).

In all three cases, part of the interactions between health services researchers on one hand and policymakers and other actors on the other took place in formalized meeting groups. These were a ‘scientific sounding board group’ (Case I), a steering group (Case II) and an MoH working group (Case III). These formalized settings provided a network for reflecting and discussing the research project, and as a result of these interactions, provided a basis for support for the respective studies. Alongside these similarities in how they functioned, the groups differed in constitution and roles. In Case I, the members of the scientific sounding board group included senior scientists from relevant academic fields and the involved health services researchers. The scientific soundness of the evaluation study was the core agenda point for this group. In Case II, the steering committee included senior staff members of the Nepalese MoH, senior officers of the NTC, senior medical specialists, academics from

the fields of clinical pharmacology and community medicine and family health. The steering committee had two formal roles: firstly, to inform the research and development process and secondly, to approve and support the proposed study. In Case III, the working group of staff members at the MoH had a clear objective for developing an instrument and the health services researchers provided assistance in reaching this objective.

In addition to the formal meeting groups in all three cases, the cases show different intensities of interaction between the health services researchers and the policymakers. Chronologically, the health services researchers had increasing levels of both formal and informal interaction. In the absence of a scale for measuring the interaction process in each of the cases in absolute terms, we can classify the interaction process in one case relative to the other cases. In Cases I, II and III, the interaction processes between health services researchers and policymakers (either chosen or proposed) can be classified as 'non-interactive', 'interactive' and 'highly interactive' respectively.

What lessons did we learn from these cases regarding the interaction process of researchers with policymakers and others? In the first case, during the health services research it became evident that policymakers would use the results as a basis for important policy decisions. The low level of interaction with policymakers at the beginning of the evaluation of the screening programme gave us, the health services researchers, a great deal of research freedom with regard to the policymakers. Towards the StOEH and its initiators, however, a higher level of interaction might have contributed to a better mutual understanding in these changing circumstances. But then again, the fact that the approach of the cost-effectiveness evaluation did not match the perspective of the StOEH probably had a much greater influence on our mutual interactions than can be attributed to our non-interactive mode of interaction. In contrast, the evaluation approach (and results) of the study of the psychosocial effects of the screening programme (not addressed in this thesis) were received positively and the interaction of the researchers in that study with the other actors was perceived as positive.

Similarly, in the second case, our criticism of the PAL package (Chapter 6) temporarily caused tension. Due to the positive interaction process at both formal and informal levels, we could eventually agree on a constructive but critical formulation of the study results and jointly published the evaluation to support the PAL's development. The highly interactive cooperation between the researchers and the Ministry of Health was stimulating and productive, and our approach resembled much of what Lomas called 'linkage and exchange' [5]; in another study regarding the development of questionnaires to measure patient experiences (mentioned in Chapter 12.), though, a similar approach created tensions between researchers and other actors from time to time. Obviously, other factors along with mutual trust are also important for successful interaction, and influence the use of research by policymakers [6]. More generally, it is easier for researchers and other stakeholders to cooperate well if there is mutual trust and if there are positive results to report (i.e. confirming assumptions, answering expectations). The more interactive processes tend to be more dynamic (and are therefore preferred by the author), and can mobilize constructive and creative input. Although the interaction

with others can give rise to obstacles (like negative tensions between actors), these can also more easily be removed because of the interaction process.

### **Usefulness of the produced knowledge by health services research**

Measuring the usefulness of health services research for national health policy is best done by looking at its aim: the actual use of the research results in the policy processes. This immediately raises the question whether research results that were not used were not useful. For example, the political instability in Nepal is an important contextual factor that prohibits the further development and implementation of PAL. These changing circumstances are not related to the content of our studies but effectively block their use. Therefore, to judge the usefulness of our PAL evaluation by its actual use in Nepal is harsh. Nevertheless, in the absence of major obstructing contextual factors (such as political instability), 'use' is probably the best indicator for 'usefulness'. We will discuss the use of research results presented in this thesis, produced by health services research at work for national health policy, from two perspectives. The first focuses on different ways of interaction between health services researchers and policymakers [7] and the second focuses on the different ways in which the results were used by policymakers [8].

Several authors have described different ways in which policymakers use research (e.g. [7;9;10]). In their review, Hanney et al. [7] summarized several models for research utilization in policymaking that referred to the interaction process between research and policy. At first glance, the first case in this thesis – nationwide screening for familial hypercholesterolemia – resembles the classic/purist/knowledge-driven model: no interaction between researchers and policymakers during the research process, researchers produce knowledge and policymakers receive it when it has been finalized, and either use it in their policymaking process or not. However, this linear sequence of actions did not hold in the aftermath of our case: The development of the nationwide expansion of the screening programme by the Health Care Insurance Board (CVZ) was done in close collaboration with a group of stakeholders, including researchers, and thus followed the interactive/social interaction model. 'This model is characterized by a set of interactions between researchers and users rather than a linear move from research to decisions. It ensures that they are exposed to each other's worlds and needs' [7]. With the addition of one content and one context question in this case (Chapters 2 and 3 respectively), we aimed to increase the usefulness of the produced knowledge for the policymaking process. Although the knowledge produced in these studies cannot be linked causally to developments since our publications, two aspects suggest a positive influence. Firstly, the Health Council [11] called for further investigation of the percentage of persons with a proven genetic mutation for FH but without high cholesterol levels. Secondly, there is increased attention for the role of GPs in managing hypercholesterolemia in persons with FH [12]. This influence fits with what is described as the enlightenment/percolation model according to which research is more likely to be used through gradual sedimentation of insights, theories, concepts and perspectives [7]. Whether these studies have also increased the usefulness of the cost-effectiveness analysis seems likely, as the issues discussed

in Chapters 2 and 3 addressed the assumptions underlying the programme and consequently influenced the results of the cost-effectiveness analysis. The fact that these issues have been put on the agendas of the coordinating institution (the CVZ) and its advisory expert committee that guides national implementation suggests that the cost-effectiveness analysis was meaningful beyond the result of the costs per life year gained.

In the second case, the interactive/social interaction model applies to some extent: Some of our findings presented in Chapter 6 could be addressed at an international forum before our final results were available because of our interaction with a wider network of PAL researchers and interested policymakers. This benefited PAL's international development. The use of the two additional studies related to the context of PAL in Nepal (Chapters 7 and 8) fit better within the enlightenment model. An example of this is the interest in exploring the involvement of the private health care sector based on our study presented in Chapter 7 [13]. It is unclear whether the exploration of the priority-setting method (Chapter 8 [14]) would support the development of PAL in Nepal in more peaceful and stable circumstances. As the results of the cost-effectiveness analysis have only recently been published, it is too early to judge the effect of the addition of the three studies presented here on the usefulness of the cost-effectiveness analysis. However, as these studies provide a broad and detailed perspective within which the cost-effectiveness analysis can be understood, it seems likely they increase its usefulness; additional study is necessary to explore this further.

The third case can also be described in terms of an interactive/social interaction model. The usefulness of our results can be derived from the fact that the conceptual framework was published by the MoH in a series of publications regarding the Dutch health system reform [15] and by the fact that the conceptual framework is currently being used to develop the *Zorgbalans*, the MoH's accountability document for the Dutch parliament (released in May 2006) [16]. The additional studies for individual indicators (mentioned in Chapter 12) brought the development of the performance indicator framework directly to the attention of a wider network of researchers and policymakers, both nationally and internationally. This increase in awareness and understanding of the framework has generated broader support and consequently contributed to its usefulness. Although these studies can be regarded as extensions of the initial content question, they can also be viewed as ingredients to increase the development process and implementation of the framework.

If we apply the categorization for research utilization outcomes as summarized in Lavis et al. [8] to indicate the utilization of our findings, we conclude that our findings on the screening programme's cost-effectiveness study (Chapter 4 [17]), the study of the 'implementability' of PAL in Nepal (Chapter 6 [18]) and the development of the performance indicator framework (Chapter 10 [19]) have been used instrumentally, i.e. several research findings have been used in policy formulation. The findings of the other studies have been used conceptually, or at least have the potential for this. For example, developing the performance indicator framework has contributed to the shift of thinking for some of those at the MoH, which increasingly is executing its steering function based on indicators of performance rather than on budget figures. This is a major change: even more so because these indicators apply

**Table 1.** Thesis overview with case study results: research questions, interaction process within HSR at work for national health policy and utilization.

Health services research at work in Case I, II and III			
Case	Chapter	Title	Content-, context- or process-focused research question
<b>CASE I</b> A national screening programme for familial hypercholesterolaemia?	1	Introduction	
	2	Results from a family- and DNA- based screening programme for FH	Content
	3	Genetic screening for familial hypercholesterolaemia in 1992-1997: primarily younger patients in the care of general practitioners	Context
	4	Cost-effectiveness of a family- and DNA- based screening programme on familial hypercholesterolaemia in the Netherlands	Content
	5	HSR <sup>1</sup> at work in Case I	
<b>CASE II</b> Nationwide implementation of respiratory care guidelines?	6	Implementing global knowledge in local practice: a WHO lung health initiative in Nepal	Process
	7	How did you get here? Twenty-six journeys on the road to tuberculosis treatment in rural Nepal	Context
	8	A rational multi-criteria approach to priority setting: Should a lung health programme be implemented in Nepal?	Process
	9	HSR at work in Case II	
<b>CASE III</b> An instrument for national health system performance measurement?	10	Developing a national performance indicator framework for the Dutch health system	Content
	11	The Performance Indicator Framework of the Dutch health system, a progress report	Context and process
	12	HSR at work in Case III	
	13	Discussion	

<sup>1</sup> HSR= health services research

Health services research at work in Case I, II and III		
Inclusion of additional research questions	Interaction process within HSR at work for national health policy	Utilization type [8] and description of utilization
<ul style="list-style-type: none"> <li>- Testing the assumption that FH screening is 'probably nearly 100% coverage'</li> <li>- Funded as part of the initial proposal</li> <li>- Assessing the proportion of newly identified FH patients who were already known in general practice to have hypercholesterolaemia</li> <li>- Not separately funded, part of academic medical training</li> <li>- Initial research question: Assessing the cost-effectiveness of the screening programme</li> </ul>	<p>Non-interactive:</p> <p>There was contact with policymakers only at the end of the study when results were presented. Policymakers did not participate in 'scientific sounding board' meetings</p>	<p>Conceptual.</p> <p>With these findings we contributed to the debate on genotype-phenotype in FH.</p> <p>Conceptual.</p> <p>With these findings we contributed to the discussion about the role of general practice in case management of FH.</p> <p>Instrumental. The study results were included in decision-making process of the MoH.</p>
<ul style="list-style-type: none"> <li>- Assessing the circumstances and processes in which PAL was developed and implemented-</li> <li>Funded as part of initial proposal, supplemented with department funds</li> <li>- Assessing the health care context in rural Nepal from the perspective of patient experiences</li> <li>- Privately funded, part of academic medical training</li> <li>- Assessing the relative priority of PAL in Nepal and exploring a method for priority-setting</li> <li>- Funded as part of the initial proposal, supplemented with department funds</li> </ul>	<p>Interactive:</p> <p>Throughout the economic and developmental evaluation we communicated with the policymakers. Policymakers were participants in 'steering committee'.</p>	<p>Instrumental. The implementation strategy for PAL has been adjusted on the basis of the study findings.</p> <p>Conceptual.</p> <p>With these findings we contributed to the discussion about passive case-finding of tuberculosis in Nepal.</p> <p>Utilization is as yet unclear (potentially conceptual). With this study, we aim to contribute to the prioritization debate and methodology.</p>
<ul style="list-style-type: none"> <li>- Initial research question: developing a tool for measuring health system performance</li> <li>- Assessing the policy context and policy processes at the MoH in which the performance indicator framework had to be developed and implemented</li> <li>- Funded as part of the initial proposal, supplemented with department funds</li> </ul>	<p>Highly-interactive:</p> <p>Policymakers participated in the research process, and the health services researchers participated in the knowledge-generating process at the MoH. Policymakers participated in formal meeting groups.</p>	<p>Instrumental. Our conceptual framework was used as a starting point for the development of the national document Zorbalans [16].</p> <p>Utilization is as yet unclear (potentially conceptual). With this study we aim to contribute to knowledge about interactive research/policy processes.</p>

to the entire health system and not only to one of the four sectors, which is the way the steering functions of the ministry have been organized historically. Symbolic use – using research to justify a position or action that has already been taken for other reasons [8] – was not observed in the studies presented in the chapters in this thesis.

## **Methodological considerations**

Several methodological considerations need explicit attention. Firstly, the cases in this thesis represent health services research as it occurred, i.e. not with a prior focus on an analytical model or with a prior plan to study different interactions and the translation of additional policy questions into researchable health services research questions. Because we applied Walt and Gilson's [20] model retrospectively to our cases, the cases do not present an ideal type of balanced research whereby each case has studies on content, context and process, and with actors explicitly addressed in all of them. This is shown in Table 1 in Chapter 1. Furthermore, over the years of the author's involvement in the cases described here, the author's perspective towards the production of scientific knowledge changed from a content-oriented perspective towards a process-oriented perspective. Consequently, the cases developed towards context and process in chronological order. For example, in the first case (evaluating the screening programme for FH), our additional questions still related closely to the content and had developed from the assumptions of the programme. In the second case (implementing respiratory care guidelines in Nepal), we used the opportunities that arose to study context and processes more explicitly. In the last case (the development of the performance indicator framework), we tried to address the content as well as the context and processes right from the start. In retrospect, the model by Walt and Gilson was helpful in analysing the issues related to specific health services research content. Using it to design and evaluate research proposals will be a next logical step.

Secondly, this thesis presents only three cases of health services research at work for national health policy and all cases took place in different policy contexts. Although these aspects may be regarded as shortcomings, the cases are not exceptional in the portfolio of health services research of the involved researchers. In addition, typical for the multidisciplinary character of health services research, we used a mix of methodological approaches in the three cases. We used an epidemiological approach in evaluating the screening programme, a qualitative approach in the case of respiratory care guidelines in Nepal and a more sociological approach in analysing the development process in the last case (regarding the development of the performance indicator framework).

Thirdly, we did not set up additional research to measure the usefulness of the results other than discussing the usefulness and utilization with those researchers who were directly involved. For example, if we would have conducted interviews with multiple actors in each of the three cases, we probably would have a more detailed picture of the usefulness and utilization of the work described in this thesis.

Fourthly, the increasingly interactive research process may have led the researchers away from independent and critical reflection because they became part of the implementation

processes described in Cases II and III. We believe that it is indeed a challenge to maintain scientific integrity when the interactive process reflects pressure towards expected outcomes or because of time frames relevant to other actors. However, these are challenges that can be overcome. In this respect, we do not consider the publications of Chapter 2 [21] and Chapter 6 [18] to be defeats because we had to formulate the conclusions more diplomatically than we might have done otherwise, but as successes of collaborative research that increased the usefulness of the content because of the involvement of a wider network of actors.

Finally, the different intensities in which we interacted with the policymakers and contractors in the different cases coincided with the level of what one might call ownership of the subject of the study. This ownership by the policymakers increased in chronological order. In Case I there was no ownership (or involvement in the development) by the MoH in the screening programme, in Case II the WHO had already developed the PAL package and in Case III there was a direct interest and involvement by the MoH in developing the framework. Furthermore, in Case III the context and process of our framework (the content) was the same as the policy context and process in which the framework has to be implemented. Interaction and ownership seem closely related. 'Not to interact' is not an option for policymakers if they are contractor, co-developer and end-user all at the same time. These observations complicate our retrospective analysis of the two strategies we focused upon, i.e. additional research questions and interaction processes. Comparative studies in similar contexts (including policy contexts) in which only one of the two strategies is studied can shed more light on the impact of either of the two.

## Implications

### Implications for science

The model by Walt and Gilson [20] offers a framework for policy analysis that we applied to health services research. We used it retrospectively to present health services research at work for national health policy. We have discussed the usefulness of the additional research questions based on general retrospective discussions of events and developments. Based on our experiences with this application of the model, we conclude it has potential for use in planning and designing health services research. Using it as a design format, it can help to translate health policy questions into researchable and policy-relevant health services research questions that address not only content but also context and process of a specific health services content. Further research is necessary to develop this model as a practical tool for research design and evaluation. For example, this could start with the development of a checklist for discussions with policymakers about translating the policy question into research questions. In future, context- and process-focused research questions should no longer be 'additional' but should be an integral part of any proposal for health services research for national health policy.

The initial research proposals in the three presented cases included a managerial evaluation, an economic as well as a developmental evaluation [22] and an instrumental research project [23] respectively. What the 'best interaction model' is may depend on the type of information needed. Therefore, in future studies we need to differentiate between the types of research when we address interaction processes. Also, in all three cases formal settings for interaction were organized. Further study is needed on how to optimize different formal interaction models to support specific research and policy demands.

Our three cases have shown that a combination of content-, context- and process-focused research questions (in addition to the initial research question) have most likely increased the usefulness of the research results from the initial content question. However, we need to design studies that measure the impact of this approach on usefulness and utilization of produced knowledge in a more systematic and structured way than we could in this thesis.

Given the diversity of studies conducted in health services research, it may take some time and effort to collect a substantial amount of evidence that allows us to be more conclusive on this topic. To start with, researchers should develop ways to systematically monitor the use of their study results. This 'post-marketing' is common practice for commercial enterprises as well as in health care, where it is used to monitor adverse drug effects [24]. Health services research can benefit from such strategies and adjust them to its own needs. The ability to follow the 'career path' of research results once a research project has finished is valuable not only for the personal learning 'career' of individual researchers but also for health services research in general.

### **Implications for policy**

We were able to address several additional research questions at a low cost because of the involvement of students. Because these content-, context- and process-focused questions should be an integral part of any proposal for health services research for national health policy, addressing them should not be fully dependent on the opportunities that the research setting may or may not provide. The finances necessary to answer them need to be included in the research budgets allocated by policymakers. In addition to the budgets allocated for commissioned research, health services research needs financial resources for academic exploration and participation in the scientific debate in international journals.

These cases show that the involved health services researchers at work for national health policy are keen to understand policy, policy context and policymaking. They also aim for their research results to be used in the policymaking process. The involved researchers are certainly willing to bridge the gap between the two communities of research and policy [25]. Policymakers can utilize this opportunity by facilitating interactive processes with researchers in which they jointly develop relevant and researchable questions that suite the policy information demands and produce results that have great potential for usefulness. In the Netherlands, Saan and De Haes [26] have stressed the need for more interaction and communication between research, practice and policy to create effective health promotion. Our cases contribute to the empirical evidence of interactive research-for-policy processes. From

these cases, policymakers can learn what interactive involvement can look like and how this contributes to producing useful knowledge. Experiences from others confirm this [27]. The activities developed at the MoH are important steps in the right direction. If successful, the push for a ministry-wide strategic knowledge agenda based on priority areas for information and knowledge can help policymakers to effectively use knowledge, develop research questions and evaluate utilization of research in a consistent and coherent fashion. Training policymakers on knowledge and information management during summer courses contributes to the personal competencies of individuals in dealing with information, knowledge and research for their policy processes [28;29]. An important challenge is to reach policymakers who are thinking about commissioning research, either directly or through subsidizing agencies such as ZonMw [30]. However, if successful, policymakers will be able to participate more actively – and interactively – in the knowledge-production process. Consequently, policy will be better informed with relevant and useful study results. As was our experience in Case III, policymakers with an affinity for research can strengthen the interaction process and contribute effectively to producing useful knowledge for the policy process, and in doing so, successfully bridge the gap between research and policy.

Policymakers and researchers need to discuss the policy information problem in order to define the right research questions. In Case II, for example, if we would have identified relevant context-, process- and actor-focused questions prior to starting the project, we might have chosen a different approach for the evaluation study. Rather than focusing on costs and effects, the study might have addressed health system performance for respiratory care in general. It calls for an open and creative mind – and some courage as well – to diverge from a path already chosen.

## **Implications for practice**

### ***Implications for the training of health services researchers***

The cases in this thesis provide a glimpse of actual interactions between researchers and others. It showed that interaction is important but also that it is not always easy. Researchers must learn how to communicate and interact with partners who may introduce conflicting agendas. To guide researchers in their interaction with others, codes of conduct have been developed not only for health research in general [31] but also for health services research in particular [32]. These codes of conduct need to be given more attention by researchers and the development of a Dutch code of conduct for health services research deserves consideration. In addition to codes of conduct, health services research must be organized and financed in a way that optimizes the independence of the researchers. Furthermore, researchers sometimes perceive a trade-off between scientific independence and interaction in research, which compromises the objective of ‘doing the right things, and doing the right things right’. Therefore, interacting with policymakers and other actors deserves attention when training researchers. Identifying communication and interaction with other actors as an integrated part of research in practice and consequently defining this as a learning objective can contribute to developing such skills for all researchers. These skills are of particular

importance at the start and at the end of a project: at the start, because policy information needs translation into relevant and researchable questions; at the end, because results need to be translated into solutions and follow-up actions.

Health services researchers need to have knowledge of the health system. This is particularly relevant when questions about context, process and actors need to be identified and discussed. Often, how the system functions or perceptions about it are not known in detail (Chapters 3 and 7) and additional research is needed.

Researchers can benefit from a long-term perspective. Junior researchers, especially those on PhD projects in the Netherlands (which typically last four years), will rarely see their results being put into practice, as most policy processes can only utilize the results long after the end of the study period. Developing a policy focus and understanding the world of policy-making will help researchers survive in a setting where systems reform, institutions change and familiar actors disappear as they redesign their career paths. All these factors cause delays. These cases showed that the national health policy processes are very dynamic, like the health services research that is at work for them. Although this challenges health services researchers when conditions and plans change, it should not distract them from enjoying the dynamics of applied research.

### ***Implications for the organization of health services research projects***

Health services research, which by definition has a multidisciplinary character, challenges not only the interaction between researchers and stakeholders, but also between researchers themselves. Focuses of collaborative research may need thorough discussion and negotiation before reaching an agreement when researchers come from different scientific backgrounds and theoretical schools. This also applies to the formulation of research questions that may reflect different scientific perspectives. In Case II, we could agree on the addition of a process-oriented research perspective at the beginning of the study development.

Identifying a combination of content-, context- and process-focused research questions needs to be done early in the research process. Discussing and developing these questions right at the start of a project with the policymakers and other actors is a way to increase the usefulness of the study results. This early-on agenda-setting is particularly relevant in settings where resources cannot be mobilized easily at a later stage.

As shown in Case I and Case II, evaluations can affect others in many ways. Health services researchers need to be aware of the sensitive nature of their work and address sensitivities in an appropriate way. To be clear and explicit about the terms of reference and the framework for the evaluation helps to facilitate the evaluation, even in circumstances that are not favourable to other stakeholders, especially the subject involved.

### ***Implications for the health services research process***

Users and other stakeholders can be expected to accept results from health services research if they can agree with the chosen approach. This became particularly relevant in Case I. If

we, the researchers, could have agreed to explore different approaches of cost-effectiveness analysis together with other stakeholders in a collaborative study, the debate would probably not have focused on technical issues.

Although it is important for health services researchers to publish their work in scientific journals, policymakers are likely to use different media to receive the context-specific information they need for the policymaking process. Health services researchers should therefore also publish in those journals more easily accessible to (and read by) policymakers. In Case 1, for example, the publication of the effects of participation in the screening programme on insurance in a Dutch journal for medical doctors [33] fuelled an important policy debate that may not have been picked up (at that time) if it would only have been published in an international scientific journal [34].

Formulating research products in the current terminology or the preferred language of the intended user can help health services researchers increase the usefulness of their research. For example, in Case III, in subsequent developments by the RIVM and the MoH the balanced scorecard (reflecting the language of the original concept and thus referring to corporate businesses) changed into a model with three 'public interests' (reflecting the current political language referring to the role of the government). With this terminology, the model is useful for the political and policy purposes of the intended user. Thus, researchers need to become sensitive to turning technical language into policy language.

## Conclusion

In conclusion, the strength of this thesis can be found in the representation of how health services research at work for national health policy actually works in practice. The chosen framework directed our analysis perspective to areas that are not always identified in the initial research proposal: context, process and actors. Our experiences demonstrate the added value of formulating content-, context- and process-focused research questions and the importance of the interaction process with policymakers. Both strategies not only make health services research for national health policy workable, they enhance it as well.

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