Chapter 8

Sound Choices: addressing the capacity challenge
Introduction

Low- and middle-income countries face major health challenges. For some the Millennium Development Goals (MDGs) are unlikely to be met; but even in those countries where these targets will be achieved, the burden of significant and avoidable disease still exists. The gap between the health experience of regions, countries and population groups is an unacceptable global travesty; unacceptable because it is avoidable. A telling example is maternal mortality statistics: around 210 million women become pregnant each year; of these, 20 million experience pregnancy-related illness and 500 000 die from complications of pregnancy or childbirth.

Given our knowledge about the causes of maternal mortality and appropriate interventions to improve maternal health, these numbers alone are horrific. However, they become particularly unacceptable when disaggregated into different regions. Consider the lifetime risk of dying in pregnancy: in Africa it is 1 in 12 compared with Europe, where it is 1 in 4000. Why does this major discrepancy exist? One critical determinant is differences between countries in income, educational achievement and the role of women in society; varied levels of funding available to support national health systems are also important. But we also know that some health systems, despite low levels of resources, are able to take evidence about appropriate interventions in the field of maternal mortality (for example, the need for skilled birth attendants and emergency obstetric care) and contextualize it within their own health systems to find solutions that work. The key here is a system of policy-making that can decide effectively on the use of scarce resources based on robust evidence for what works well within a given context. The variations in health and health systems experience suggest that many countries simply do not have the necessary policy-making components in place. The underlying causes of such policy-making failures have been the subject of this Review. We have focused particularly on capacity constraints at all stages of the processes that lead to poor policy performance: constraints on research priority-setting – determining what evidence is needed; constraints on generating and disseminating knowledge – the research function; constraints on transmitting the knowledge from researchers to policy-makers in a useful and usable format; and, finally, constraints on the capacity of the policy processes themselves to use evidence.

To assist in this process, we have developed a framework for understanding these four functions and their interrelationships; the previous four chapters have analysed each of these in turn. In this final chapter we synthesize the key messages from these chapters and propose a number of broad strategies for actors who have an interest in strengthening health system capacity.

Capacity needs

It is increasingly recognized that policy-making is a messy process in which policies emerge, as more or less explicit products, from a maelstrom of forces; it is also recognized that it would be naive (and indeed inappropriate) to assume that policy-making will ever be “completely rational and value free”. There is, however, growing acknowledgement of the importance of finding ways to increase the influence of evidence about what works – and what does not – and under what circumstances. This is particularly true for low- and middle-income countries, where every dollar wasted in ineffective services has a high opportunity cost in terms of loss of life and suffering. A growing vocabulary in the literature describes decision-making that either does not take account of the current state of knowledge or fails to seek evidence where uncertainty exists: the ‘know-do gap’; the failure to get research into policy and practice; the need for evidence-based or informed policy; and so on. This Review focuses on a major barrier to achiev-
ing policy-making that is more informed by evidence – capacity constraints.

Given the remit of the Alliance, we approached this task through the lens of health policy and systems research (HPSR) and are particularly concerned with finding ways to activate the full potential of HPSR to contribute to better policies. HPSR faces particular challenges in getting its outputs into the policy arena. These challenges include its newness as a field, the methodological impediments posed by this newness and the low level of resources dedicated to HPSR. These challenges have been discussed in the different chapters.

The framework presented in Chapter 3 broke down the process into four key functions; the subsequent chapters analysed in turn both the state of each function and the capacity needs of the organizations most closely associated with them. Appendix also used the framework to analyse a country case study – Thailand. We believe, as a result of the process of writing this Review, that the framework can be a useful tool for understanding the current state of the research–policy interface and its capacity limitations in a health system. It could be used by a variety of key actors and, most important, national policy-makers, research leaders and international funding agencies, to structure an analysis of a situation and obtain an overview of the critical areas for capacity development in any particular country. This need for country-specific analysis accords closely with a theme running throughout the Review – that each country faces different hurdles in this area. While the level of income of a country is clearly a major differentiating factor, others such as the type of political system are also likely to result in different pressures and capacity needs.

One clear and self-evident generalization is that the ability of policy-makers to draw on appropriate high-quality evidence is often restricted by its availability; in this reality lie the roots of the first general constraint. Increasing the body of evidence requires funding for research. Such funding is determined by priority-setting processes, and these are largely internationally driven with limited responsiveness to national research agendas and their health policy and system needs. This suggests the need for action at two levels: first, by seeking ways of making international processes more locally responsive; and second, by building the capacity of national priority-setting processes through both the leadership of the government and developing and strengthening national research funding bodies.

Of course, generating appropriate, trustworthy evidence also depends on the availability of research organizations to generate new knowledge. The current capacity of such organizations in low- and middle-income countries is quite varied – a number of institutions in some countries have excellent capacity, while others are severely limited in what they can do; still other countries have no credible organizations currently conducting HPSR. This dimension of the framework – the research function – has historically received the most attention by funders. That attention has often focused primarily on training individual researchers. We argue that capacity-strengthening strategies need to focus more on the holistic needs of institutions, including skills and career development alongside attention to the other key dimensions of capacity. These include less tangible aspects, such as developing leadership, governance and administrative systems, and strengthening networks among the research community both nationally and internationally.

We have also drawn attention to the need for more research on methodological development. HPSR is a relatively new field, and it has special needs in terms of both its multidisciplinary nature and its frequent context specificity. In particular, HPSR can benefit from investment in the following methodologies: conducting systematic reviews of HPSR; understanding the nature of generalizability of context-specific findings; and concep-
tual developments exploring issues such as the role of trust and accountability in health systems.

The third function addressed in this Review is the most neglected in terms of general understanding. While few people would see the link between the outputs of research and the incorporation of evidence in policy formation as a direct and simple one, there is little general appreciation of the often complex processes that mediate between these different functions. We call this function filtration and amplification; the former refers to the process of selecting particular pieces of evidence for transmission to policy-makers and the latter to the way in which that information is packaged. Filtration and amplification covers a spectrum of activity from knowledge brokering, which purports to select and synthesize evidence (into a digestible format) on the basis of explicit scientific criteria, to advocacy, which has a clear purpose of influencing a policy stance in a particular way. Somewhere between these lies the role of media. Organizations engaging in these activities are likely to have different capacity needs. Currently, none of these needs appears to have been systematically addressed by capacity initiatives.

The function of policy-making itself is, naturally, the crucial end point. For policy-makers, evidence generated from research findings is only one consideration among many. However, one goal of organizations such as the Alliance is to encourage policy-makers to draw more on evidence in their deliberations and to help them overcome any capacity constraints that prevent this. Capacity development needs may include developing skills in commissioning and interpreting evidence, mechanisms to nurture stronger relationships with researchers and tools to assess the legitimacy of organizations that filter and amplify research.

Policy-makers also have a responsibility as stewards for the whole health system. In this role they need to be able to assess the capacity of each element, or function, and lead or support initiatives related either to individual elements or the interface between them. Such a comprehensive view of all the elements of an evidence-informed health policy-making process is often lacking, yet critical. This brings us back to the potential of the framework as a tool to assist in this assessment.

Finally (as perhaps befits a review of this topic), we would draw attention to the general lack of evidence about the various functions analysed and their interrelationships. It is striking, for example, that there has been no clear assessment of the different strategies deployed to strengthen research capacity.

Figure 8.1 summarizes the above points, relating the key messages to the Alliance’s framework.

**Capacity strategies**

The preceding section has set out a number of key messages that were discussed earlier. It is important, however, that these messages lead to action by relevant stakeholders, and in this final section we suggest some potential strategies.

**Enhancing evidence on capacity development in the HPSR field**

A greater body of evidence is clearly needed about the current capacity in this field, the constraints on it and strategies to enhance it. Throughout the Review we have pointed out where we see critical gaps, but we also recognize the low level of robust evidence in this area. Evidence is particularly needed in two related domains.

First, there is a need to better understand the impact of the different capacity-strengthening initiatives that have taken place in the past or are currently ongoing. A common approach to such evaluations, and one which took particular account of the effect of contextual differences at the country level, would allow comparative analysis and lead to clearer future strategies for appropriate investment by international funders.
The framework can be a useful tool for understanding the current state of the research-policy interface, and its capacity limitations.

Priority-setting processes of research funding that are largely internationally driven need to be made more responsive to national research agendas.

More knowledge is needed about filtering and amplification processes and their input into policy-making.

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Strengthening of policy processes and structures to encourage use of evidence should be part of capacity development.

Capacity-strengthening strategies need to focus on the comprehensive needs of institutions rather than individuals.

The capacity development needs of these organizations should be assessed and addressed.

More systematic evidence about capacity needs is required.

Capacity development needs for policy-makers include skills development and tools to assess the legitimacy of organizations that filter and amplify.

HPSR has areas where methodologies and tools need to be developed.
Second, investment is needed to support nationally driven approaches to mapping capacity needs related to the research–policy interface. The framework presented here provides an entry point for such work and complements other approaches, such as that developed by the Council on Health Research for Development (COHRED) to assess national research systems. Such investment would include both the development of more specific tools and support to the conduct of such assessments, and development of subsequent strategies. This mapping and the resultant strategies must be comprehensive; that is, they need to consider the four functions analysed here and the organizations engaging in them, together with wider networking and partnership relations and the governance of the sector.

**Strengthening the global and national architecture for funding health systems research**

The current global dominance of both funding and decisions on the focus of such funding has, we have argued, negative effects on national health systems and suggests the need for strategies in this area on the part of international partners as well as national bodies.

First, mechanisms for funding HPSR need to be developed that both reduce the current fragmentation of approaches and allow greater national ownership of subsequent priorities, in other words, a sector-wide approach to HPSR. International agencies will have to devolve some of their current decision-making powers from the global level to the national level; we recognize that this poses challenges in terms of accountability and agency mandates, but these challenges need to be confronted if national capacity is to be enhanced and relevant priorities set. At the same time, national stakeholders, under the leadership of the health ministry, need to ensure that there are appropriate national level priority-setting bodies with robust mechanisms for consulting and determining priorities.

We realize, of course, that significant international funding will continue to be controlled at the international level; indeed, some of that is likely to be appropriate where HPSR has cross-boundary questions to answer. However, even here, global funders need to examine the processes both to ensure that there is adequate and appropriate representation by low- and middle-income countries on the bodies that set priorities and make disbursements and that decisions support rather than constrain the capacity of emerging HPSR institutions.

**Responding to the needs of HPSR**

Given HPSR’s relative ‘youth’, and its particular needs as a multidisciplinary endeavour, investment is needed to nurture it and strengthen its capacity. Strategies are needed in various areas. First, investment is needed to strengthen HPSR methods. Two of the key characteristics of much HPSR – bringing different disciplines together and taking account of contextual variations – introduce real challenges that require methodological investment, which funding agencies need to recognize and respond to. One particular example that we have referred to is the clear need for developing methods for systematic reviews of HPSR.

Second, at the national level, institutions which engage in HPSR have investment needs in terms of the dimensions of capacity that we have identified. Clearly, these vary from country to country and institution to institution. As such, support is needed to assist these HPSR institutions in assessing their needs and developing strategies to meet them. Examples include development of leadership programmes and support towards fostering partnerships between institutions and, more broadly, development of larger networks. In some small and particularly poorly resourced health systems, where no HPSR capacity exists at all, a strategy may be needed both to build this, and to find interim arrangements, perhaps with neighbouring countries, for support.
Enhance investment in evidence synthesis, knowledge translation and use

One of the constraints on the use of evidence lies in the processes which translate it into a form usable by policy-makers. Investment in better understanding the particular needs of policy-makers and developing more appropriate responses are needed. How this will be initiated will vary between countries, with different sets of civil society organizations, knowledge brokers, research institutions and government bodies having a potential role. Each will have different capacity needs, and a country-by-country assessment may be appropriate.

At an international level, investment is also needed both in developing methods of synthesizing evidence and providing easily accessible and digestible information for policy-makers.

Roles of key stakeholders

We turn finally to the roles of key stakeholders in delivering these strategies. The following section sets out the key roles and responsibilities that follow from our analysis, and Box 8.1 summarizes this.

National health leaders

National health leaders are the key actors for several reasons. First, as stewards of the health system they are ultimately responsible for all activities in the sector. Second, there is increasing recognition that different country contexts require different solutions and responses; as such the natural leadership should come from this level. Finally, in their role as national policy-makers they are also the group with the biggest stake in implementing policy effectively – in enhancing their own roles as policy-makers through the use of better evidence. The key role of this group is to lead the process of capacity development. This is likely to involve consulting with and engaging other key actors involved in the various functions. In the first instance, it may be helpful to carry out a national assessment of the state of policy processes and related functions. Such an assessment will pinpoint the functions and institutions most in need of capacity support and allow the development of more specific support strategies for which resources can be sought. National leaders also have a responsibility to set clear standards in a number of areas, including the appropriate use of evidence in policy and ethical governance.

Research institution leaders

Leaders of national research institutions have responsibilities at two levels. First, at the level of their own organizations they have an ongoing responsibility to assess the health of their organization and seek strategies to overcome any particular constraints, outlined in Chapter 5, which affect them. This, of course, is likely in most cases to require financial resources, and a critical role for such leaders is inevitably the pursuit of funding. However they also have a wider responsibility to contribute, alongside other research leaders, to ensuring the effectiveness of the knowledge generation function and maximizing its contribution to policy-making. This will involve the development of networks, and of new analytical methods in the HPSR field, as well as synthesis of evidence for policy briefs.

We have seen also that national research can be affected both positively and negatively by the activities of research institutions based in other, usually developed countries. At a minimum, leaders of such institutions that work in low-income countries have a clear responsibility to ensure that their activities do not constrain the development of national research organizations. However, as development-focused organizations, they also need to take the issue of capacity development seriously and include consideration of it in all their activities through, for example, ensuring that partnerships between developed and developing countries are equitable and include explicit capacity-strengthening activities.
# BOX 8.1 ACTIONS REQUIRED OF KEY ACTORS

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<th>National health leaders</th>
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<tr>
<td>National policy-makers have a responsibility for assessing the capacity within their health research system, across all functions, and leading or supporting initiatives to strengthen that capacity.</td>
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<tr>
<td>National leaders should seek partnership with other key actors from all the functions to carry out a national assessment of the state of policy processes and related functions. Such an assessment will pinpoint the functions and institutions most in need of capacity support and allow the development of more specific support strategies for which resources can be sought.</td>
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<tr>
<td>Governments must develop and strengthen national research funding bodies and work with their international counterparts to ensure that research financing emanates from strong national research priority-setting processes, which in turn emanate from national health policy and system needs.</td>
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<td>A culture (and resulting legislation and regulation) that supports research and evidence-informed policy-making must be fostered from within government.</td>
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<td>At a wider level, national research institution leaders have a responsibility to work, alongside other research leaders, to increase the effectiveness of the knowledge-generation industry and maximize its contribution to policy-making. This will include developing networks, ensuring ethical guidelines are in place and followed, and identifying and developing new methods in the HPSR field.</td>
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<td>Research institution leaders should seek to strengthen capacity by working in partnership with other research leaders nationally and internationally (particularly those working in developing country contexts).</td>
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<td>Leaders of research institutions from developed countries whose institutions work in developing countries have a responsibility, at a minimum, to ensure that their activities do not constrain the development of national research organizations in developing countries. As development-focused organizations, they should also take the issue of capacity development seriously, and include consideration of it in all their activities (for example, through ensuring developed–developing country partnerships are equitable and include explicit capacity-strengthening activities).</td>
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### BOX 8.1 ACTIONS REQUIRED OF KEY ACTORS

**International funding and development agencies**

- In recognizing the importance of HPSR and its contribution to evidence-informed policy processes, funding agencies should invest in the strengthening of HPSR methods, and the capacity development of all the functions in the evidence-informed policy process.

- All funding and development agencies have, at a minimum, the responsibility to consider the impact of their activities on national capacity – for instance, considering the effect their payment structure has on national institutions and staff retention; additionally, they should consider how their priority-setting processes relate to national priorities and priority-setting processes.

- Funding and development agencies should support and encourage greater local control over priority-setting for research.

- They should also support the development of a critical mass of research institutions through long-term programmes, rather than short-term projects and consultancies, particularly for institutions with fragile or emerging capabilities.

- Funding agencies have a role in funding research in the area of capacity development generally, and more specifically in the area of evidence-informed policy-making. This role is currently neglected.

We have also indicated that policy-makers may place particular emphasis on briefs that synthesize evidence from a number of sources. Leaders of national HPSR organizations (and their funders) need to pay more attention both to developing the methodologies for briefs and to conducting syntheses.

**International funding and development agencies**

While we suggest that leadership for identifying capacity strategies should come from national organizations, we fully recognize the important role of international agencies in supporting this both in terms of funding and of technical support. For some agencies, such as the Alliance, capacity strengthening is a core component of their mission; for such organizations we hope that the focus that we have laid within the Review on a comprehensive approach to capacity strikes a chord. For other organizations for whom capacity-strengthening activities may either be peripheral or non-existent we urge deliberate consideration of the impact of their activities on national capacity. We have seen, for instance, the difficulties that inappropriate salaries set by development agencies can have on the ability of national institutions to retain staff. International research funding agencies therefore need to better align with national priority-setting processes. Indeed, a general message from this Review is the need, particularly in the area of HPSR, for greater local control over priority-setting for research.

The form of funding can also be critical for research institutions with fragile or emerging capabilities. Long-term programmes rather than short-term projects or consulting assignments are essential to enable them to develop a sustainable foundation.
HPSR in general and the capacity development of all the functions in evidence-informed policy processes have been neglected by funding agencies, and we urge funding agencies to reassess their own contribution to this critical area. In particular, greater focus is needed on building capacity to employ evidence in policy-making.

Finally, at various places in this Review we have pointed out the lack of sound evidence about our subject. Our final message to funders is a plea for funding for research into the neglected area of capacity development both generally and more specifically in the area of evidence-informed policy-making.