Chapter 1

Introduction
This Review is a response to a major frustration facing those interested in health in poor economies. This lies in the gap between what is already known about how to respond to particular health problems and what is actually done in practice. We have a variety of interventions for major health threats that are proven as effective but are not accessible to communities in significant parts of the world. For example, the knowledge exists to avoid many of the problems of maternal and child ill-health, but the right policies are often not implemented (Victora et al. 2005) leading to unacceptable and avoidable levels of mortality.

Why is this? There are various reasons, of which shortages of resources and imbalances in distribution are clearly critical. Beyond resource constraints, however, policy-makers at all levels, from global to local, often fail to understand how to apply proven technologies effectively and without damaging other parts of the health system. Some of this can be put down to a failure of policy processes as well as policy-makers themselves – their skills, or indeed motivation, may be lacking. Some of it may also be due to the research processes – are we producing enough appropriate evidence about how to scale-up the health system to use known technologies, recognizing that each health system will have different answers due to their own different contexts and needs.

What is appropriate in India may not work in Brazil. It is also possible that evidence exists about appropriate system responses to particular health problems, but is not reaching policy-makers in the right format or at the right time for them to be able to use. Underlying these failures lie, we believe, a series of capacity constraints and these are the subject of this Review.

This is, of course, not a problem specific to the health system. We are living in what are increasingly referred to as “knowledge societies”. These are societies which are able to harness the huge amount of information that modern technology such as computers and the Internet allow us to manipulate, store, transmit and share (UNESCO 2005; WHO 2006). The skill, however, lies in turning all this information into knowledge. And the great challenge is to then use that knowledge – to put it into practice. Knowledge societies aim to ground policy-making in evidence – of what works and what does not – an aim which is essentially optimistic about the potential “to achieve social progress through the application of research” (Sanderson 2002). However there are huge differences between countries, societies and population groups in both access to, and capacity to use, new technologies and to transform available information into practical knowledge.

Over recent years there has been a proliferation of literature focusing on knowledge and how to get it into health policy and practice (Court et al. 2005; Stone & Maxwell 2005). For example, in the 1990s the ‘evidence-based medicine’ movement advocated the greater and more direct use of research evidence in the making of clinical decisions, and this was later broadened into a call for more evidence-based policy as opposed to policies determined through conviction or politics. Part of this interest arose from a perception that even when research provides solutions, these are not necessarily translated into policy and practice.

This Review focuses on a particular constraint that weakens the interface between the production of knowledge by researchers and its use by policy-makers – the capacity of these two groups of actors and their institutions. Weak capacity, at a number of levels, in the institutions and interfaces between knowledge generation and use in policy-making has been identified by the Alliance for Health Policy and Systems Research (HPSR) as a key strategic issue, but one about which there is still inadequate understanding. The Alliance focuses on health policy and systems research as an area which is increasingly recognized as key to strengthening the ability of national health systems to achieve the United Nations Millennium Development Goals (MDGs) yet which remains relatively neglected alongside its better
established and resourced counterpart, biomedical research. HPSR is a key source of understanding about the nature both of how health systems operate and the content of policy-making (Box 1.1). Policy-makers increasingly recognize both the importance of health systems in providing the infrastructure for the delivery of proven service interventions and the obstacles a poorly functioning health system can put in the way of delivery of such services. As such there is growing recognition of the importance of generating knowledge in this field. However paradoxically there is also recognition that even in areas where robust knowledge about the health system exists, it may not be taken into account by policy-makers for a variety of reasons.

**BOX 1.1 HEALTH POLICY AND SYSTEMS RESEARCH**

Health Policy and Systems Research has been defined as “…the production of new knowledge to improve how societies organize themselves to achieve health goals” (Alliance HPSR 2007).

HPSR aims to produce reliable and rigorous evidence which helps to inform the many and varied critical decisions that must be made by ministers of health, senior policy-makers and health service managers about how to organize the health system and effect changes (Alliance HPSR 2007).

HPSR focuses primarily upon the more downstream aspects of health: it focuses on policies, organizations and programmes, but does not address clinical management of patients or basic scientific research (e.g. into cell or molecular structures).

HPSR can address any or all of the 6 ‘building blocks’ of health systems identified in the World Health Organization’s Framework for Action on health systems (WHO 2007):

- **Service delivery** – addressing how services are organized and managed, to ensure access, quality, safety and continuity of care across health conditions, across health facilities and over time.

- **Information and evidence** – the generation and strategic use of information, evidence and research on health and health systems in order to strengthen management, leadership and governance.

- **Medical products and technologies** – ensuring equitable access to essential medical products and technologies of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use.

- **Health workforce** – managing dynamic labour markets, to address entry into and exits from the health workforce and improve the distribution and performance of existing health workers.

- **Health financing** – raising adequate funds for health in ways that ensure people can use needed services and are protected from financial catastrophe or impoverishment associated with having to pay for them.

- **Leadership and governance** – ensuring that strategic policy frameworks exist and are combined with effective oversight, coalition-building, regulation, attention to health-system design issues and promotion of accountability in order to protect the public interest in health.

The Alliance’s interest in the subject of this Review stems therefore from two sources. First, it recognizes that the continued inability of HPSR to achieve its full potential comes, in part, from a number of capacity constraints. These exist in, for example, the priority-setting processes which continue to give inadequate attention to HPSR, and to underinvestment in the research institutions that carry out HPSR. Secondly, HPSR’s very interest in understanding how policy is developed and implemented suggests a need to understand how evidence, of any type including both HPSR and biomedical, is used (or not) by policy-makers. The topic is therefore a key plank in the Alliance’s recently developed strategy.

This Review specifically focuses on capacity. Capacity is a term that is widely used, but often superficially. There have been few studies of the nature of capacity itself and even less in the area of the capacity of researchers and policy-makers.\(^1\) This Review explores the capacity issues underlying different aspects of the relationship between the two key groups — policy-makers and researchers — through the development of a conceptual framework which both underpins the Review itself and will, we hope, prove a useful way of analysing these relationships particularly at the country level.

Given that the goal of this Review is to seek ways in which to improve policy processes, it starts with an overview in Chapter 2 of the nature of policy processes and how the key actors in these processes use (or not) evidence alongside other considerations in the development and implementation of policy. This is followed in Chapter 3 with the development of the framework that provides the foundations for the rest of the book. This framework presents a way of analysing the four key functions that are integral in the interface between knowledge generation and policy processes — priority-setting for research, the generation of evidence, the filtering and amplification of research outputs and the policy processes themselves. Given our emphasis on capacity, the chapter also explores the different understandings of this loose term, and identifies key dimensions which the Review will focus on in subsequent chapters. The chapter ends by a brief review of previous and ongoing international initiatives to develop capacity.

The subsequent chapters focus in turn on the four different functions identified in the framework. Chapter 4 examines the priority-setting processes at both the international and national level and explores both the degree to which these currently reflect the needs of national health systems and the capacity weaknesses in the priority-setting institutions that contribute to this. This is followed in Chapter 5 by an exploration of the capacity gaps and concerns that face health policy and systems research institutions. The next chapter focuses on what we have called the Filtration and Amplification function. This function is perhaps the least well understood of the four. It refers to the processes that determine which research outputs are selected as important and, through different means, brought (more or less successfully) to the attention of policy-makers. This, we believe is an area in which more research itself is needed, both because it is little understood, and because it is likely, we suggest, to grow in importance through the activities of advocacy organizations — which may or may not be regarded as having a legitimate role in policy formation.

Chapter 7 brings us back to the policy-making function, the critical endpoint of the framework, and again we identify a number of capacity weaknesses that deserve attention, in the institutions responsible for policy.

One of the major challenges a publication such as this faces, and one that health policy and systems researchers will be particularly familiar with, is the differences in context between different national health systems. The Review focuses on health systems in low- and middle-income countries; however this still spans a huge range of diversity in terms of various critical factors including

\(^1\) Nuyens (2007) provides a review of some key resources for research capacity strengthening.
resources, research traditions and policy and political processes. We have tried to make clear where we see such differences, but ask readers to tolerate, in the interests of making the publication manageably brief, occasional over-generalizations, and provide their own contextualized interpretations.

A second challenge we have faced is the, occasionally surprising, lack of published evidence about the topic. Given the basic premise of this Review, we have tried to be very careful in only drawing conclusions which are evidence-informed. The unevenness of evidence about the different functions means that our ability to get down to the level of detail of the capacity dimensions of organizations involved varies greatly. One output of this however is that it is clear that there are significant gaps in the knowledge base in this area and hopefully this Review will help readers identify new areas for research concerning the research/policy interface and its capacity needs.

Though we hope the analysis in the Review will itself be of interest to readers, we see its real importance as leading to action derived from the analysis. As such each chapter identifies a number of key messages and these are brought together in the final chapter in the form of recommendations aimed at particular actors. Given the focus of the Review is on HPSR, these key messages relate to this; inevitably, however some of the capacity issues are common to all forms of research.

The Review is aimed at various audiences and we expect different readers to pay particular attention to different chapters as a result of their different backgrounds and roles. First we hope that national and international policy-makers will recognize the critical importance of the subject. Though, as health policy-makers, they may be tempted to focus primarily on Chapters 2 and 7, we would urge them to recognize their critical roles as stewards for the whole health research system and as such pay similar attention to the other chapters and their attendant recommendations. We also see a key readership in HPSR leaders who have a responsibility to enhance the capacity not only of their own institutions but of the wider research communities. The third audience comprises international organizations that have a particular interest in improving research and policy processes. As Chapter 4 points out, there have been a number of different approaches to building capacity by international organizations but there is a widespread recognition that more resources, and perhaps different approaches, are needed. We have seen in recent years greater recognition of the importance of aid harmonization (through for example the Paris Declaration on Aid Effectiveness (OECD DAC 2005)). We would argue that a parallel more cohesive approach by international donors in the area of research and capacity development for research is also necessary and hope that this Review will contribute to greater alignment.

Beyond these prime targets for the Review, we anticipate a wider group of readers who will find it of interest. For example, given the increasing interest in the interface between evidence and policy we hope that those from, or interested in, civil society organizations that have an interest in improving the general policy processes will find Chapter 6 of particular interest.

The Review has been written by a group of authors with different sets of expertise and interest. It has also emerged from a long and rigorous process of development and review with a number of author and reviewer meetings and peer review of the chapters. In the best traditions of HPSR the individuals involved in both the writing and the reviewing come from different disciplines; we have also tried to ensure a range of regional inputs in recognition of the critical contextual differences between countries and regions.